A faecal metabolite signature of impaired fasting glucose: results from two independent population-based cohorts

Ana Nogal[1*], Francesca Tettamanzi[1,2*], Qiuling Dong[3], Panayiotis Louca[1], Alessia Visconti[1], Colette Christiansen[1,4], Taylor Breuninger[5], Jakob Linseisen[5,6,7], Harald Grallert[3,8], Nina Wawro[3a,5] Francesco Asnicar[9], Kari Wong[10], Andrei-Florin Baleanu[1], Gregory A. Michelotti[10], Nicola Segata[9], Mario Falchi[1], Annette Peters[3a,8,11], Paul W. Franks[12,13], Vincenzo Bagnardi[14], Tim D Spector[1], Jordana T Bell[1], Christian Gieger[3,8], Ana M Valdes[15‡], Cristina Menni[1‡]

Authors' affiliations:
[1] Department of Twin Research, King's College London, St Thomas' Hospital Campus, London SE1 7EH.
[2] Humanitas Clinical and Research Centre – IRCCS - Via Manzoni 56, 20089 Rozzano (Milan), Italy.
[3] Institute of Epidemiology, Helmholtz Zentrum München, German Research Center for Environmental Health (GmbH), Research Unit of Molecular Epidemiology, Ingolstädter Landstr. 1, 85764 Neuherberg, Germany.
[3a] Institute of Epidemiology, Helmholtz Zentrum München, German Research Center for Environmental Health (GmbH), Ingolstädter Landstr. 1, 85764 Neuherberg, Germany.
[4] School of Mathematics and Statistics, The Open University, Milton Keynes, United Kingdom.
[5] Epidemiology, University Hospital Augsburg, University of Augsburg, Stenglinstr. 2, 86156 Augsburg, Germany.
[6] ZIEL-Institute for Food & Health, Technische Universität München, Weihenstephaner Berg 3, 85354 Freising, Germany.
[7] Institute for Medical Information Processing, Biometry, and Epidemiology, Medical Faculty, Ludwig-Maximilian University Munich, Marchioninistr. 15, 81377, Munich, Germany.
[8] German Center for Diabetes Research (DZD), Ingolstädter Landstraße 1, 85764 Neuherberg, Germany.
[9] Department CIBIO, University of Trento, Trento, Italy.
[10] Metabolon, Research Triangle Park, Morrisville, NC, USA.
[11] Munich Heart Alliance, German Center for Cardiovascular Research (DZHK e.V., Partner-Site Munich), Munich, Germany.
[12] Lund University Diabetes Center, Lund University, Malmö, Sweden.
[13] Department of Clinical Sciences, Lund University, Malmö, Sweden.
[14] Department of Statistics and Quantitative Methods, University of Milan-Bicocca, Milan, Italy.
[15] Academic Rheumatology Clinical Sciences Building, Nottingham City Hospital, University of Nottingham, United Kingdom.
*Equal contribution

‡ **Corresponding authors:** Cristina Menni, PhD & Ana M. Valdes, PhD

Department of Twin Research, King's College London, St Thomas' Hospital Campus, 4th Floor South Wing Block D, Westminster Bridge Road, London SE1 7EH, UK. Phone: +44 (0) 207 188 7188 (ext. 52594); email: cristina.menni@kcl.ac.uk

Word count: 3626
Number of tables: 1
Number of figures: 4

Abstract

Prediabetes is a metabolic condition associated with gut microbiome composition, though mechanisms remain elusive. We searched for faecal metabolites, a readout of gut microbiome function, associated with impaired fasting glucose (IFG) in 142 individuals with IFG and 1105 healthy individuals from TwinsUK. We used the KORA cohort (318 IFG individuals, 689 healthy individuals) to replicate our findings. We linearly combined 8 IFG-positively associated metabolites (1-methylxantine, nicotinate, glucuronate, uridine, cholesterol, serine, caffeine and protoporphyrin IX) into an IFG-metabolite score, which was significantly associated with higher odds ratios for IFG (TwinsUK: OR[95%CI]=3.9[3.02-5.02], p<0.0001, KORA: OR[95%CI]=1.3[1.16-1.52], p<0.0001) and incident type-2 diabetes (T2D) (TwinsUK: HR[95%CI]=4[1.97-8], p=0.0002). Although these are host-produced metabolites, we found that the gut microbiome is strongly associated with their faecal levels (AUC>70%). Abundances of *Faecalibacillus intestinalis, Dorea formicigenerans, Ruminococcus torques* and *Dorea sp. AF24_7LB* were positively associated with IFG, and such associations were partially mediated by 1-methylxanthine and nicotinate (VAF mean(SD)=14.4%(5.1), p<0.05). Our results suggest that gut microbiome is linked to prediabetes not only via the production of microbial metabolites but also by affecting intestinal absorption/excretion of host-produced metabolites and xenobiotics, which are correlated with the risk of IFG. Faecal metabolites enable modelling of another mechanism of gut microbiome effect on prediabetes and T2D onset.

Keywords: impaired fasting glucose, prediabetes, faecal metabolomics, gut microbiome, type-2 diabetes

Article highlights

- **Gap:** Prediabetes is a metabolic condition associated with gut microbiome composition, though mechanisms remain elusive.
- **Question:** Is there a faecal metabolite signature of impaired fasting glucose (IFG)? What are the underlying mechanisms of action?
- **Findings:** We identified a faecal metabolite signature of IFG associated with prevalent IFG in two independent cohorts and incident type-2 diabetes in a sub-analysis. Although the signature consists of metabolites of non-microbial origin, it is strongly correlated with gut microbiome composition.
- **Meaning:** Faecal metabolites enable modelling of another mechanism of gut microbiome effect on prediabetes by affecting intestinal absorption or excretion of host compounds and xenobiotics.

Introduction

Type-2 diabetes (T2D) is a leading cause of mortality and morbidity (1) affecting more than 536.6 million people (10.5% of the total population) worldwide (2), thus representing a huge public health burden (1). The causation of T2D is multifactorial, influenced by host genetics and environmental factors, including diet, obesity, inactivity and smoking, and the interaction between these factors (3). Furthermore, its onset is gradual, with people progressing through a state of prediabetes (4) and is defined as impaired levels of fasting glucose (IFG), and/or glucose intolerance (IGT), and/or elevated haemoglobin A1c (HbA1c) (5).

Over the past decade, T2D and prediabetes have been linked by us and others (6-8) to changes in the gut microbiota, and we have recently demonstrated that T2D development is preceded by an alteration in gut microbiota composition (7). A critical challenge in human microbiome research, however, is to characterise and quantify metabolic activity across the full microbial ecosystem (9). The gut microbiome is highly variable and different bacterial types may have similar metabolic effects on the host. Microbial metabolites are now widely seen as key mediators of the effects of gut microbiome composition on human physiology (10). Faecal metabolites provide a functional readout of the gut microbiome (11; 12) and are a novel tool to explore links between gut microbiome composition and activity, host phenotypes, and heritable complex traits, thus improving our understanding of the impact that the gut microbiome can have on its host (11). As the gut microbiome is modifiable with nutritional and lifestyle interventions (13), it is of utmost importance to identify alterations in the faecal metabolites abundances, which reflect metabolic activity perturbations of the human gut microbial ecosystem that might lead to T2D onset.

In the first faecal metabolomics study of prediabetes to date, we aim to identify a faecal metabolite signature of this condition in two independent cohorts to shed light on mechanisms of action underlying T2D onset/development. Addressing this challenge also has long-term implications for future studies into therapies and lifestyle interventions that alter microbial metabolic activity to improve human health.

Methods

A flowchart of the study design with the main results is presented in **Figure 1.**

Discovery cohort

We analysed data from 1247 non-related individuals from TwinsUK (14) for whom concurrent non-targeted faecal metabolomic profiling (526 metabolites at fasting) and glucose/diabetic information were available (cross-sectional design). Concurrent metagenome sequencing (as a measure of the gut microbiome composition) was also available for a subset of 342 individuals. Subjects were classified into three groups following the American Diabetes Association (ADA) criteria based on isolated fasting glucose levels (15) at the time of initial sampling and at subsequent visits (on average 3.5 visits (SD=2.0), 4.6 (SD=2.7) years apart): individuals with T2D (fasting glucose ≥7 mmol/L or physician's letter confirming diabetes diagnosis), individuals with IFG (>5.5 mmol/L fasting glucose <7 mmol/L, not on diabetic medication), and subjects without IFG and T2D (>3.9 mmol/L fasting glucose ≤5.5 mmol/L) (see **Table 1**). We refer to 'healthy individuals' to indicate individuals without IFG and/or T2D.

Only one twin per twin pair was included in the analyses to eliminate potential bias through correlated error, which might inflate effect estimates.

In a small sub-analysis, we included individuals with incident T2D (average follow-up time =2.1 (SD=1.3) years) and an independent subset of healthy individuals that remained healthy during follow-up.

All twins provided informed written consent and the study was approved by St. Thomas' Hospital Research Ethics Committee (REC Ref: EC04/015).

Replication cohort

The Cooperative Health Research in the Region of Augsburg (KORA) study is a population-based cohort study. The KORA FF4 study (2013–2014) is the second follow-up of KORA S4 (1999–2001). The 1007 samples included in the study were collected in the morning between 8:00 A.M. and 10:30 A.M. after at least 8 h of fasting. Metabolon - Untargeted LC/MS-based techniques were applied to measure the metabolites in the KORA cohort (a different version of the platform used in TwinsUK). Healthy individuals and IFG individuals were assigned based on the same criteria as in TwinsUK (described in the above section and in **Table 1**).

Faecal metabolomics profiling

Metabolomics profiling was conducted using ultrahigh-performance liquid chromatography-tandem mass spectrometry (LC/MS/MS) by the metabolomics provider Metabolon Inc. (Morrisville, USA) on faecal samples from participants in the TwinsUK and KORA cohorts (**Supplementary Text**). The metabolomic dataset measured by Metabolon includes 526 known metabolites for TwinsUK belonging to the following broad categories – amino-acids, peptides, carbohydrates, energy intermediates, lipids, nucleotides, cofactors and vitamins, and xenobiotics, of which 357 were also measured in KORA. These include metabolites of established microbial origin (16). A complete list of the included metabolites with their superpathways, sub-pathways, KEGG and HMDB identifiers are reported in **Supplementary Table 1**. We imputed to the day minimum metabolites with less than 20% missing.

Metagenomic assessment

Gut microbiota composition was generated from faecal shotgun metagenomes for a subset of the discovery cohort. DNA extraction, library preparation and sequencing were conducted as detailed in Visconti et al. (2019) (11). For details see the **Supplementary Text**. Of note, gut microbiota composition is described by Species-level Genome Bins (SGB), which is the best proxy to define microbial species (17).

Statistical analysis

Statistical analyses were conducted using R 4.2.2.

To identify a faecal metabolite signature of prediabetes, we ran logistic regressions adjusting for age, BMI, sex, and multiple testing using the Benjamini and Hochberg method (18) (FDR<0.05). We then checked whether the metabolites significantly associated with IFG in the discovery set were also replicated in KORA (p-value<0.1). We used a less stringent threshold for KORA because of the Winner’s Curse (the effect sizes of the most strongly associated variables within a cohort-specific analysis are inflated) (19). Results were meta-analysed using inverse variance random effect meta-analysis. We then created the IFG-metabolite score by linearly combining the replicated metabolites along with covariates. To assess the performance of the score in predicting prevalent IFG and incident T2D, we calculated the area under the curve (AUC) values obtained using 5-fold cross-validation (caret package implemented in R (20)). Finally, logistic and Cox regressions were used to investigate the association between the IFG score (Z-scaled) and prevalent IFG risk and incident T2D risk, respectively.

Given the strong association between faecal metabolites and gut microbiome composition (12), we investigated to what extent the gut microbiota composition was associated with each of the replicated metabolites using Random Forest regressors and classifiers with compositional data and 5-fold cross-validation. The performance was calculated using the average of the obtained Spearman's correlations (between the observed metabolite levels and the levels predicted by the model - denoted as *rho*) over the 5 folds used as a test set for the regressors, and the average of the obtained AUC values over the testing folds for the classifiers. For details see **Supplementary File.**

We further investigated the associations between their top 100 bacterial features and IFG by running logistic regression models adjusting for covariates and multiple testing species (FDR<0.05). Specifically, we included all the faecal metabolites that could be predicted by the gut microbiome with an AUC>70% and we then focussed on those that had an outstanding prediction performance (AUC>90%).

Finally, we used formal mediation analysis as implemented in the R package ‘mediation’ with 1000 nonparametric bootstrap samples (21) to test the mediation effects of the metabolites on the total effect of the gut bacteria on IFG. The mediation model was used to quantify both the direct effect of these gut bacterial species on IFG and the indirect (mediated) effects mentioned above while controlling for age, BMI and sex. The variance accounted for (VAF) score, which represents the ratio of indirect-to-total effect and determines the proportion of the variance explained by the mediation process, was used to determine the significance of the mediation effect.

Data and resource availability

TwinsUK data are available upon request on the department website (https://twinsuk.ac.uk/resources-for-researchers/our-data/). All other data sets generated and/or analysed in this study are available from the corresponding author upon request.

Results

We included 1247 unrelated individuals from the TwinsUK cohort who had faecal metabolite measures along with glucose/diabetic and prediabetic information. Of these, 142 individuals had IFG (mean fasting glucose 5.9 mmol/L (SD=0.4)) and 1105 were healthy individuals (mean fasting glucose 4.5 mmol/L (SD=0.3)). Descriptive characteristics of the discovery and replication populations are included in **Table 1.**

Faecal metabolites associated cross-sectionally to IFG

In TwinsUK, out of the 526 known faecal metabolites analysed, the faecal abundances of 26 compounds were associated with IFG after adjusting for age, BMI, sex and multiple testing (FDR<0.05) (**Figure 2**). Identified metabolites were mainly amino acids (n=7) and lipids (n=7), but also included xenobiotics (n=4), cofactors and vitamins (n=3), nucleotides (n=2), carbohydrates (n=2) and one energy-related metabolite (**Figure 2)**. All significant metabolites, but 3-hydroxyoleate, octadecanedioate (C18-DC), azelate (C9-DC), gamma-tocotrienol and enterolactone, were positively associated with IFG (**Figure 2)**. Out of the 26, 18 metabolites were also measured in KORA (**Supplementary Table 1**), and 8 metabolites were replicated (p-value<0.1) (**Figure 3**). These were the lipid cholesterol (sterol metabolism), the carbohydrate glucuronate (aminosugar metabolism), the cofactors/vitamins nicotinate

(nicotinate and nicotinamide metabolism) and protoporphyrin IX (haemoglobin and porphyrin metabolism), the xenobiotics caffeine and 1-methylxanthine (both involved in the xanthine metabolism), the amino acid serine (glycine, serine and threonine metabolism), and the nucleotide uridine (pyrimidine metabolism). The correlation matrices for the 8 faecal metabolites in TwinsUK and KORA are depicted in **Supplementary Figure 1**. We combined the results from both cohorts using inverse variance random effect meta-analysis (**Figure 3**).

IFG-metabolite score and predictive power

We then generated the IFG-metabolite score using TwinsUK individuals:

*IFG-metabolite score = -8.79 + 0.07 x glucuronate + 0.25 x p*rotoporphyrin IX *+ 0.09 x 1-methylxanthine + 0.14 x cholesterol + 0.04 x serine + 0.07 x uridine + 0.04 x nicotinate + 0.17 x caffeine + 0.07 x age + 0.1 x BMI - 0.6 x sex (female=1)*

The IFG-metabolite score was associated with an increased risk of IFG in TwinsUK (OR[95%CI]=3.9[3.02-5.02], p<0.0001) and in KORA (OR[95%CI]=1.3[1.16-1.52], p<0.0001). The association remained significant when further adjusting for clinical covariates (i.e. systolic and diastolic blood pressure, circulating levels of high-density lipoprotein (HDL), total cholesterol and triglycerides, alternative health eating index (aHEI – not available in KORA), activity levels and smoking status – see **Table 1**) in both cohorts (TwinsUK: OR[95%CI]= 3.4[2.65-4.49], p<0.0001; KORA: OR[95%CI]=1.2[1.06-1.41], p=0.008). Finally, in TwinsUK the IFG-metabolite score accurately predicted prevalent IFG with an AUC of 79.8%[95% CI=76.3-83.3] in 5-fold stratified cross-validation and outperformed the model including only covariates (AUC=77.2%[95% CI=73.6-81]) by 2.6%[Δ95% CI=2.7-2.1]. In KORA, the IFG-metabolite score (top vs lowest decile) could satisfactory predict prevalent IFG (AUC=65.4[95%CI=57.9-73]).

Sub-analysis: incident T2D

In a small independent sample from TwinsUK (descriptive characteristics are shown in **Table 1**) consisting of 17 healthy individuals (different from the healthy subjects of the IFG dataset) and 10 individuals with incident T2D (follow-up time between faecal metabolite measurements and incident events: mean=2.1 (SD=1.3) years), the IFG-metabolite score was also predictive of an increased risk of incident T2D (HR[95%CI]=4[1.97-8], p=0.0002) in TwinsUK after further adjusting for baseline circulating glucose levels**.** It also accurately predicted incident T2D (AUC[95% CI]=83.3%[74.4-92.2], while a model using baseline circulating glucose levels as predictor presented a lower prediction power (AUC[95% CI]=72.4%[51.8-92.9]).

Gut microbiome – faecal metabolites association

We further evaluated the extent to which the gut microbiota was associated with the faecal abundances of the 8 replicated metabolites using the AUC obtained by the Random Forest classifiers and the Spearman's correlations (denoted as *rho)* between the real abundances and predicted values by the Random Forest regressors. We included a subset of 342 individuals from TwinsUK with concurrent gut microbiota composition assessed by shotgun metagenomics and faecal metabolites measurements. Descriptive characteristics of this subset are shown in **Supplementary Table 2.**

The gut microbiome composition was strongly associated with the replicated metabolites with performance metric values ranging from AUC[95% CI]=70.7%[69.1-72.4] and *rho*[95% CI]=0.24[0.23-0.25] for caffeine to AUC[95% CI]=91.4%[90.8-91.9] and *rho*[95% CI]=0.62[0.62-0.62] for 1-methylxanthine (**Figure 4A** and **Supplementary Table 3**). Protoporphyrin IX was the only metabolite presenting a moderate association (AUC[95% CI]=64.8%[63.9-65.6]; *rho*=0.25[95%CI=0.24-0.26] (**Figure 4A**).

We then investigated whether the abundances from their top 100 bacterial features based on the Random Forest models were also significantly associated with IFG (**Supplementary Table 4**). We focussed on the faecal metabolites that presented the strongest associations with the gut microbiome composition (AUC>90% - outstanding prediction performance) (1-methylxathine and nicotinate). We identified 4 characterised gut bacterial species for 1-methylxanthine and nicotinate, of which 3 overlapping (overlapping: *D. formicigenerans, R. torques* and *F. intestinalis;* 1-methylxanthine only*: D. sp. AF24 7LB;* nicotinate only: *D. sp. AF36 15AT*), that were positively associated with IFG after adjusting for age, BMI and sex (FDR<0.05) (**Supplementary Table 4**). We, therefore, performed a formal mediation analysis adjusting for age, BMI, and sex to determine whether 1-methylxanthine and/or nicotinate mediated the associations between these species and IFG. The analysis revealed that 1-methylxanthine acted as a potential mediator in the positive associations of *D. sp. AF24 7LB* (VAF=10.3%, p-value=0.03) and *R. torques* (VAF=9.7%, p-value=0.04) with IFG, while nicotinate acted as a potential mediator in the positive associations of *F. intestinalis* (VAF=22.3%, p-value=0.002)*, D. formicigenerans* (VAF=15.8%, p-value=0.002) and *R. torques* (VAF=14.1%, p-value=0.03) with IFG (**Figure 4B**). We further run mediation analyses for the metabolites that could be predicted by the gut microbiome with an AUC>70%. As reported in the **Supplementary Figure 2**, uridine, serine, cholesterol and caffeine were also mediators in the associations between different species (e.g., *Dorea* species and *A. hallii*) and IFG. Models were not further adjusted for other comorbidities (e.g., systolic and diastolic blood pressure, circulating levels of HDL, total cholesterol and triglycerides, aHEI, activity levels and smoking status) as these were not significantly associated with the identified bacterial species, nor the metabolites making up the score (**Supplementary Table 5).**

Discussion

Here we identify for the first time a faecal metabolite signature of IFG, which is associated with prevalent IFG in two independent cohorts and in a small sub-analysis, also predictive of incident T2D. The faecal metabolites making up the score are not microbial-derived metabolites but are “host metabolites” (e.g., xenobiotics, cofactors, and vitamins). However, the gut microbiome can accurately predict their faecal abundances (AUC>70%). It is well known that the gut microbiome composition can affect diseases via several mechanisms (22). Circulating microbial metabolites have been reported by us and others to be reflective of gut microbiome diversity and composition (6-8) and predictive of prevalent and incident T2D (7). Taken together, this suggests that the gut microbiome can influence T2D, not only by producing metabolites that enter the bloodstream (7) but also by regulating the absorption or excretion of host-produced compounds, thereby influencing IFG and T2D risk. This hypothesis is further supported by the results of our mediation analysis, showing that metabolites making up the score act as partial mediators on the significant associations between several gut microbial species, (e.g., *Faecalibacillus intestinalis, Dorea formicigenerans, Ruminococcus torques* and *Dorea sp. AF24_7LB*) and IFG.

Studies have shown that gut microbiome composition differs between prediabetic/diabetic individuals and healthy subjects (6; 7), with compositional shifts correlated with synthesis profile changes of gut bacteria-derived metabolites, including short-chain fatty acids, indolepropionic acid and trimethylamine (7; 22). These “microbial” metabolites enter into the bloodstream and reach different tissues, where they can influence glucose homeostasis and insulin resistance by activating or inhibiting signalling pathways (22). Nevertheless, in this study, the identified signature of prediabetes consists of 8 metabolites of non-bacterial origin. Serine is a non-essential amino acid mainly obtained by intrinsic synthesis (23). Glucuronate is a sugar acid derived from glucose and involved in the detoxification of xenobiotic compounds (24). Protoporphyrin IX is a cofactor ubiquitously present in the human body as a heme precursor (25). Nicotinate, also known as vitamin B3 and niacin, is a water-soluble vitamin that can be produced by the human body from tryptophan (26). Cholesterol is an essential lipid of eukaryotic cell membranes and is also a precursor of bile acids and steroid hormones, which is mainly produced by the liver (27). Uridine is a necessary pyrimidine nucleotide for RNA synthesis produced by several reversible reactions (e.g., de-phosphorylation of uridine monophosphate, de-amination of a cytidine or combination of uracil and ribose 1-phosphate) (28). Caffeine and 1-methylxanthine are xenobiotics involved in the caffeine metabolism pathway (29).

Strikingly, we find that the gut microbiome is strongly associated with faecal levels of these metabolites suggesting that the gut microbiome influences the absorption or excretion of compounds involved in various metabolic pathways (e.g., cholesterol, uridine and glucuronate) and xenobiotics (e.g., caffeine and its derivatives), among others, and such levels of absorption or excretion are directly related to IFG. Our findings lead us to speculate that prediabetic individuals present gut microbiome composition perturbations, which likewise, influence the absorption or excretion of the identified compounds. This is further supported by the mediation analyses which suggest that the associations between specific gut microbial species, including *Faecalibacillus intestinalis, Dorea formicigenerans, Ruminococcus torques* and *Dorea sp. AF24_7LB*, and IFG are mainly reflecting the effect of the gut microbiome in the absorption or excretion of the found compounds.

Under normal conditions, the small intestine can break down, emulsify and absorb most nutrients, including fats, simple carbohydrates and proteins (30). For instance, <5g/day of fat are not absorbed and reach the colon (30). Nonetheless, the absorption capability of the gut can be limited depending on the gut microbiome composition (31). A study conducted by Basolo and colleagues demonstrated that changes in participants' gut microbiome composition, due to diet or antibiotic use, impaired nutrient absorption (31). Several mechanisms might explain how gut microbiome composition might influence absorption, and thus, the disease onset (32-34). For instance, the gut microbiome can affect the gut barrier, which consists of a collection of physical and chemical structures that protects the host from pathogenic invasions and harmful stimuli (32). This can be provoked by the presence of pathogen-associated molecular patterns (PAMPs), such as lipopolysaccharides (LPS), in the cell walls of some gram-negative bacteria, which play an important role in intestinal absorption, blood glucose and inflammation (33). Moreover, changes in the permeability of the gut barrier can be caused by an unbalanced increase in bacteria able to degrade mucin (the main component of mucus, which covers the epithelial surfaces of the gastrointestinal tract) (32). Indeed, in this study, we identify that prediabetic individuals present larger abundances compared to healthy individuals of the mucin-degraders *Dorea formicigenerans* (35) and *Ruminococcus torques* (36), which have been previously associated with lower nutrient absorption (36). Finally, some gut microbes can also reduce absorption in the jejunum by altering the expression of intestinal transporters of different types of compounds (34).

Another possible explanation for our findings could be a reduction of specific beneficial bacteria able to utilize these compounds, thus resulting in increased excretion (27; 37). In the case of cholesterol, bacterial members of the genera *Bifidobacterium, Lactobacillus* and *Peptostreptococcus* are needed to convert cholesterol into coprostanol (27). Likewise, an inefficient cholesterol-coprostanol conversion is linked to cardiometabolic diseases (27). For glucuronate, most of it is not absorbed by the small intestine, however, under normal conditions, the amounts that make it to the colon are then efficiently utilized by *Bifidobacterium* (37).

This work has several strengths. Our study benefits from a large, accurately phenotyped discovery cohort, with metabolomic profiling and gut microbiome composition. We were also able to replicate our findings in a large independent cohort, thus strengthening our findings. Finally, a machine learning algorithm was applied to investigate the prediction of the gut microbiota to the levels of the found 8 metabolites, allowing us to simultaneously integrate all the species in the models.

We also note some study limitations. First, the cross-sectional nature of the data used for our primary analysis does not allow us to determine the temporal link between IFG and the identified faecal metabolites. Second, HbA1c, postprandial glucose to derive impaired glucose tolerance (IGT), which more closely resembles the T2D state (38), and a clinician's diagnosis were not available in the discovery cohort. Thus, in this study, the division of categories is derived from IFG. Third, for the sub-analysis looking at incident T2D, the sample size was limited and we were unable to seek independent replication as, to the best of our knowledge, there are no other cohorts in the world that have measured this faecal metabolome panel and incident T2D. Future studies with larger sample size are therefore needed to test the robustness of the IFG metabolite score to predict incident T2D. Fourth, there was not a full overlap between metabolites measured in the discovery and validation datasets, which might cause the loss of metabolites of interest to study. Fifth, the included study groups were unbalanced in terms of age and sex. Hence, although we adjusted all analyses for them and other important clinical variates, the confidence of the results is lowered. In addition, gut microbiota composition data was only available for a subset from the discovery set, and therefore, we could not replicate the mediation analysis in KORA. Furthermore, the Spearman's correlations between the predicted (from gut microbiome composition) and actual metabolites' levels were modest. Indeed, Random Forest models were trained based on microbial features extracted from metagenomic data, which for procedural and technical reasons, does not retrieve all species present in a microbiome sample. Finally, this study does not include measures of permeability markers, which would contribute to a better understanding of the role of intestinal permeability in the absorption or excretion of the identified compounds.

In conclusion, we are proposing a novel mechanism of how gut microbiome composition affects prediabetes and consequently the onset of T2D. The gut microbiome is linked to prediabetes not only by microbial-derived metabolites but also by affecting intestinal absorption or excretion of metabolites of non-microbial origin, which are correlated with the risk of IFG and incident type-2 diabetes. Henceforth, to better understand the onset of T2D, the effect of the gut microbiome in the excretion or/and absorption of host-produced compounds and xenobiotics also needs to be also considered.

Acknowledgements

We thank all the participants of TwinsUK for contributing and supporting our research, and all participants of KORA for their long-term commitment to the KORA study, the staff for data collection and research data management and the members of the KORA Study Group (https://www.helmholtz-munich.de/en/epi/cohort/kora) who are responsible for the design and conduct of the study. Finally, we thank Caroline Le Roy for the helpful discussion.

Author's contributions

C.M. and T.D.S. conceived and designed the experiments. Q.D., P.L., A.V., C.C., T.B., J.L., H.G., N.W., F.A., K.W., A.F.B., G.A.M, N.S., M.F., A.P., P.W.F., V.B., T.D.S, J.T.B. and C.G. contributed reagents/materials/analysis tools. A.N., F.T., Q.D., A.V, C.C., F.A., H.G. and C.G. curated the data. A.N., F.T., Q.D. and C.M. performed the formal analyses. A.N., A.M.V. and C.M. wrote the manuscript. All the authors revised the manuscript.

Dr. Cristina Menni is the guarantor of this work, had full access to all the data, and takes full responsibility for the integrity of data and the accuracy of data analysis.

Sources of Funding

This research was funded by the Chronic Disease Research Foundation, and in part by the Wellcome Trust (Grant number: 212904/Z/18/Z) and by DiabetesUK (19/0006053). For the purpose of open access, the authors have applied a CC BY public copyright licence to any Author Accepted Manuscript version arising from this submission. TwinsUK receives funding from the Wellcome Trust, the European Commission H2020 grants SYSCID (contract #733100); the National Institute for Health Research (NIHR) Clinical Research Facility and the Biomedical Research Centre based at Guy's and St Thomas' NHS Foundation Trust in partnership with King's College London, the Chronic Disease Research Foundation, the UKRI Medical Research Council (MRC)/British Heart Foundation Ancestry and Biological Informative Markers for Stratification of Hypertension (AIM-HY; MR/M016560/1), and Zoe Limited. This work was also supported by UKRI grant MR/W026813/1 to C.M. and A.M.V. The KORA study was initiated and financed by the Helmholtz Zentrum München – German Research Center for Environmental Health, which is funded by the German Federal Ministry of Education and Research (BMBF) and by the State of Bavaria. Stool sample collection and metabolomics analysis in KORA FF4 was supported by iMED, a research alliance within the Helmholtz Association, Germany. Data collection in the KORA study is done in cooperation with the University Hospital of Augsburg. C.M., L.P. and A.N. are funded by the Chronic Disease Research Foundation. A.M.V. is supported by the National Institute for Health Research Nottingham Biomedical Research Centre.

Disclosures

T.D.S. is a co-founder and shareholder of Zoe Ltd. A.M.V., P.W.F., F.A., and N.S. are consultants to Zoe Ltd. K.W. and G.A.M. are employees of Metabolon Inc. No other potential conflicts of interest relevant to this article were reported.

References

1. Zheng Y, Ley SH, Hu FB: Global aetiology and epidemiology of type 2 diabetes mellitus and its complications. Nature reviews endocrinology 2018;14:88-98
2. Sun H, Saeedi P, Karuranga S, Pinkepank M, Ogurtsova K, Duncan BB, Stein C, Basit A, Chan JC, Mbanya JC: IDF Diabetes Atlas: Global, regional and country-level diabetes prevalence estimates for 2021 and projections for 2045. Diabetes research and clinical practice 2022;183:109119
3. Kolb H, Martin S: Environmental/lifestyle factors in the pathogenesis and prevention of type 2 diabetes. BMC medicine 2017;15:1-11
4. Knowler WC, Barrett-Connor E, Fowler SE, Hamman RF, Lachin JM, Walker EA, Nathan DM, Watson P, Mendoza J, Smith K: Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. 2002;
5. Elliott TL, Pfotenhauer KM: Classification and Diagnosis of Diabetes. Primary Care: Clinics in Office Practice 2022;49:191-200
6. Aydin Ö, Nieuwdorp M, Gerdes V: The gut microbiome as a target for the treatment of type 2 diabetes. Current diabetes reports 2018;18:1-11
7. Menni C, Zhu J, Le Roy CI, Mompeo O, Young K, Rebholz CM, Selvin E, North KE, Mohney RP, Bell JT: Serum metabolites reflecting gut microbiome alpha diversity predict type 2 diabetes. Gut Microbes 2020;11:1632-1642
8. Zhang Z, Tian T, Chen Z, Liu L, Luo T, Dai J: Characteristics of the gut microbiome in patients with prediabetes and type 2 diabetes. PeerJ 2021;9:e10952
9. Maurice CF, Turnbaugh PJ: Quantifying the metabolic activities of human-associated microbial communities across multiple ecological scales. FEMS microbiology reviews 2013;37:830-848
10. Krautkramer KA, Fan J, Bäckhed F: Gut microbial metabolites as multi-kingdom intermediates. Nat Rev Microbiol 2021;19:77-94
11. Visconti A, Le Roy CI, Rosa F, Rossi N, Martin TC, Mohney RP, Li W, de Rinaldis E, Bell JT, Venter JC: Interplay between the human gut microbiome and host metabolism. Nature communications 2019;10:1-10
12. Zierer J, Jackson MA, Kastenmüller G, Mangino M, Long T, Telenti A, Mohney RP, Small KS, Bell JT, Steves CJ: The fecal metabolome as a functional readout of the gut microbiome. Nature genetics 2018;50:790-795
13. Conlon MA, Bird AR: The impact of diet and lifestyle on gut microbiota and human health. Nutrients 2014;7:17-44
14. Verdi S, Abbasian G, Bowyer RC, Lachance G, Yarand D, Christofidou P, Mangino M, Menni C, Bell JT, Falchi M: TwinsUK: the UK adult twin registry update. Twin Research and Human Genetics 2019;22:523-529
15. ElSayed NA, Aleppo G, Aroda VR, Bannuru RR, Brown FM, Bruemmer D, Collins BS, Hilliard ME, Isaacs D, Johnson EL: 2. Classification and diagnosis of diabetes: standards of care in diabetes—2023. Diabetes care 2023;46:S19-S40
16. Donia MS, Fischbach MA: Small molecules from the human microbiota. Science 2015;349:1254766
17. Pasolli E, Asnicar F, Manara S, Zolfo M, Karcher N, Armanini F, Beghini F, Manghi P, Tett A, Ghensi P: Extensive unexplored human microbiome diversity revealed by over 150,000 genomes from metagenomes spanning age, geography, and lifestyle. Cell 2019;176:649-662. e620
18. Thissen D, Steinberg L, Kuang D: Quick and easy implementation of the Benjamini-Hochberg procedure for controlling the false positive rate in multiple comparisons. J Educ Behav Stat 2002;27:77-83
19. Tugwell P, Knottnerus JA: A statistic to avoid being misled by the “winners curse”. Journal of Clinical Epidemiology 2018;103:vi-viii

20. Kuhn M: Building predictive models in R using the caret package. Journal of statistical software 2008;28:1-26

21. Tingley D, Yamamoto T, Hirose K, Keele L, Imai K: Mediation: R package for causal mediation analysis. 2014;

22. Nogal A, Valdes AM, Menni C: The role of short-chain fatty acids in the interplay between gut microbiota and diet in cardio-metabolic health. Gut Microbes 2021;13:1-24

23. Jiang J, Li B, He W, Huang C: Dietary serine supplementation: Friend or foe? Current Opinion in Pharmacology 2021;61:12-20

24. Fujiwara R, Yoda E, Tukey RH: Species differences in drug glucuronidation: Humanized UDP-glucuronosyltransferase 1 mice and their application for predicting drug glucuronidation and drug-induced toxicity in humans. Drug metabolism and pharmacokinetics 2018;33:9-16

25. Sachar M, Anderson KE, Ma X: Protoporphyrin IX: the good, the bad, and the ugly. Journal of Pharmacology and Experimental Therapeutics 2016;356:267-275

26. Moffett JR, Namboodiri MA: Tryptophan and the immune response. Immunology and cell biology 2003;81:247-265

27. Kriaa A, Bourgin M, Potiron A, Mkaouar H, Jablaoui A, Gérard P, Maguin E, Rhimi M: Microbial impact on cholesterol and bile acid metabolism: current status and future prospects. Journal of lipid research 2019;60:323-332

28. Urasaki Y, Pizzorno G, Le TT: Uridine affects liver protein glycosylation, insulin signaling, and heme biosynthesis. PloS one 2014;9:e99728

29. Keijzers GB, De Galan BE, Tack CJ, Smits P: Caffeine can decrease insulin sensitivity in humans. Diabetes care 2002;25:364-369

30. de Vos WM, Tilg H, Van Hul M, Cani PD: Gut microbiome and health: mechanistic insights. Gut 2022;71:1020-1032

31. Basolo A, Hohenadel M, Ang QY, Piaggi P, Heinitz S, Walter M, Walter P, Parrington S, Trinidad DD, von Schwartzenberg RJ: Effects of underfeeding and oral vancomycin on gut microbiome and nutrient absorption in humans. Nature Medicine 2020;26:589-598

32. Raimondi S, Musmeci E, Candeliere F, Amaretti A, Rossi M: Identification of mucin degraders of the human gut microbiota. Sci Rep 11: 11094. 2021

33. Anhê FF, Barra NG, Cavallari JF, Henriksbo BD, Schertzer JD: Metabolic endotoxemia is dictated by the type of lipopolysaccharide. Cell Reports 2021;36:109691

34. Depommier C, Van Hul M, Everard A, Delzenne NM, De Vos WM, Cani PD: Pasteurized Akkermansia muciniphila increases whole-body energy expenditure and fecal energy excretion in diet-induced obese mice. Gut Microbes 2020;11:1231-1245

35. Vacca M, Celano G, Calabrese FM, Portincasa P, Gobbetti M, De Angelis M: The controversial role of human gut lachnospiraceae. Microorganisms 2020;8:573

36. Kaczmarczyk M, Löber U, Adamek K, Węgrzyn D, Skonieczna-Żydecka K, Malinowski D, Łoniewski I, Markó L, Ulas T, Forslund SK: The gut microbiota is associated with the small intestinal paracellular permeability and the development of the immune system in healthy children during the first two years of life. Journal of Translational Medicine 2021;19:1-26

37. Asano T, Yuasa K, Kunugita K, Teraji T, Mitsuoka T: Effects of gluconic acid on human faecal bacteria. Microbial ecology in health and disease 1994;7:247-256

38. Unwin N, Shaw J, Zimmet P, Alberti K: Impaired glucose tolerance and impaired fasting glycaemia: the current status on definition and intervention. Diabetic medicine: a journal of the British Diabetic Association 2002;19:708-723

Table 1. Descriptive characteristics of the study populations.

	Discovery cohort: TwinsUK						**Replication cohort: KORA**		
	Prevalent IFG (n=1247)			**Incident T2D (n=27)**			**Prevalent IFG (n=1007)**		
	Healthy individuals	*IFG individuals*	*Differences between groups (p-value)*	*Healthy individuals*	*T2D individuals*	*Differences between groups (p-value)*	*Healthy individuals*	*IFG individuals*	*Differences between groups (p-value)*
ADA definition (15), fasting glucose, mmol/L	≤5.5	>5.5 & <7	-	≤5.5	≥7	-	≤5.5	>5.5 & <7	-
N	1105	142	-	17	10	-	689	318	-
Females, %	88.8	79	0.003	94.1	90	1	58.1	35.5	
Age, yrs	56.6 (14.9)	67.1 (10)	<0.0001	66.5 (6.6)	65 (7.7)	0.7	55.2 (10.9)	59.8 (10.8)	<0.0001
BMI, kg/m^2	25.2 (4.6)	28.5 (5.1)	<0.0001	25.3 (3.3)	35.1 (6.7)	0.0004	26.1 (4.1)	28.4 (4.5)	<0.0001
Circulating fasting glucose, mmol/L	4.5 (0.3)	5.9 (0.4)	<0.0001	3.8 (0.3)	4.6 (1.5)	0.06	5.1 (0.3)	5.9 (0.3)	<0.0001

SBP, mmHg	125 (13.6)	134 (17)	<0.0001	132 (21.5)	133 (9.5)	0.8	114.5 (15.9)	123.1 (15.3)	<0.0001
DBP, mmHg	74.7 (8.1)	77.9 (10.3)	<0.0001	73.8 (11.9)	81.7 (8.1)	0.05	72.3 (8.9)	76 (9.7)	<0.0001
Circulating HDL, mmol/L	1.8 (1.2)	1.6 (1)	0.003	1.7 (0.4)	1.3 (0.2)	0.004	1.8 (0.5)	1.6 (0.5)	<0.0001
Circulating total cholesterol, mmol/L	4.1 (0.5)	4.1 (0.7)	0.73	4.7 (1.2)	3.6 (0.8)	0.02	5.6 (1)	5.7 (1)	0.008
Circulating triglycerides, mmol/L	1 (1)	1.6 (2.7)	0.0003	1 (0.3)	1.3 (0.4)	0.01	1.2 (0.7)	1.4 (0.9)	<0.0001
aHEI	70.5 (6.4)	70.1 (6.5)	0.49	72.8 (9.9)	71.4 (6.2)	0.68	NA	NA	NA
Current Smoker	No: 1060 Yes: 45	No: 139 Yes: 3	0.36	No: 17	No: 10	-	No: 346 Yes: 343	No: 139 Yes: 179	0.9
Activity levels	Low: 100 Moderate: 802 High: 203	Low: 13 Moderate: 102 High: 27	0.98	Low: 3 Moderate: 11 High: 3	Low: 2 Moderate: 5 High: 3	0.71	Inactive: 225 Active: 464	Inactive: 133 Active: 185	0.006

‘Healthy individuals’ refers to individuals with no IFG or T2D. Continuous variables are presented as mean and standard deviation. Measures are shown at baseline. There was no overlap between the healthy subjects from the IFG and incident T2D datasets. The p-value from a Wilcoxon test/t.test (continuous variable) or chi-squared test (categorical variable) was calculated to check whether differences between the different subject groups for the described parameters existed. *Abbreviations:* ADA, American Diabetes Association; aHEI, alternative health eating index; BMI, body mass index; DBP, diastolic blood pressure; HDL, high-density lipoprotein; IFG, impaired fasting glucose; KORA, Cooperative Health Research in the Region of Augsburg; NA, not available; SBP, systolic blood pressure; T2D, type-2 diabetes; yrs, years

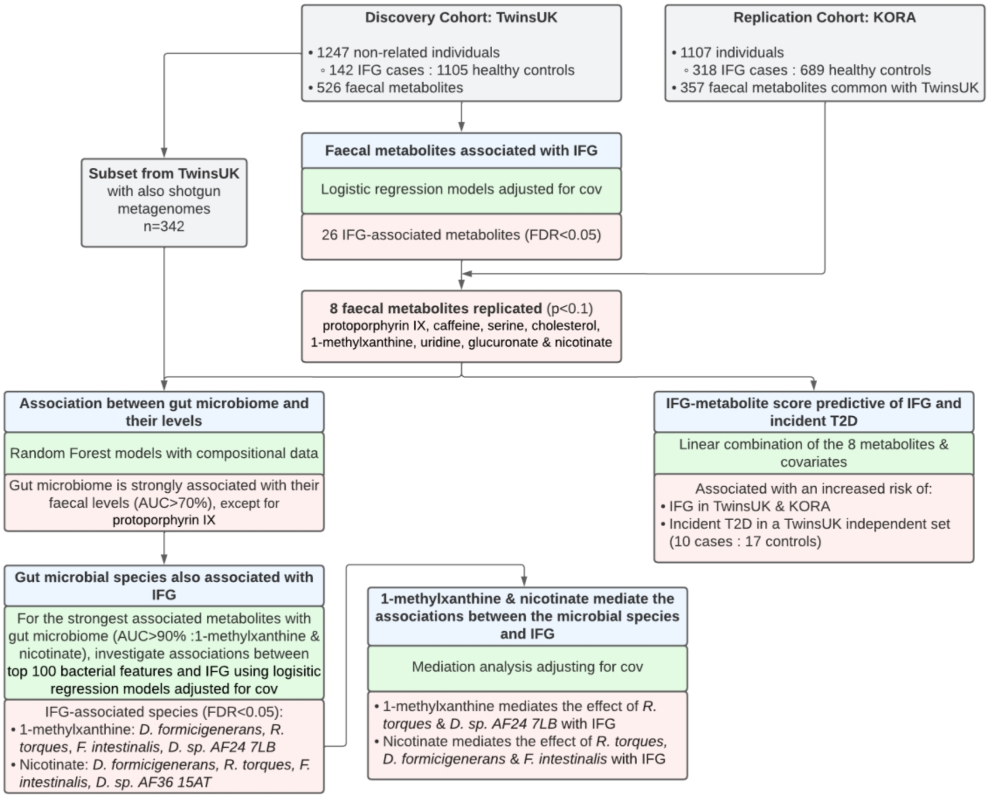
Figure legends

Figure 1. Flowchart of the study design with the main results. Data, aims, methods and results are shown in grey, blue, green, and pink squares, respectively. Mediation analyses were also performed for the metabolites making up the score that were predicted by the gut microbiome composition with an AUC>70%. *Abbreviations*: Cov, covariates (age, BMI and sex); FDR, false discovery rate; IFG, impaired fasting glucose; T2D, type-2 diabetes.

Figure 2. **Faecal metabolites significantly associated with IFG in 1247 individuals from TwinsUK after adjusting for baseline age and BMI, sex, and multiple testing (FDR<0.05).** Bars represent OR. Base labels illustrate subpathways. *Abbreviations:* met., metabolism.

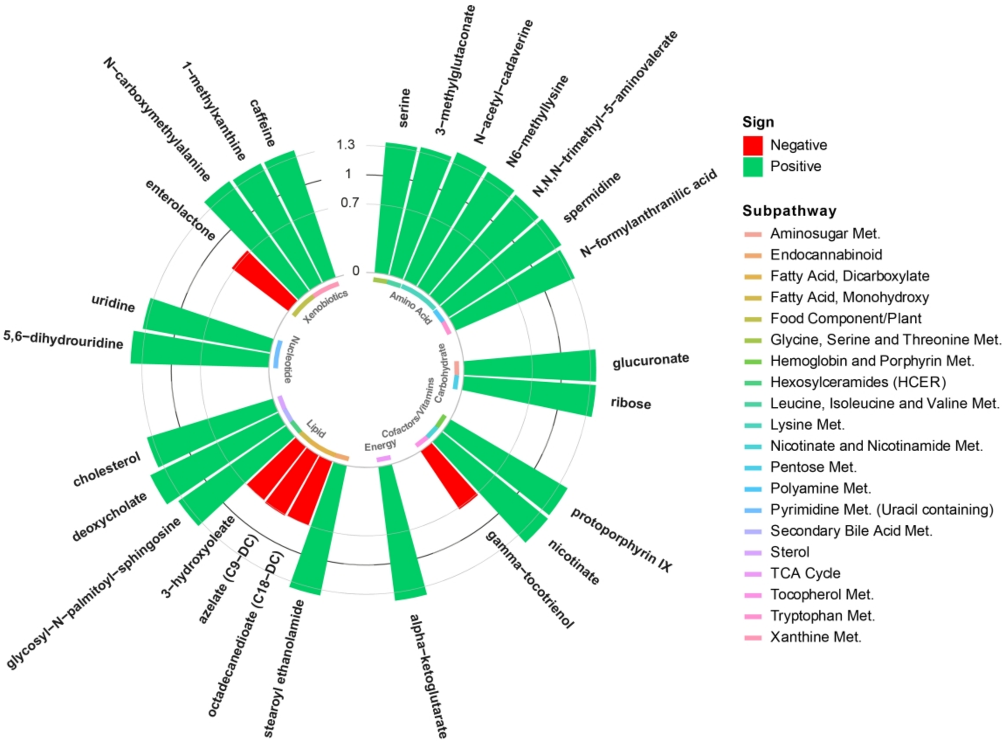
Figure 3. Faecal metabolites significantly associated with IFG after adjusting for age, BMI and sex in TwinsUK (FDR<0.05), KORA (p-value<0.1) and in the overall cohort (applying inverse variance random effect meta-analysis). The odds ratio (OR) and 95% confidence interval are indicated.

Figure 4. Associations of the gut microbiota with the 8 faecal replicated metabolites and impaired fasting glucose (IFG) in 342 TwinsUK participants. (A) Influence of the gut microbiota composition in the faecal abundances of the 8 replicated metabolites estimated by Random Forest regressors (Spearman's correlations between the real value of each metabolite and the value predicted) and classifiers (AUC). Red and blue bars represent the mean AUC and Spearman's correlations with the respective 95% confidence intervals across 5 folds, respectively. (B) Mediation analyses of the associations between characterised gut bacterial species and IFG. Models were adjusted for age, BMI, and sex. Path coefficients are shown beside each path, and indirect effects and variance accounted for (VAF) score are indicated below each mediator (left: nicotinate, right: 1-methylxanthine). Only metabolites with a predictive power of AUC>90% in '(A)' are shown.



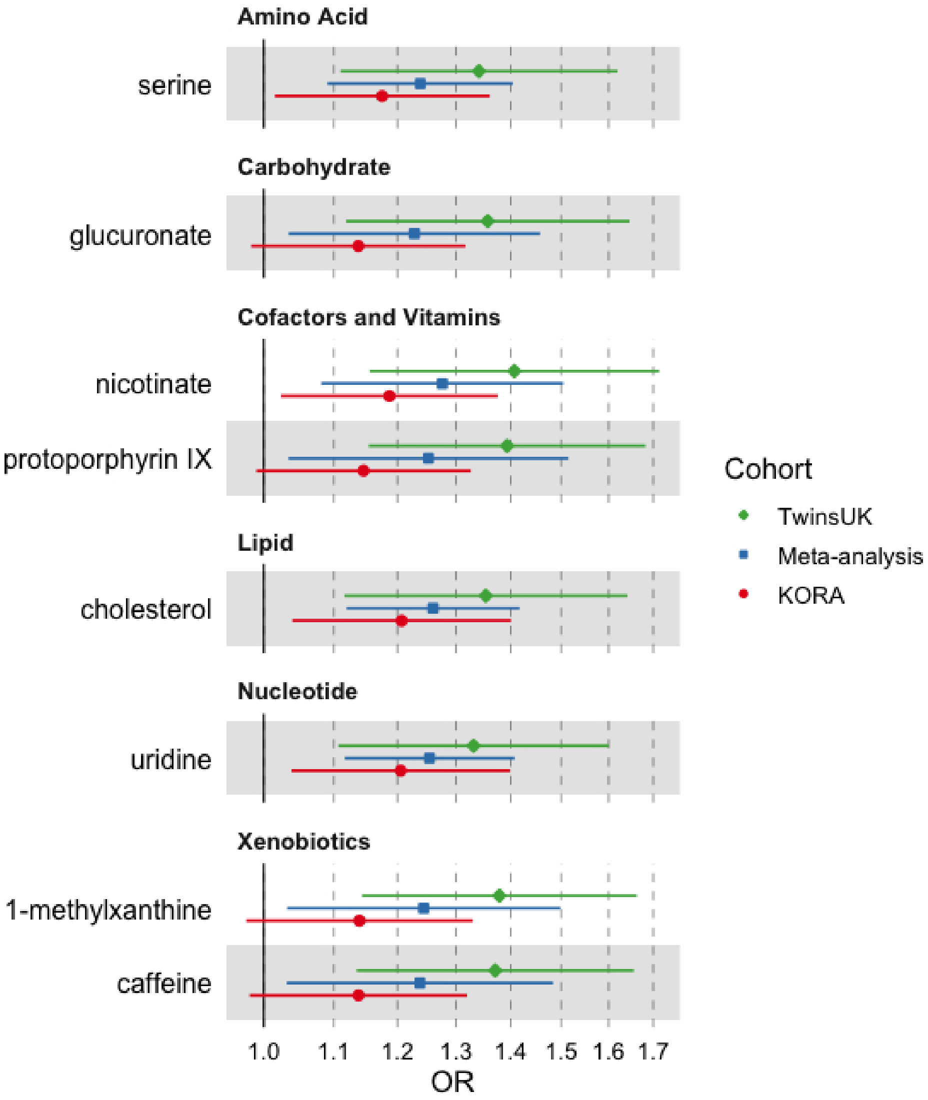
Flowchart of the study design with the main results. Data, aims, methods and results are shown in grey, blue, green, and pink squares, respectively. Mediation analyses were also performed for the metabolites making up the score that were predicted by the gut microbiome composition with an AUC>70%. Abbreviations: Cov, covariates (age, BMI and sex); FDR, false discovery rate; IFG, impaired fasting glucose; T2D, type-2 diabetes.

732x594mm (63 x 63 DPI)



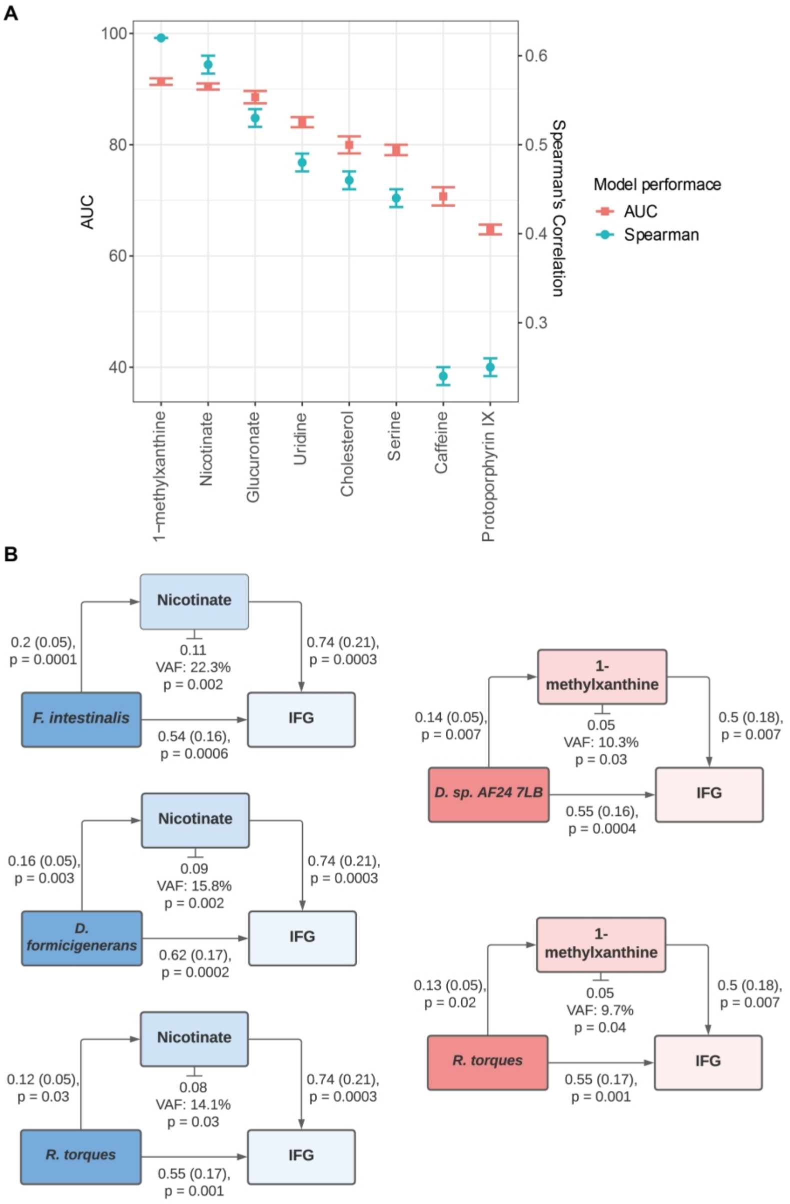
Faecal metabolites significantly associated with IFG in 1247 individuals from TwinsUK after adjusting for baseline age and BMI, sex, and multiple testing (FDR<0.05). Bars represent OR. Base labels illustrate subpathways. Abbreviations: met., metabolism.

729x538mm (118 x 118 DPI)



Faecal metabolites significantly associated with IFG after adjusting for age, BMI and sex in TwinsUK (FDR<0.05), KORA (p-value<0.1) and in the overall cohort (applying inverse variance random effect meta-analysis). The odds ratio (OR) and 95% confidence interval are indicated.

206x234mm (72 x 72 DPI)



Associations of the gut microbiota with the 8 faecal replicated metabolites and IFG in 342 TwinsUK participants. (A) Influence of the gut microbiota composition in the faecal abundances of the 8 replicated metabolites estimated by Random Forest regressors (Spearman's correlations between the real value of each metabolite and the value predicted) and classifiers (AUC). Red and blue bars represent the mean AUC and Spearman's correlations with the respective 95% confidence intervals across 5 folds, respectively. (B) Mediation analyses of the associations between characterised gut bacterial species and IFG. Models were adjusted for age, BMI, and sex. Path coefficients are shown beside each path, and indirect effects and variance accounted for (VAF) score are indicated below each mediator (left: nicotinate, right: 1-methylxanthine). Only metabolites with a predictive power of AUC>90% in '(A)' are shown.

520x744mm (118 x 118 DPI)

A faecal metabolite signature of impaired fasting glucose: results from two independent population-based cohorts

Ana Nogal[1*], Francesca Tettamanzi[1,2*], Qiuling Dong[3], Panayiotis Louca[1], Alessia Visconti[1], Colette Christiansen[1], Taylor Breuninger[4], Jakob Linseisen[4,5,6], Harald Grallert[3,7], Nina Wawro[3a,4] Francesco Asnicar[8], Kari Wong[9], Andrei-Florin Baleanu[1], Gregory A. Michelotti[9], Nicola Segata[8], Mario Falchi[1], Annette Peters[3a,7,10], Paul W. Franks[11,12], Vincenzo Bagnardi[13], Tim D Spector[1], Jordana T Bell[1], Christian Gieger[3,7], Ana M Valdes[14], Cristina Menni[1]

Supplementary material

Metabolomics profiling

Metabolite concentrations were measured from faecal samples by Metabolon Inc. (Durham, USA) using an untargeted LC-MS platform. All samples were maintained at -80°C until processing. As a means of quality control, several recovery standards were added prior to the first step in the extraction process. Briefly, to remove protein, dissociate small molecules bound to proteins or trapped within the precipitated protein matrix, and to recover chemically diverse metabolites, proteins were precipitated in methanol and vigorously shaken for 2 minutes (Glen Mills GenoGrinder 2000), then centrifuged. The resulting extract was divided into five fractions; both aliquots (i) and (ii) were analysed using acidic positive ion conditions and chromatographically optimised for hydrophilic and hydrophobic compounds respectively, aliquot (iii) was analysed using a basic negative ion optimised conditions using a dedicated separate dedicated C18 column, aliquot (iv) was analysed using negative ionisation following elution from a hydrophilic interaction liquid chromatography column, while aliquot (v) was reserved as a back-up.

Several controls were analysed in concert with experimental samples. (i) a pooled sample generated from a small volume of each experimental sample of interest served as a technical replicate throughout the platform run; (ii) extracted water samples served as process blanks; (iii) and a cocktail of standards, known not to interfere with measurements, spiked into every analysed sample facilitated instrument performance monitoring and aided chromatographic alignment. Instrument variability was determined by calculating the median relative standard deviation (RSD) for the standards that were added to each sample prior to injection into the mass spectrometers. Overall process variability was determined by calculating the median RSD for all endogenous metabolites (i.e., non-instrument standards) present in 100% or more of the pooled technical replicate samples. Experimental samples and controls were randomised across the platform run.

Compound identification

Metabolites were identified by comparison of the ion features in the experimental samples to a reference library of chemical standard entries that included retention time/index, molecular weight (m/z), and MS spectra. Identification of known chemical entities is based on comparison across all 3 features to metabolomic library entries of purified standards. More than 3300 commercially available purified standard compounds have been acquired and registered into the library, while additional mass spectral entries have been created for structurally unnamed biochemicals, which have been identified by virtue of their recurrent nature (both chromatographic and mass spectral). These compounds have the potential to be identified by future acquisition of a matching purified standard or by classical structural analysis.

Metabolite quantification and normalisation

Peaks were quantified using area-under-the-curve. Raw area counts for each metabolite in each sample were normalised to correct for variation resulting from instrument inter-day tuning differences by the median value for each run-day, therefore, setting the medians to 1.0 for each run. This preserved variation between samples but allowed metabolites of widely different raw peak areas to be compared on a similar graphical scale.

Metagenomic assessment in TwinsUK

Faecal sample collection

Participants collected stool samples at home in pre-labelled kits (containing 2 x 25ml tube or 1 x 25ml tube and 1 x 10ml Zymo buffer), which were posted to them before their clinic visit date and brought with them to the visit. In the laboratory, samples were homogenised, aliquoted into 4 bijou tubes, and stored at −80 °C, within 2 hours of receipt.

DNA extraction, library preparation, and sequencing

To isolate genomic DNA from faecal material, bijou tubes were removed from the freezer and grounded with glass beads and 5-6ml distilled water (Spex Grinder, 10 seconds, 800 strokes per minute). The supernatant was centrifuged and further grounded (5 minutes, 1000 strokes per minute) before 200-300µl of the sample was mixed with 10µl PK solution and 720µl of Lysis/Bind Master Mix). Proteins were degraded by the binding solution and subsequently extracted by KingFisher Flex robot. DNA was washed in 2 steps using washing solutions and eluted in MagMax Core Elution Buffer in 100µl. Library preparation and sequencing was performed by GenomeScan.

Metagenome quality control and preprocessing

Sequenced metagenomes were processed using the YAMP pipeline (v. 0.9.5.3). Briefly, identical reads were removed. Reads were filtered to remove adapters, known artefacts, phix174, and then quality trimmed (PhRED quality score < 10). Reads that became too short after trimming (N < 60 bp) were discarded. We retained singleton reads (i.e., reads whose mate has been discarded) to retain as much information as possible. Contaminant reads belonging to the host genome were removed (build: GRCh37), and low-quality samples (i.e., samples with <10M reads after QC) were discarded.

Microbiome taxonomic profiling

The metagenomic analysis was conducted following the general guidelines and based on the bioBakery computational environment. High resolution taxonomic profiling of the metagenomes was performed using MetaPhlAn 4.beta.2 with the January 2021 database and default parameters.

Statistical analysis

We run random forest regression (1000 trees and a third of features number as number of variables randomly sampled as candidates at each split) and classification models (1000 trees and square root of features number as number of variables randomly sampled as candidates at each split) with compositional data using 5-folds cross-validation. Before running the models, gut microbiota variables with variance zero or near to zero were excluded using the nearZeroVar function implemented in R in the caret package (the included/excluded SGBs are shown in **Supplementary Table 6**). For the classifiers, the continuous response was converted into two classes based on the top and bottom quartiles. The features were ranked based on the node purity.

Super-pathway
Amino Acid
Amino Acid
Nucleotide
Amino Acid
Amino Acid
Amino Acid
Amino Acid
Amino Acid
Lipid
Amino Acid
Lipid
Amino Acid
Amino Acid
Amino Acid
Amino Acid
Nucleotide
Carbohydrate
Energy
Lipid
Carbohydrate
Amino Acid
Lipid
Nucleotide
Nucleotide
Amino Acid
Cofactors and Vitamins
Xenobiotics
Nucleotide
Carbohydrate
Xenobiotics
Cofactors and Vitamins
Xenobiotics
Nucleotide
Nucleotide
Nucleotide
Nucleotide
Amino Acid
Lipid
Nucleotide
Lipid
Lipid
Lipid
Nucleotide
Lipid
Amino Acid

Amino Acid
Lipid
Amino Acid
Amino Acid
Amino Acid
Amino Acid
Energy
Lipid
Lipid
Lipid
Lipid
Amino Acid
Nucleotide
Nucleotide
Amino Acid
Amino Acid
Energy
Amino Acid
Carbohydrate
Lipid
Amino Acid
Amino Acid
Amino Acid
Cofactors and Vitamins
Nucleotide
Cofactors and Vitamins
Lipid
Amino Acid
Xenobiotics
Nucleotide
Lipid
Nucleotide
Amino Acid
Cofactors and Vitamins
Energy
Nucleotide
Carbohydrate
Nucleotide
Amino Acid
Amino Acid
Amino Acid
Amino Acid
Amino Acid
Nucleotide
Amino Acid
Nucleotide

Amino Acid
Lipid
Energy
Lipid
Lipid
Amino Acid
Amino Acid
Cofactors and Vitamins
Amino Acid
Cofactors and Vitamins
Amino Acid
Amino Acid
Amino Acid
Amino Acid
Cofactors and Vitamins
Cofactors and Vitamins
Nucleotide
Amino Acid
Amino Acid
Nucleotide
Amino Acid
Nucleotide
Nucleotide
Amino Acid
Amino Acid
Cofactors and Vitamins
Amino Acid
Amino Acid
Amino Acid
Nucleotide
Lipid
Xenobiotics
Nucleotide
Amino Acid
Carbohydrate
Lipid
Lipid
Carbohydrate
Carbohydrate
Carbohydrate
Xenobiotics
Amino Acid
Amino Acid
Amino Acid
Amino Acid
Amino Acid

Amino Acid
Energy
Lipid
Amino Acid
Amino Acid
Xenobiotics
Amino Acid
Carbohydrate
Xenobiotics
Lipid
Nucleotide
Lipid
Xenobiotics
Lipid
Lipid
Amino Acid
Amino Acid
Xenobiotics
Amino Acid
Xenobiotics
Amino Acid
Carbohydrate
Peptide
Lipid
Peptide
Amino Acid
Xenobiotics
Lipid
Lipid
Lipid
Lipid
Xenobiotics
Amino Acid
Xenobiotics
Xenobiotics
Lipid
Xenobiotics
Lipid
Xenobiotics
Lipid
Amino Acid
Nucleotide
Nucleotide
Amino Acid
Amino Acid
Amino Acid

Xenobiotics
Amino Acid
Xenobiotics
Lipid
Lipid
Lipid
Lipid
Amino Acid
Xenobiotics
Cofactors and Vitamins
Amino Acid
Carbohydrate
Xenobiotics
Carbohydrate
Cofactors and Vitamins
Peptide
Amino Acid
Cofactors and Vitamins
Amino Acid
Lipid
Lipid
Lipid
Lipid
Lipid
Amino Acid
Amino Acid
Lipid
Amino Acid
Amino Acid
Nucleotide
Carbohydrate
Lipid
Amino Acid
Xenobiotics
Lipid
Cofactors and Vitamins
Amino Acid
Xenobiotics
Lipid
Lipid
Lipid
Lipid
Lipid
Amino Acid
Cofactors and Vitamins
Cofactors and Vitamins

Peptide
Nucleotide
Lipid
Xenobiotics
Lipid
Cofactors and Vitamins
Amino Acid
Lipid
Peptide
Xenobiotics
Amino Acid
Amino Acid
Amino Acid
Amino Acid
Amino Acid
Lipid
Lipid
Amino Acid
Amino Acid
Lipid
Lipid
Lipid
Lipid
Amino Acid
Lipid
Xenobiotics
Amino Acid
Xenobiotics
Lipid
Peptide
Xenobiotics
Xenobiotics
Xenobiotics
Xenobiotics
Peptide
Amino Acid
Nucleotide
Nucleotide
Lipid
Amino Acid
Carbohydrate
Xenobiotics
Lipid
Xenobiotics
Amino Acid
Xenobiotics

Xenobiotics
Lipid
Lipid
Lipid
Lipid
Xenobiotics
Xenobiotics
Xenobiotics
Peptide
Carbohydrate
Amino Acid
Lipid
Lipid
Amino Acid
Amino Acid
Lipid
Xenobiotics
Amino Acid
Energy
Peptide
Amino Acid
Nucleotide
Amino Acid
Peptide
Amino Acid
Amino Acid
Lipid
Amino Acid
Cofactors and Vitamins
Cofactors and Vitamins
Lipid
Lipid
Lipid
Xenobiotics
Amino Acid
Lipid
Lipid
Xenobiotics
Xenobiotics
Lipid
Lipid
Cofactors and Vitamins
Xenobiotics
Lipid
Cofactors and Vitamins
Lipid

Xenobiotics
Xenobiotics
Xenobiotics
Peptide
Amino Acid
Peptide
Peptide
Cofactors and Vitamins
Cofactors and Vitamins
Lipid
Amino Acid
Xenobiotics
Amino Acid
Peptide
Xenobiotics
Xenobiotics
Lipid
Xenobiotics
Peptide
Amino Acid
Peptide
Peptide
Amino Acid
Peptide
Energy
Lipid
Lipid
Carbohydrate
Lipid
Lipid
Cofactors and Vitamins
Lipid
Amino Acid
Cofactors and Vitamins
Xenobiotics
Lipid
Amino Acid
Amino Acid
Amino Acid
Xenobiotics
Amino Acid
Amino Acid
Xenobiotics
Xenobiotics
Amino Acid
Amino Acid

Amino Acid
Amino Acid
Lipid
Cofactors and Vitamins
Peptide
Lipid
Amino Acid
Amino Acid
Amino Acid
Lipid
Lipid
Carbohydrate
Peptide
Amino Acid
Xenobiotics
Amino Acid
Xenobiotics
Lipid
Lipid
Carbohydrate
Partially Characterized Molecules
Amino Acid
Lipid
Amino Acid
Carbohydrate
Lipid
Lipid
Xenobiotics
Amino Acid
Xenobiotics
Lipid
Amino Acid
Xenobiotics
Carbohydrate
Carbohydrate
Carbohydrate
Peptide
Carbohydrate
Carbohydrate
Carbohydrate
Xenobiotics
Amino Acid
Amino Acid
Amino Acid
Lipid
Carbohydrate

Carbohydrate
Xenobiotics
Amino Acid
Energy
Lipid
Lipid
Lipid
Lipid
Lipid
Lipid
Cofactors and Vitamins
Lipid
Lipid
Lipid
Lipid
Xenobiotics
Xenobiotics
Lipid
Lipid
Lipid
Lipid
Amino Acid
Lipid
Lipid
Lipid
Lipid
Peptide
Amino Acid
Lipid
Xenobiotics
Lipid
Lipid
Lipid
Lipid
Lipid
Amino Acid
Lipid
Lipid
Lipid
Lipid
Lipid
Lipid
Cofactors and Vitamins
Lipid
Lipid
Cofactors and Vitamins

Lipid
Cofactors and Vitamins
Cofactors and Vitamins
Cofactors and Vitamins
Lipid
Lipid
Nucleotide
Lipid
Amino Acid
Lipid
Amino Acid
Amino Acid
Lipid
Xenobiotics
Amino Acid
Lipid
Lipid
Nucleotide
Lipid
Xenobiotics
Carbohydrate
Lipid
Lipid
Lipid
Lipid
Amino Acid
Lipid
Lipid
Amino Acid
Amino Acid
Amino Acid
Amino Acid
Xenobiotics
Amino Acid
Amino Acid
Lipid
Lipid
Lipid
Lipid
Xenobiotics
Lipid
Cofactors and Vitamins
Lipid
Lipid
Lipid
Amino Acid

Xenobiotics
Amino Acid
Lipid
Lipid
Amino Acid
Amino Acid
Amino Acid
Amino Acid
Xenobiotics
Amino Acid
Xenobiotics
Amino Acid
Lipid
Partially Characterized Molecules
Partially Characterized Molecules
Xenobiotics
Peptide
Amino Acid
Amino Acid
Peptide
Amino Acid

Sub-pathway
Glutamate Metabolism
Tryptophan Metabolism
Pyrimidine Metabolism, Uracil containing
Methionine, Cysteine, SAM and Taurine Metabolism
Glutamate Metabolism
Glycine, Serine and Threonine Metabolism
Histidine Metabolism
Leucine, Isoleucine and Valine Metabolism
Sterol
Phenylalanine Metabolism
Fatty Acid, Dicarboxylate
Alanine and Aspartate Metabolism
Polyamine Metabolism
Alanine and Aspartate Metabolism
Creatine Metabolism
Pyrimidine Metabolism, Cytidine containing
Glycolysis, Gluconeogenesis, and Pyruvate Metabolism
TCA Cycle
Mevalonate Metabolism
Pentose Metabolism
Phenylalanine Metabolism
Ketone Bodies
Purine Metabolism, Adenine containing
Purine Metabolism, Adenine containing
Phenylalanine Metabolism
Biotin Metabolism
Xanthine Metabolism
Pyrimidine Metabolism, Cytidine containing
Pentose Metabolism
Food Component/Plant
Nicotinate and Nicotinamide Metabolism
Food Component/Plant
Pyrimidine Metabolism, Orotate containing
Pyrimidine Metabolism, Thymine containing
Pyrimidine Metabolism, Uracil containing
Pyrimidine Metabolism, Uracil containing
Histidine Metabolism
Long Chain Polyunsaturated Fatty Acid (n3 and n6)
Purine Metabolism, (Hypo)Xanthine/Inosine containing
Secondary Bile Acid Metabolism
Long Chain Saturated Fatty Acid
Long Chain Saturated Fatty Acid
Purine Metabolism, (Hypo)Xanthine/Inosine containing
Inositol Metabolism
Leucine, Isoleucine and Valine Metabolism

Alanine and Aspartate Metabolism
Sterol
Glycine, Serine and Threonine Metabolism
Tyrosine Metabolism
Lysine Metabolism
Methionine, Cysteine, SAM and Taurine Metabolism
TCA Cycle
Long Chain Saturated Fatty Acid
Long Chain Saturated Fatty Acid
Long Chain Saturated Fatty Acid
Long Chain Saturated Fatty Acid
Polyamine Metabolism
Purine Metabolism, Guanine containing
Pyrimidine Metabolism, Uracil containing
Phenylalanine Metabolism
Tryptophan Metabolism
TCA Cycle
Lysine Metabolism
Pentose Metabolism
Secondary Bile Acid Metabolism
Urea cycle; Arginine and Proline Metabolism
Glutathione Metabolism
Lysine Metabolism
Nicotinate and Nicotinamide Metabolism
Pyrimidine Metabolism, Orotate containing
Pantothenate and CoA Metabolism
Sphingolipid Synthesis
Tryptophan Metabolism
Drug - Topical Agents
Purine Metabolism, Adenine containing
Long Chain Monounsaturated Fatty Acid
Purine Metabolism, Adenine containing
Polyamine Metabolism
Tocopherol Metabolism
TCA Cycle
Pyrimidine Metabolism, Thymine containing
Glycolysis, Gluconeogenesis, and Pyruvate Metabolism
Purine Metabolism, Guanine containing
Histidine Metabolism
Alanine and Aspartate Metabolism
Leucine, Isoleucine and Valine Metabolism
Methionine, Cysteine, SAM and Taurine Metabolism
Leucine, Isoleucine and Valine Metabolism
Pyrimidine Metabolism, Orotate containing
Tyrosine Metabolism
Purine Metabolism, (Hypo)Xanthine/Inosine containing

Urea cycle; Arginine and Proline Metabolism
Medium Chain Fatty Acid
TCA Cycle
Medium Chain Fatty Acid
Medium Chain Fatty Acid
Glycine, Serine and Threonine Metabolism
Leucine, Isoleucine and Valine Metabolism
Vitamin B6 Metabolism
Tyrosine Metabolism
Riboflavin Metabolism
Methionine, Cysteine, SAM and Taurine Metabolism
Urea cycle; Arginine and Proline Metabolism
Methionine, Cysteine, SAM and Taurine Metabolism
Urea cycle; Arginine and Proline Metabolism
Hemoglobin and Porphyrin Metabolism
Vitamin B6 Metabolism
Pyrimidine Metabolism, Thymine containing
Tryptophan Metabolism
Methionine, Cysteine, SAM and Taurine Metabolism
Purine Metabolism, (Hypo)Xanthine/Inosine containing
Glycine, Serine and Threonine Metabolism
Purine Metabolism, (Hypo)Xanthine/Inosine containing
Pyrimidine Metabolism, Uracil containing
Tryptophan Metabolism
Glycine, Serine and Threonine Metabolism
Thiamine Metabolism
Tryptophan Metabolism
Lysine Metabolism
Phenylalanine Metabolism
Purine Metabolism, (Hypo)Xanthine/Inosine containing
Glycerolipid Metabolism
Bacterial/Fungal
Purine Metabolism, (Hypo)Xanthine/Inosine containing
Lysine Metabolism
Aminosugar Metabolism
Carnitine Metabolism
Phospholipid Metabolism
Pentose Metabolism
Glycogen Metabolism
Aminosugar Metabolism
Food Component/Plant
Leucine, Isoleucine and Valine Metabolism
Histidine Metabolism
Guanidino and Acetamido Metabolism
Lysine Metabolism
Histidine Metabolism

Glutamate Metabolism
TCA Cycle
Fatty Acid, Dicarboxylate
Leucine, Isoleucine and Valine Metabolism
Histidine Metabolism
Benzoate Metabolism
Leucine, Isoleucine and Valine Metabolism
Pentose Metabolism
Benzoate Metabolism
Fatty Acid Synthesis
Pyrimidine Metabolism, Cytidine containing
Phospholipid Metabolism
Benzoate Metabolism
Sphingosines
Sphingolipid Synthesis
Lysine Metabolism
Tyrosine Metabolism
Benzoate Metabolism
Lysine Metabolism
Food Component/Plant
Tryptophan Metabolism
Aminosugar Metabolism
Dipeptide
Fatty Acid, Dicarboxylate
Gamma-glutamyl Amino Acid
Methionine, Cysteine, SAM and Taurine Metabolism
Xanthine Metabolism
Long Chain Polyunsaturated Fatty Acid (n3 and n6)
Primary Bile Acid Metabolism
Secondary Bile Acid Metabolism
Fatty Acid, Dicarboxylate
Chemical
Leucine, Isoleucine and Valine Metabolism
Food Component/Plant
Benzoate Metabolism
Fatty Acid, Dicarboxylate
Food Component/Plant
Fatty Acid, Monohydroxy
Food Component/Plant
Monoacylglycerol
Leucine, Isoleucine and Valine Metabolism
Pyrimidine Metabolism, Uracil containing
Purine Metabolism, Adenine containing
Phenylalanine Metabolism
Leucine, Isoleucine and Valine Metabolism
Methionine, Cysteine, SAM and Taurine Metabolism

Food Component/Plant
Alanine and Aspartate Metabolism
Food Component/Plant
Fatty Acid, Branched
Primary Bile Acid Metabolism
Sterol
Monoacylglycerol
Tryptophan Metabolism
Food Component/Plant
Thiamine Metabolism
Creatine Metabolism
Fructose, Mannose and Galactose Metabolism
Food Component/Plant
Pentose Metabolism
Ascorbate and Aldarate Metabolism
Dipeptide
Glutamate Metabolism
Vitamin B6 Metabolism
Glutamate Metabolism
Fatty Acid Metabolism (also BCAA Metabolism)
Secondary Bile Acid Metabolism
Secondary Bile Acid Metabolism
Fatty Acid Metabolism (also BCAA Metabolism)
Fatty Acid, Monohydroxy
Tyrosine Metabolism
Urea cycle; Arginine and Proline Metabolism
Primary Bile Acid Metabolism
Histidine Metabolism
Histidine Metabolism
Purine Metabolism, Guanine containing
Aminosugar Metabolism
Fatty Acid, Dicarboxylate
Tyrosine Metabolism
Xanthine Metabolism
Fatty Acid, Dicarboxylate
Nicotinate and Nicotinamide Metabolism
Tryptophan Metabolism
Food Component/Plant
Fatty Acid, Monohydroxy
Medium Chain Fatty Acid
Medium Chain Fatty Acid
Long Chain Polyunsaturated Fatty Acid (n3 and n6)
Monoacylglycerol
Urea cycle; Arginine and Proline Metabolism
Nicotinate and Nicotinamide Metabolism
Tocopherol Metabolism

Gamma-glutamyl Amino Acid
Pyrimidine Metabolism, Uracil containing
Short Chain Fatty Acid
Benzoate Metabolism
Long Chain Monounsaturated Fatty Acid
Nicotinate and Nicotinamide Metabolism
Glutamate Metabolism
Long Chain Monounsaturated Fatty Acid
Gamma-glutamyl Amino Acid
Food Component/Plant
Alanine and Aspartate Metabolism
Glutamate Metabolism
Histidine Metabolism
Phenylalanine Metabolism
Urea cycle; Arginine and Proline Metabolism
Lysophospholipid
Lysophospholipid
Tryptophan Metabolism
Leucine, Isoleucine and Valine Metabolism
Medium Chain Fatty Acid
Sterol
Long Chain Polyunsaturated Fatty Acid (n3 and n6)
Secondary Bile Acid Metabolism
Urea cycle; Arginine and Proline Metabolism
Sphingolipid Synthesis
Food Component/Plant
Urea cycle; Arginine and Proline Metabolism
Xanthine Metabolism
Phospholipid Metabolism
Dipeptide
Xanthine Metabolism
Xanthine Metabolism
Xanthine Metabolism
Xanthine Metabolism
Gamma-glutamyl Amino Acid
Leucine, Isoleucine and Valine Metabolism
Purine Metabolism, Guanine containing
Pyrimidine Metabolism, Uracil containing
Sterol
Leucine, Isoleucine and Valine Metabolism
Aminosugar Metabolism
Food Component/Plant
Lysophospholipid
Benzoate Metabolism
Glutathione Metabolism
Food Component/Plant

Chemical
Fatty Acid, Dicarboxylate
Fatty Acid, Monohydroxy
Fatty Acid, Dicarboxylate
Long Chain Polyunsaturated Fatty Acid (n3 and n6)
Food Component/Plant
Benzoate Metabolism
Benzoate Metabolism
Dipeptide
Advanced Glycation End-product
Leucine, Isoleucine and Valine Metabolism
Carnitine Metabolism
Fatty Acid, Dicarboxylate
Lysine Metabolism
Lysine Metabolism
Fatty Acid, Dicarboxylate
Food Component/Plant
Urea cycle; Arginine and Proline Metabolism
TCA Cycle
Gamma-glutamyl Amino Acid
Alanine and Aspartate Metabolism
Purine and Pyrimidine Metabolism
Glycine, Serine and Threonine Metabolism
Dipeptide
Urea cycle; Arginine and Proline Metabolism
Methionine, Cysteine, SAM and Taurine Metabolism
Phospholipid Metabolism
Polyamine Metabolism
Tocopherol Metabolism
Tocopherol Metabolism
Sphingomyelins
Fatty Acid, Monohydroxy
Endocannabinoid
Food Component/Plant
Tryptophan Metabolism
Sterol
Endocannabinoid
Food Component/Plant
Food Component/Plant
Fatty Acid, Branched
Endocannabinoid
Nicotinate and Nicotinamide Metabolism
Drug - Other
Fatty Acid, Branched
Hemoglobin and Porphyrin Metabolism
Mevalonate Metabolism

Benzoate Metabolism
Food Component/Plant
Food Component/Plant
Dipeptide
Glutamate Metabolism
Dipeptide
Dipeptide
Hemoglobin and Porphyrin Metabolism
Hemoglobin and Porphyrin Metabolism
Phospholipid Metabolism
Histidine Metabolism
Chemical
Histidine Metabolism
Dipeptide
Food Component/Plant
Food Component/Plant
Short Chain Fatty Acid
Chemical
Dipeptide
Histidine Metabolism
Dipeptide
Dipeptide
Tyrosine Metabolism
Dipeptide
Oxidative Phosphorylation
Fatty Acid, Dicarboxylate
Lysophospholipid
Aminosugar Metabolism
Phosphatidylcholine (PC)
Fatty Acid, Monohydroxy
Biotin Metabolism
Fatty Acid, Dicarboxylate
Phenylalanine Metabolism
Pterin Metabolism
Food Component/Plant
Fatty Acid, Dicarboxylate
Lysine Metabolism
Urea cycle; Arginine and Proline Metabolism
Polyamine Metabolism
Food Component/Plant
Tryptophan Metabolism
Tyrosine Metabolism
Food Component/Plant
Food Component/Plant
Histidine Metabolism
Methionine, Cysteine, SAM and Taurine Metabolism

Lysine Metabolism
Tryptophan Metabolism
Fatty Acid, Amino
Hemoglobin and Porphyrin Metabolism
Gamma-glutamyl Amino Acid
Glycerolipid Metabolism
Leucine, Isoleucine and Valine Metabolism
Phenylalanine Metabolism
Leucine, Isoleucine and Valine Metabolism
Long Chain Polyunsaturated Fatty Acid (n3 and n6)
Fatty Acid Metabolism (Acyl Carnitine, Long Chain Saturated)
Glycogen Metabolism
Gamma-glutamyl Amino Acid
Methionine, Cysteine, SAM and Taurine Metabolism
Chemical
Methionine, Cysteine, SAM and Taurine Metabolism
Chemical
Lysophospholipid
Sterol
Fructose, Mannose and Galactose Metabolism
Partially Characterized Molecules
Lysine Metabolism
Secondary Bile Acid Metabolism
Leucine, Isoleucine and Valine Metabolism
Aminosugar Metabolism
Diacylglycerol
Diacylglycerol
Chemical
Methionine, Cysteine, SAM and Taurine Metabolism
Bacterial/Fungal
Fatty Acid, Monohydroxy
Guanidino and Acetamido Metabolism
Food Component/Plant
Aminosugar Metabolism
Glycolysis, Gluconeogenesis, and Pyruvate Metabolism
Fructose, Mannose and Galactose Metabolism
Dipeptide
Fructose, Mannose and Galactose Metabolism
Pentose Metabolism
Pentose Metabolism
Food Component/Plant
Tyrosine Metabolism
Urea cycle; Arginine and Proline Metabolism
Lysine Metabolism
Glycerolipid Metabolism
Pentose Metabolism

Glycolysis, Gluconeogenesis, and Pyruvate Metabolism
Food Component/Plant
Glutathione Metabolism
TCA Cycle
Long Chain Monounsaturated Fatty Acid
Fatty Acid, Dicarboxylate
Phospholipid Metabolism
Dihydrosphingomyelins
Phosphatidylcholine (PC)
Phosphatidylcholine (PC)
Tocopherol Metabolism
Phosphatidylcholine (PC)
Dihydroceramides
Endocannabinoid
Hexosylceramides (HCER)
Bacterial/Fungal
Bacterial/Fungal
Fatty Acid, Dicarboxylate
Fatty Acid, Dicarboxylate
Galactosyl Glycerolipids
Galactosyl Glycerolipids
Glutamate Metabolism
Diacylglycerol
Diacylglycerol
Diacylglycerol
Diacylglycerol
Gamma-glutamyl Amino Acid
Urea cycle; Arginine and Proline Metabolism
Fatty Acid Hydroxyl Fatty Acid
Food Component/Plant
Phospholipid Metabolism
Sphingolipid Synthesis
Sphingosines
Sphingosines
Ceramides
Urea cycle; Arginine and Proline Metabolism
Fatty Acid Metabolism (Acyl Carnitine, Long Chain Saturated)
Fatty Acid Metabolism (Acyl Carnitine, Long Chain Saturated)
Fatty Acid Metabolism (Acyl Carnitine, Long Chain Saturated)
Endocannabinoid
Endocannabinoid
Sphingolipid Synthesis
Thiamine Metabolism
Secondary Bile Acid Metabolism
Secondary Bile Acid Metabolism
Vitamin A Metabolism

Sphingosines
Vitamin A Metabolism
Vitamin A Metabolism
Vitamin A Metabolism
Long Chain Polyunsaturated Fatty Acid (n3 and n6)
Long Chain Polyunsaturated Fatty Acid (n3 and n6)
Pyrimidine Metabolism, Uracil containing
Fatty Acid, Monohydroxy
Lysine Metabolism
Ceramides
Phenylalanine Metabolism
Leucine, Isoleucine and Valine Metabolism
Secondary Bile Acid Metabolism
Bacterial/Fungal
Polyamine Metabolism
Fatty Acid, Monohydroxy
Fatty Acid, Monohydroxy
Pyrimidine Metabolism, Uracil containing
Fatty Acid, Monohydroxy
Food Component/Plant
Pentose Metabolism
Fatty Acid, Dicarboxylate
Fatty Acid, Dicarboxylate
Fatty Acid, Dicarboxylate
Fatty Acid, Dicarboxylate
Polyamine Metabolism
Galactosyl Glycerolipids
Galactosyl Glycerolipids
Lysine Metabolism
Urea cycle; Arginine and Proline Metabolism
Lysine Metabolism
Lysine Metabolism
Food Component/Plant
Histidine Metabolism
Urea cycle; Arginine and Proline Metabolism
Fatty Acid, Dihydroxy
Fatty Acid, Dihydroxy
Fatty Acid, Dihydroxy
Sphingolipid Synthesis
Drug - Topical Agents
Sterol
Pantothenate and CoA Metabolism
Fatty Acid, Dihydroxy
Secondary Bile Acid Metabolism
Secondary Bile Acid Metabolism
Alanine and Aspartate Metabolism

Food Component/Plant
Tryptophan Metabolism
Fatty Acid, Dicarboxylate
Fatty Acid, Dicarboxylate
Phenylalanine Metabolism
Phenylalanine Metabolism
Leucine, Isoleucine and Valine Metabolism
Leucine, Isoleucine and Valine Metabolism
Food Component/Plant
Methionine, Cysteine, SAM and Taurine Metabolism
Chemical
Polyamine Metabolism
Sterol
Partially Characterized Molecules
Partially Characterized Molecules
Chemical
Polypeptide
Tryptophan Metabolism
Lysine Metabolism
Modified Peptides
Histidine Metabolism

Metabolite
glutamine
tryptophan
beta-alanine
cystine
glutamate
glycine
histidine
leucine
cholesterol
phenylalanine
glutarate (C5-DC)
aspartate
spermidine
asparagine
creatinine
cytidine
lactate
alpha-ketoglutarate
3-hydroxy-3-methylglutarate
2-deoxyribose
4-hydroxyphenylacetate
3-hydroxybutyrate (BHBA)
adenine
adenosine
phenylpyruvate
biotin
caffeine
cytosine
arabinose
gluconate
nicotinamide
phytanate
dihydroorotate
thymine
uracil
uridine
trans-urocanate
linoleate (18:2n6)
allantoin
deoxycholate
arachidate (20:0)
margarate (17:0)
inosine
myo-inositol
isoleucine

alanine
lanosterol
threonine
tyrosine
lysine
methionine
malate
palmitate (16:0)
nonadecanoate (19:0)
stearate (18:0)
myristate (14:0)
putrescine
2'-deoxyguanosine
2'-deoxyuridine
3-hydroxyphenylacetate
kynurenate
succinate
pipecolate
ribose
lithocholate
ornithine
5-oxoproline
N6,N6,N6-trimethyllysine
nicotinate
orotate
pantothenate
phytosphingosine
picolinate
salicylate
1-methyladenine
erucate (22:1n9)
2'-deoxyadenosine
4-acetamidobutanoate
alpha-tocopherol
citrate
3-aminoisobutyrate
glycerate
guanosine
histamine
N-acetylalanine
N-acetylleucine
N-acetylmethionine
N-acetylvaline
N-carbamoylaspartate
tyramine
urate

arginine
caprate (10:0)
fumarate
heptanoate (7:0)
laurate (12:0)
serine
valine
pyridoxal
4-hydroxyphenylpyruvate
riboflavin (Vitamin B2)
cysteine
proline
taurine
citrulline
biliverdin
pyridoxamine
thymidine
serotonin
N-formylmethionine
hypoxanthine
betaine
xanthine
3-ureidopropionate
anthranilate
dimethylglycine
thiamin (Vitamin B1)
tryptamine
2-aminoadipate
phenethylamine
2'-deoxyinosine
glycerol
diaminopimelate
xanthosine
cadaverine
glucuronate
carnitine
choline
xylose
maltose
fucose
2-isopropylmalate
3-methyl-2-oxovalerate
3-methylhistidine
4-guanidinobutanoate
5-hydroxylysine
imidazole lactate

N-acetylglutamate
tricarballylate
suberate (C8-DC)
methylsuccinate
anserine
3-phenylpropionate (hydrocinnamate)
ethylmalonate
ribitol
benzoate
malonate
2'-deoxycytidine
glycerophosphorylcholine (GPC)
p-hydroxybenzaldehyde
sphingosine
sphinganine
N6-formyllysine
gentisate
3,4-dihydroxybenzoate
5-aminovalerate
quinate
indolelactate
N-acetylmuramate
glycylvaline
azelate (C9-DC)
gamma-glutamylleucine
methionine sulfoxide
theophylline
eicosapentaenoate (EPA; 20:5n3)
glycocholate
glycodeoxycholate
maleate
diethanolamine
2,3-dimethylsuccinate
galacturonate
4-hydroxybenzoate
adipate (C6-DC)
saccharin
3-hydroxymyristate
caffeate
1-oleoylglycerol (18:1)
4-methyl-2-oxopentanoate
4-ureidobutyrate
N6-dimethylallyladenine
phenyllactate (PLA)
alpha-hydroxyisocaproate
cysteine s-sulfate

levulinate (4-oxovalerate)
N-acetylaspartate (NAA)
theanine
isocaproate (i6:0)
cholate
beta-sitosterol
1-linoleoylglycerol (18:2)
indoleacetate
harmane
5-(2-Hydroxyethyl)-4-methylthiazole
creatine
galactonate
erythrose
ribonate
threonate
threonylphenylalanine
N-methylglutamate
pyridoxate
2-pyrrolidinone
butyrylglycine
dehydrolithocholate
7-ketodeoxycholate
propionylglycine
5-hydroxyhexanoate
3-(4-hydroxyphenyl)lactate
trans-4-hydroxyproline
glycochenodeoxycholate
4-imidazoleacetate
1-methyl-4-imidazoleacetate
guanine
N-acetylneuraminate
dodecanedioate (C12-DC)
N-acetyltyrosine
1,3-dimethylurate
sebacate (C10-DC)
trigonelline (N'-methylnicotinate)
indolepropionate
daidzein
3-hydroxylaurate
caproate (6:0)
caprylate (8:0)
docosapentaenoate (n3 DPA; 22:5n3)
2-linoleoylglycerol (18:2)
N-alpha-acetylornithine
nicotinamide riboside
delta-tocopherol

gamma-glutamylphenylalanine
pseudouridine
valerate (5:0)
p-cresol
palmitoleate (16:1n7)
nicotinate ribonucleoside
glutamate, gamma-methyl ester
eicosenoate (20:1)
gamma-glutamyl-epsilon-lysine
piperine
N-acetylasparagine
N-acetylglutamine
N-acetylhistidine
N-acetylphenylalanine
N-acetylarginine
1-palmitoyl-GPC (16:0)
1-stearoyl-GPC (18:0)
indole
N-acetylisoleucine
5-dodecenoate (12:1n7)
campesterol
linolenate [alpha or gamma; (18:3n3 or 6)]
hyocholate
methylurea
3-ketosphinganine
stachydrine
N-acetylproline
1-methylxanthine
choline phosphate
glycylleucine
3,7-dimethylurate
1,7-dimethylurate
1,3,7-trimethylurate
5-acetylamino-6-amino-3-methyluracil
gamma-glutamylisoleucine*
isovalerylglycine
7-methylguanine
5-methyluridine (ribothymidine)
cholesterol sulfate
isobutyrylglycine
N-acetyl-beta-glucosaminylamine
ferulate
1-palmitoyl-GPE (16:0)
3-(3-hydroxyphenyl)propionate
cysteinylglycine
vanillate

ectoine
tetradecanedioate (C14-DC)
2-hydroxypalmitate
hexadecanedioate (C16-DC)
dihomo-linolenate (20:3n3 or n6)
pheophorbide A
2,4,6-trihydroxybenzoate
p-cresol sulfate
glycylisoleucine
N6-carboxymethyllysine
2-hydroxy-3-methylvalerate
deoxycarnitine
3-methyladipate
N2-acetyllysine
N6-acetyllysine
octadecanedioate (C18-DC)
4-hydroxycinnamate
dimethylarginine (SDMA + ADMA)
succinylcarnitine (C4-DC)
gamma-glutamylalanine
N-methylalanine
methylphosphate
N-acetylserine
alanylleucine
N-methylproline
cysteine sulfinic acid
glycerophosphoethanolamine
N-acetylputrescine
gamma-tocotrienol
alpha-tocotrienol
palmitoyl sphingomyelin (d18:1/16:0)
13-HODE + 9-HODE
oleoyl ethanolamide
2-aminophenol
indole-3-carboxylate
4-cholesten-3-one
palmitoyl ethanolamide
piperidine
2,3-dihydroxyisovalerate
(16 or 17)-methylstearate (a19:0 or i19:0)
stearoyl ethanolamide
maleamate
N-carbamoylglutamate
(14 or 15)-methylpalmitate (a17:0 or i17:0)
protoporphyrin IX
mevalonate

3-(4-hydroxyphenyl)propionate
enterolactone
solanidine
valylleucine
carboxyethyl-GABA
isoleucylglycine
leucylglycine
D-urobilin
L-urobilin
trimethylamine N-oxide
cis-urocanate
2-oxo-1-pyrrolidinepropionate
hydantoin-5-propionate
valylglycine
2-oxindole-3-acetate
dihydroferulate
butyrate/isobutyrate (4:0)
diglycerol
prolylglycine
imidazole propionate
phenylalanylglycine
phenylalanylalanine
tyrosol
valylglutamine
phosphate
undecanedioate (C11-DC)
1-stearoyl-GPE (18:0)
erythronate*
1-palmitoyl-2-linoleoyl-GPC (16:0/18:2)
2-hydroxydecanoate
biocytin
dimethylmalonic acid
N-methylphenylalanine
pterin
nicotianamine
tridecanedioate (C13-DC)
6-oxopiperidine-2-carboxylate
N-delta-acetylornithine
acisoga
indolin-2-one
tryptophol
o-Tyrosine
2-piperidinone
1-methyl-beta-carboline-3-carboxylic acid
formiminoglutamate
N-propionylmethionine

N-acetyl-cadaverine
N-formylanthranilic acid
2-aminoheptanoate
bilirubin (Z,Z)
gamma-glutamylvaline
glycerol 3-phosphate
3-methyl-2-oxobutyrate
valerylphenylalanine
isovalerate (i5:0)
docosahexaenoate (DHA; 22:6n3)
palmitoylcarnitine (C16)
maltotriose
gamma-glutamylmethionine
methionine sulfone
O-sulfo-L-tyrosine
N-acetylmethionine sulfoxide
1,3-propanediol
1-palmitoyl-GPG (16:0)*
coprostanol
mannitol/sorbitol
glutamine_degradant*
fructosyllysine
6-oxolithocholate
alpha-hydroxyisovalerate
N-acetylglucosamine/N-acetylgalactosamine
oleoyl-linoleoyl-glycerol (18:1/18:2) [1]
oleoyl-linoleoyl-glycerol (18:1/18:2) [2]
sulfate*
3-sulfo-L-alanine
N-methylpipecolate
10-hydroxystearate
1-methylguanidine
2-keto-3-deoxy-gluconate
N-acetylglucosaminylasparagine
glucose
mannose
leucylglutamine*
fructose
arabonate/xylonate
ribulose/xylulose
pyrraline
N-formylphenylalanine
N-acetylcitrulline
N2,N6-diacetyllysine
glycerophosphoglycerol
arabitol/xylitol

pyruvate
sitostanol
2-hydroxybutyrate/2-hydroxyisobutyrate
2-methylcitrate/homocitrate
oleate/vaccenate (18:1)
2-hydroxyglutarate
glycerophosphoinositol*
palmitoyl dihydrosphingomyelin (d18:0/16:0)*
1-oleoyl-2-linoleoyl-GPC (18:1/18:2)*
1-palmitoyl-2-oleoyl-GPC (16:0/18:1)
gamma-tocopherol/beta-tocopherol
1,2-dilinoleoyl-GPC (18:2/18:2)
N-palmitoyl-sphinganine (d18:0/16:0)
linoleoyl ethanolamide
glycosyl-N-palmitoyl-sphingosine (d18:1/16:0)
glutamyl-meso-diaminopimelate
2-acetamidobutanoate
3-methylglutarate/2-methylglutarate
3-carboxyadipate
1-palmitoyl-2-linoleoyl-digalactosylglycerol (16:0/18:2)*
1,2-dilinoleoyl-galactosylglycerol (18:2/18:2)*
butyrylglutamine/isobutyrylglutamine
linoleoyl-linolenoyl-glycerol (18:2/18:3) [1]*
linoleoyl-linolenoyl-glycerol (18:2/18:3) [2]*
linoleoyl-linoleoyl-glycerol (18:2/18:2) [1]*
linoleoyl-linoleoyl-glycerol (18:2/18:2) [2]*
gamma-glutamyl-alpha-lysine
2-oxoarginine*
LAHSA (18:2/OH-18:0)*
deoxymugineic acid
glycerophosphoserine*
sphingadienine
heptadecasphingosine (d17:1)
hexadecasphingosine (d16:1)*
ceramide (d18:1/14:0, d16:1/16:0)*
argininate*
arachidoylcarnitine (C20)*
behenoylcarnitine (C22)*
lignoceroylcarnitine (C24)*
behenoyl ethanolamide (22:0)*
lignoceroyl ethanolamide (24:0)*
hexadecasphinganine (d16:0)*
hydroxymethylpyrimidine
ursocholate
isoursodeoxycholate
beta-cryptoxanthin

eicosanoylsphingosine (d20:1)*
carotene diol (1)
carotene diol (2)
carotene diol (3)
hexadecatrienoate (16:3n3)
hexadecadienoate (16:2n6)
2'-O-methyluridine
2-hydroxybehenate
N,N,N-trimethyl-5-aminovalerate
N-(2-hydroxypalmitoyl)-sphingosine (d18:1/16:0(2OH))
phenylacetate
3-methylglutaconate
isohyodeoxycholate
Urolithin A
(N(1) + N(8))-acetylspermidine
2-hydroxylignocerate*
2-hydroxyarachidate*
5,6-dihydrouridine
3-hydroxyoleate*
pheophytin A
lyxonate
octadecenedioate (C18:1-DC)
heptenedioate (C7:1-DC)*
3-carboxy-4-methyl-5-pentyl-2-furanpropionate (3-CMPFP)**
3-hydroxyadipate
diacetylspermidine*
1-palmitoyl-galactosylglycerol (16:0)*
2-palmitoyl-galactosylglycerol (16:0)*
N,N-dimethyl-5-aminovalerate
3-amino-2-piperidone
N6-methyllysine
N6,N6-dimethyllysine
3-formylindole
1-methyl-5-imidazoleacetate
N,N,N-trimethyl-alanylproline betaine (TMAP)
2S,3R-dihydroxybutyrate
2,4-dihydroxybutyrate
3,4-dihydroxybutyrate
dehydrophytosphingosine*
2,6-dihydroxybenzoic acid
stigmastadienone
pantoate
2R,3R-dihydroxybutyrate
12-ketolithocholate
3-dehydrodeoxycholate
N,N-dimethylalanine

N-carboxymethylalanine
5-hydroxypicolinic acid
branched chain 14:0 dicarboxylic acid**
2-hydroxysebacate
N-butyryl-phenylalanine
N-isobutyryl-phenylalanine
N-butyryl-leucine
N-butyryl-isoleucine
3-indoleglyoxylic acid
2-hydroxy-4-(methylthio)butanoic acid
dibutyl sulfosuccinate
N-carbamoylputrescine
25-hydroxycholesterol sulfate
bilirubin degradation product, $C_{16}H_{18}N_2O_5$ (1)**
bilirubin degradation product, $C_{16}H_{18}N_2O_5$ (3)**
diethyl phosphate
val-val-ala
oxindolylalanine
N-butyryl-lysine
N,N-dimethyl-pro-pro
1-methyl-5-imidazolelactate

HMDB
HMDB0000641
HMDB0000929
HMDB0000056
HMDB0000192
HMDB0000148
HMDB0000123
HMDB0000177
HMDB0000687
HMDB0000067
HMDB0000159
HMDB0000661
HMDB0000191
HMDB0001257
HMDB0000168
HMDB0000562
HMDB0000089
HMDB0000190
HMDB0000208
HMDB0000355
HMDB0003224
HMDB0000020
HMDB0000442,HMDB0000357,HMDB0000011
HMDB0000034
HMDB0000050
HMDB0000205
HMDB0000030
HMDB0001847
HMDB0000630
HMDB0029942
HMDB0000625
HMDB0001406
HMDB0000801
HMDB03349
HMDB0000262
HMDB0000300
HMDB0000296
HMDB0000301
HMDB0006270,HMDB0000673
HMDB0000462
HMDB0000626
HMDB0002212
HMDB0002259
HMDB0000195
HMDB0000211
HMDB0000172

HMDB0000161
HMDB0001251
HMDB0000167
HMDB0000158
HMDB0003405
HMDB0000696
HMDB0031518,HMDB0000156,HMDB0000744
HMDB0000220
HMDB0000772
HMDB0000827
HMDB0000806
HMDB0001414
HMDB0000085
HMDB0000012
HMDB0000440
HMDB0000715
HMDB0000254
HMDB0000070
HMDB0000283
HMDB0000761
HMDB0000214
HMDB0000267
HMDB0001325
HMDB0001488
HMDB0000226
HMDB0000210
HMDB0004610
HMDB0002243
HMDB0001895
HMDB0011599
HMDB0002068
HMDB0000101
HMDB0003681
HMDB0001893
HMDB0000094
HMDB0002166
HMDB0000139,HMDB0006372
HMDB0000133
HMDB0000870
HMDB0000766
HMDB0011756
HMDB0011745
HMDB0011757
HMDB0000828
HMDB0000306
HMDB0000289

HMDB0000517
HMDB0000511
HMDB0000134
HMDB0000666
HMDB0000638
HMDB0000187
HMDB0000883
HMDB0001545
HMDB0000707
HMDB0000244
HMDB0000574
HMDB0000162,HMDB0003411
HMDB0000251
HMDB0000904
HMDB0001008
HMDB0001431
HMDB0000273
HMDB0000259
HMDB0001015
HMDB0000157
HMDB0000043
HMDB0000292
HMDB0000026
HMDB0001123
HMDB0000092
HMDB0000235
HMDB0000303
HMDB0000510
HMDB0012275
HMDB0000071
HMDB0000131
HMDB0001370
HMDB0000299
HMDB0002322
HMDB0000127
HMDB0000062
HMDB0000097
HMDB0000098
HMDB0000163
HMDB0000174,HMDB0029196
HMDB0000402
HMDB0000491
HMDB0000479
HMDB0003464
HMDB0000450
HMDB0002320

HMDB0001138
HMDB0031193
HMDB0000893
HMDB0001844
HMDB0000194
HMDB0000764
HMDB0000622
HMDB0002917,HMDB0001851,HMDB0000568,HMDB0000508
HMDB0001870
HMDB0000691
HMDB0000014
HMDB0000086
HMDB0011718
HMDB0000252
HMDB0000269

HMDB0000152
HMDB0001856
HMDB0003355
HMDB0003072
HMDB0000671
HMDB0060493
HMDB0028854
HMDB0000784
HMDB0011171
HMDB0002005
HMDB0001889
HMDB0001999
HMDB0000138
HMDB00631
HMDB0000176
HMDB0004437

HMDB0002545
HMDB0000500
HMDB0000448
HMDB0029723
HMDB0061656
HMDB0001964
HMDB0011567
HMDB0000695

HMDB0000779,HMDB0000563
HMDB0000665,HMDB00746,HMDB0000624
HMDB0000731

HMDB0000720
HMDB0000812
HMDB0034365
HMDB00689
HMDB0000619
HMDB0000852
HMDB0011568
HMDB0000197
HMDB0035196
HMDB0032985
HMDB0000064
HMDB0000565
HMDB0002649
HMDB0000867
HMDB0062620,HMDB0000943
HMDB0029068
HMDB0062660
HMDB0000017
HMDB0002039
HMDB0000808
HMDB00502
HMDB0000391
HMDB0000783
HMDB0000409,HMDB0000525
HMDB0000755
HMDB0000725
HMDB0000637
HMDB0002024
HMDB0002820
HMDB0000132
HMDB0000230
HMDB0000623
HMDB0000866
HMDB0001857
HMDB0000792
HMDB0000875
HMDB0002302
HMDB0003312
HMDB0000387
HMDB0000535
HMDB0000482
HMDB0006528,HMDB0001976
HMDB0011538
HMDB0003357
HMDB0000855
HMDB0002902

HMDB0000594
HMDB0000767
HMDB0000892
HMDB0001858
HMDB0003229
HMDB0006809
HMDB0061715
HMDB0002231,HMDB0062436
HMDB0003869
HMDB0029377
HMDB0006028
HMDB0006029
HMDB0032055
HMDB0000512
HMDB0004620
HMDB0010382
HMDB0010384
HMDB0000738
HMDB0061684
HMDB0000529
HMDB0002869
HMDB0003073,HMDB0001388
HMDB0000760

HMDB01480
HMDB0004827
HMDB0094701
HMDB0010738
HMDB0001565
HMDB0000759
HMDB0001982
HMDB0011103
HMDB0002123
HMDB0004400
HMDB0011170
HMDB00678
HMDB0000897
HMDB0000884
HMDB00653
HMDB0000730
HMDB01104
HMDB0000954
HMDB0011503
HMDB0000375
HMDB0000078
HMDB0000484

HMDB0240650
HMDB0000872
HMDB0031057
HMDB0000672
HMDB0002925

HMDB0029649
HMDB0011635
HMDB0028844
HMDB0240347
HMDB0000317
HMDB0001161
HMDB0000555
HMDB0000446
HMDB0000206
HMDB0000782
HMDB0002035
HMDB0003334,HMDB0001539
HMDB0061717
HMDB0029142
HMDB0094692
HMDB61711
HMDB0002931
HMDB0028691
HMDB0094696
HMDB0000996
HMDB0000114
HMDB0002064
HMDB0012958
HMDB0006327
HMDB0010169
HMDB0004670,HMDB0004667
HMDB0002088

HMDB0003320
HMDB0000921
HMDB0002100
HMDB0034301
HMDB0012141
HMDB0037397
HMDB0013078

HMDB0062795
HMDB0061859
HMDB0000241
HMDB0000227

HMDB0002199
HMDB0006101
HMDB0003236
HMDB0029131
HMDB0002201
HMDB0028907
HMDB0028929
HMDB04161
HMDB0004159
HMDB0000925
HMDB0034174

HMDB0001212
HMDB0029127
HMDB0035514
HMDB0062121
HMDB0000039

HMDB0011178
HMDB0002271
HMDB0028995
HMDB0028988
HMDB0004284
HMDB0029125
HMDB0001429
HMDB0000888
HMDB0011130
HMDB0000613
HMDB0007973
HMDB0094656
HMDB0003134
HMDB0002001
HMDB0029224
HMDB0000802

HMDB0002327
HMDB0061705
HMDB0003357
HMDB0061384

HMDB03447
HMDB0006050
HMDB0011749

HMDB0000854
HMDB0094704

HMDB0002284
HMDB0004089
HMDB0094649
HMDB0000054
HMDB0011172
HMDB0000126
HMDB0000019
HMDB0094646
HMDB0000718
HMDB0002183
HMDB0000222
HMDB0001262
HMDB0029155
HMDB0062174
HMDB0155722

HMDB0240601
HMDB0000577
HMDB0000247,HMDB0000765

HMDB0034879

HMDB0000407
HMDB0000212,HMDB0000215
HMDB0007219
HMDB0007219
HMDB01448
HMDB0002757

HMDB0037396
HMDB0001522
HMDB0001353
HMDB0000489
HMDB0000122
HMDB0000169
HMDB0028927
HMDB0000660
HMDB0000539
HMDB0000621,HMDB0000751,HMDB0001644,HMDB0003371
HMDB0033143
HMDB0240317
HMDB0000856

HMDB0240316
HMDB0001851,HMDB0000568,HMDB0002917

HMDB0000243
HMDB0000494
HMDB0000729,HMDB00008
HMDB0003518,HMDB0000379
HMDB0003231,HMDB0000573,HMDB0240219,HMDB0000207
HMDB0059655

HMDB0010168
HMDB0008105
HMDB0007972
HMDB0006335,HMDB0001492
HMDB0008138
HMDB11760
HMDB0012252

HMDB0000422,HMDB0000752

HMDB0007249
HMDB0007250
HMDB0007248
HMDB0007248

HMDB0004225

HMDB0240681,HMDB0011773
HMDB0003148
HMDB0006460
HMDB0062468
HMDB0240665

HMDB0000917
HMDB0000686
HMDB0033844

HMDB0000477
HMDB0240328
HMDB0061660

HMDB0000209
HMDB0000522
HMDB0000664
HMDB0013695
HMDB0002189,HMDB0001276
HMDB0039540

HMDB0000497

HMDB0060255

HMDB0061643
HMDB0000345
HMDB0002172

HMDB0000323
HMDB0002038
HMDB0013287
HMDB29737
HMDB04988
HMDB0240365
HMDB0002453
HMDB0000360
HMDB0000337
HMDB0038057
HMDB0013676

HMDB0240389
HMDB0000498
HMDB0000328
HMDB0062742

HMDB0000424

HMDB0037115

HMDB0033458

HMDB0012209

KEGG	KORA
C00064	yes
C00078	yes
C00099	yes
C00491	no
C00025,C00217	yes
C00037	yes
C00135	yes
C00123	yes
C00187	yes
C00079	yes
C00489	yes
C00049	yes
C00315	yes
C00152	yes
C00791	no
C00475	yes
C00186	no
C00026	no
C03761	yes
C01801	no
C00642	yes
C03197,C01089	yes
C00147	yes
C00212	yes
C00166	no
C00120	yes
C07481	yes
C00380	yes
C00216	yes
C00257	no
C00153	yes
C01607	no
C00337	yes
C00178	no
C00106	yes
C00299	yes
C00785	no
C01595	no
C02348,C01551,C02350	no
C04483	yes
C06425	no
	no
C00294	yes
C00137	yes
C06418,C00407,C16424	yes

C00041	yes
C01724,C08624	yes
C00188	yes
C00082	yes
C00739,C00047	yes
C00073	yes
C00149,C00711,C00497	yes
C00249	no
C16535	no
C01530	no
C06424	no
C00134	yes
C00330	yes
C00526	yes
C05593	yes
C01717	yes
C00042	yes
	yes
C00121	yes
C03990	yes
C00077	yes
C02237,C01879	yes
C03793	yes
C00253	yes
C00295	no
C00864	yes
C12144	yes
C10164	yes
C00805	yes
C02216	yes
C08316	no
C00559	yes
C02946	no
C02477	yes
C00158	no
C05145	no
C00258	yes
C00387	yes
C00388	yes
C02847	no
C02710	yes
C02712	yes
	yes
C00438	no
C00483	yes
C00366	no

C00062	yes
C01571	yes
C00122	yes
C17714	yes
C02679	yes
C00065	yes
C00183	yes
C00250	yes
C01179	yes
C00255	yes
C00097	yes
C00148,C000763	yes
C00245	yes
C00327	yes
C00500	yes
C00534	yes
C00214	yes
C00780	yes
C03145	yes
C00262	yes
C00719	no
C00385	yes
C02642	yes
C00108	no
C03626	yes
DG00125,C00378,D08580	yes
C00398	yes
C00956	yes
C05332	yes
C05512	yes
C00116	yes
C00680,C0666	yes
C01762	no
C01672	yes
C16245	yes
C00487,C00308	yes
C00114	yes
C00181	no
C00208	yes
C01019,C01018	yes
C02504	no
C03465,C06008,C00671	no
C01152	yes
C01035	yes
C16741	yes
C05568	yes

C00624	yes
C19806	yes
C08278	yes
	yes
C01262	yes
C05629	yes
	yes
C00379,C01904,C00474,C00532	yes
C00180	yes
C00383	no
C00881	no
C00670	no
C00633	no
C00319	yes
C00836	yes
	yes
C00628	yes
C00230	yes
C00431	yes
C00296	yes
C02043	yes
C02713	yes
	yes
C08261	no
	yes
C02989	no
C07130	yes
C06428	no
C01921	yes
C05464	yes
C01384	no
C06772	no
	yes
C08348	yes
C00156	yes
C06104	yes
C12283	yes
	no
C01197	yes
	no
C00233	no
	yes
C04083	no
C05607	no
C03264	yes
C05824	no

	yes
C01042	yes
C01047	no
	yes
C00695	yes
C01753	yes
	no
C00954	yes
C09209	no
C04294	yes
C00300	no
C00880,C15930	no
C01796	yes
C01685	no
C01620	no
	yes
C01046	yes
C00847	yes
	yes
	no
	yes
	yes
	yes
	yes
C03672	yes
C01157	yes
C05466	yes
C02835	yes
C05828	yes
C00242	yes
C00270	yes
C02678	yes
	yes
	yes
C08277	yes
C01004	yes
	yes
C10208	yes
	yes
C01585	yes
C06423	yes
C16513	no
	no
C00437	yes
C03150	yes
C14151	yes

	yes
C02067	yes
C00803	yes
C01468	yes
C08362	no
C05841	yes
	yes
C16526	no
	yes
C03882	no
	yes
C02716	yes
C02997	yes
C03519	yes
C02562	yes
C04102	yes
	yes
C00463	yes
	yes
	yes
C01789	yes
C06426,C06427	no
C17649	yes
C16363	no
C02934	yes
C10172	yes
	yes
C16358	yes
C00588	no
C02155	yes
C16360	yes
C16356	yes
C16361	yes
C16366	yes
	no
	yes
C02242	yes
	yes
C18043	no
	no
C01239	no
C01494	yes
	yes
C11457	yes
C01419	yes
C06672	no

C06231	yes
	yes
	no
C19615	yes
C03242	no
C18021	yes
	yes
	no
	yes
	yes
	yes
C01181	yes
	yes
C12989	yes
C02727	yes
	yes
C00811	yes
C21189,C03626	yes
	yes
C03738	yes
C02721	yes
	no
	yes
	yes
	yes
C00606	yes
C01233	yes
C02714	yes
C14155	no
C14153	yes
	yes
C14767,C14762	yes
	yes
C01987	yes
C19837	yes
C00599	yes
C16512	no
C01746	yes
C04039	yes
	no
	yes
C01596	no
C05829	yes
C16995	no
C02191	yes
C02104	no

C01744	yes
C18165	yes
C06543	yes
	yes
	yes
	yes
	yes
C05795	yes
C05793	yes
C01104	yes
	no
	yes
C05565	yes
	yes
	yes
	yes
C00246	no
	yes
	yes
	yes
	yes
	yes
C06044	yes
	yes
C00009	yes
	no
	yes
	no
	no
	yes
C05552	no
	yes
	no
C00715	yes
C05324	yes
	yes
	yes
C00437	yes
	yes
C12312	yes
C00955	no
	no
	yes
	yes
C00439	yes
	yes

	yes
C05653	yes
	yes
C00486	yes
	no
C0093	yes
C00141	no
	yes
C08262	yes
C06429	no
C02990	yes
C01835	yes
	no
	no
	yes
	yes
C02457	yes
	no
	yes
C00392,C00794	yes
	yes
	no
	yes
	no
C01074	yes
	yes
	yes
C00059	yes
C00506	yes
	yes
C03195	yes
C02294	yes
C00204	no
C04540	yes
C00031	yes
C00159,C02209,C00936	yes
	yes
C00095	yes
C00502,C05411	no
	no
C21013	yes
	yes
C15532,C02851	yes
	no
C03274	yes
C00379,C00542,C01904	no

C00022	no
C19644	yes
C21297,C05984	yes
C01251	no
C21944,C08367,C01712,C00712	no
C02630	yes
	yes
	yes
	no
C13875	no
C14152,C02483	yes
	no
	yes
	no
	yes
	no
	yes
	yes
	yes
	yes
	yes
	no
	yes
	yes
	yes
	yes
	yes
C03771	yes
	yes
	yes
	yes
	yes
	yes
	yes
	yes
	yes
	yes
	yes
	yes
	yes
	yes
C13915	yes
C01279	no
C17644	yes
C17662	yes
C08591	yes

	yes
	yes
	yes
	yes
	yes
	yes
	no
	no
	yes
	yes
C07086	no
	no
	no
	no
C01029,C00612	no
C17873	no
	no
	no
	no
C05797	no
	no
	no
	no
	no
	no
C03413	no
	no
	no
	no
	no
C02728	no
C05545	no
C08493	no
	no
	no
	no
	no
	no
	no
	no
	no
C00522	no
	no
	no
	no
	no

	no
	no
	no
	no
	no
	no
	no
	no
	no
	no
	no
C00436	no
	no
	no
	no
C06608	no
	no
	no
	no
	no
	no

	Total	Healthy individuals	IFG individuals	Differences between groups (p-value)
N	342	297	45	-
Females, %	83.9	86.2	68.9	0.006
Age, yrs	56 (16.6)	54.3 (16.8)	67.4 (9.3)	<0.0001
BMI, kg/m2	25.6 (5)	25 (4.6)	29.4 (6.1)	<0.0001
Fasting glucose, mmol/L	4.7 (0.5)	4.5 (0.2)	5.8 (0.3)	<0.0001
SBP, mmHg	126.7 (13.7)	126 (12.6)	134 (17.7)	0.002
DBP, mmHg	74.2 (7.5)	73.8 (6.8)	76.9 (10.8)	0.07
Circulating total cholesterol, mmol/L	4.1 (0.5)	4.1 (0.5)	4 (0.7)	0.25
CirculatingHDL, mmol/L	1.87 (1.3)	1.91 (1.3)	1.6 (0.8)	0.15
Circulating triglycerides, mmol/L	0.94 (1.1)	0.91 (1.1)	1.11 (1)	0.03
aHEI	70.6 (5.7)	70.6 (5.6)	70.8 (6.3)	0.88
Current Smoker	No: 331 Yes: 11	No: 286 Yes: 11	No: 45	0.39
Acitivity level	Low: 25 Moderate: 259 High: 58	Low: 22 Moderate: 225 High: 50	Low: 3 Moderate: 34 High: 8	0.98

Metabolite name	AUC (%) [95% CI]	Spearman's rho [95% CI]
Protoporphyrin IX	64.8 [63.9,65.6]	0.25 [0.24,0.26]
Caffeine	70.7 [69.1,72.4]	0.24 [0.23,0.25]
Serine	79.1 [78.1,80]	0.44 [0.43,0.45]
Cholesterol	80 [78.4,81.5]	0.46 [0.45,0.47]
Uridine	84.1 [83.1,85]	0.48 [0.47,0.49]
Glucuronate	88.6 [87.4,89.7]	0.53 [0.52,0.54]
Nicotinate	90.5 [89.9,91]	0.59 [0.58,0.6]
1-methylxanthine	91.4 [90.8,91.9]	0.62 [0.62,0.62]

bacteria

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__CFGB3047|o__OFGB3047|f__FGB3047|g__GGB9557|s__GGB9557_SGB1496
k__Bacteria|p__Firmicutes|c__CFGB9612|o__OFGB9612|f__FGB9612|g__GGB45495|s__GGB45495_SGB631
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Archaea|p__Euryarchaeota|c__Methanobacteria|o__Methanobacteriales|f__Methanobacteriaceae|g__
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB3005|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9342|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9347|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9522|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9787|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenellaceae_u
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenellaceae_u
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenellaceae_u
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Lactonifactor|s__Lactonifact
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Intestinimonas|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Lawsonibacter|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteri
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_faecis|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_massil
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_obeu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_obeu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_SGB48
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_wexle
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Coprococcus|s__Coproco
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_formicig
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_longicat

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_longicat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF3
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Eisenbergiella|s__Eisenbe
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Faecalicatena|s__Faecalic
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Faecalicatena|s__Faecalic
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Fusicatenibacter|s__Fusic
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3571|s__GGB3571_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoclostridium|s__Clo
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lacrimispora|s__Lacrimis
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__M
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__R
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Roseburia|s__Roseburia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Roseburia|s__Roseburia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Roseburia|s__Roseburia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Oscillospiraceae|g__Oscillibacter|s__Oscillibac
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Agathobaculum|s__Agat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Anaeromassilibacillus|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Candidatus_Cibiobacter|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9614|s__GGB9614_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9677|s__GGB9677_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9694|s__GGB9694_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9694|s__GGB9694_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9699|s__GGB9699_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9712|s__GGB9712_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruthenibacterium|s__R
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Erysipelato
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Faecalibaci
k__Bacteria|p__Firmicutes|c__Firmicutes_unclassified|o__Firmicutes_unclassified|f__Firmicutes_unclassifie
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact

k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillales_unclassified|g__Gemella|s__Gemella_sang

estimate	SE	p_val	n	fdr	g_Random	prevalence
0.31	0.14	0.035	342	0.201	88	57.02%
0.28	0.16	0.079	342	0.264	96	77.78%
0.29	0.16	0.063	342	0.264	25	45.61%
0.17	0.17	0.325	342	0.608	53	46.78%
-0.3	0.27	0.258	342	0.526	54	31.29%
0.4	0.16	0.016	342	0.154	13	59.36%
-0.24	0.22	0.28	342	0.56	77	19.30%
0.38	0.16	0.015	342	0.154	72	66.96%
-0.49	0.23	0.032	342	0.198	7	55.56%
-0.02	0.18	0.927	342	0.983	65	86.26%
-0.07	0.19	0.711	342	0.857	95	48.54%
-0.16	0.19	0.396	342	0.648	76	59.36%
-0.1	0.18	0.575	342	0.777	27	61.11%
-0.08	0.22	0.708	342	0.857	14	67.25%
-0.1	0.22	0.657	342	0.816	18	43.86%
0.29	0.17	0.092	342	0.282	80	91.23%
-0.38	0.24	0.109	342	0.302	100	24.27%
-0.12	0.2	0.531	342	0.769	91	55.26%
0.05	0.17	0.778	342	0.892	3	63.74%
-0.43	0.22	0.058	342	0.262	50	47.95%
-0.01	0.17	0.958	342	0.988	32	50.88%
0.16	0.15	0.301	342	0.579	74	49.71%
-0.34	0.23	0.136	342	0.341	85	52.05%
-0.67	0.29	0.02	342	0.157	36	35.09%
-0.17	0.19	0.373	342	0.648	84	72.51%
-0.25	0.19	0.184	342	0.417	33	51.46%
0.11	0.18	0.539	342	0.769	56	50.00%
0.28	0.16	0.082	342	0.264	20	73.68%
0.24	0.15	0.111	342	0.302	67	26.61%
0.59	0.17	0.001	342	0.015	30	95.32%
0.11	0.18	0.557	342	0.769	40	49.42%
0.11	0.19	0.561	342	0.769	8	78.95%
0.28	0.16	0.08	342	0.264	9	61.40%
-0.05	0.19	0.785	342	0.892	44	43.57%
0.12	0.17	0.468	342	0.714	47	57.02%
-0.01	0.2	0.944	342	0.983	78	19.01%
0.06	0.18	0.733	342	0.873	15	83.33%
-0.17	0.24	0.472	342	0.714	19	45.03%
-0.24	0.25	0.328	342	0.608	41	56.43%
0.22	0.16	0.172	342	0.399	52	73.39%
0.25	0.16	0.132	342	0.339	63	99.42%
0.38	0.17	0.024	342	0.16	58	92.98%
0.13	0.17	0.443	342	0.692	51	53.22%
0.31	0.17	0.073	342	0.264	69	97.08%
0.04	0.17	0.829	342	0.921	97	86.26%
0.37	0.16	0.02	342	0.157	23	99.42%
0.23	0.17	0.189	342	0.42	60	85.67%
0.62	0.17	0	342	0.015	82	96.20%
0.29	0.16	0.08	342	0.264	48	89.18%

0.47	0.16	0.004	342	0.056	90	68.42%
0.56	0.16	0.001	342	0.015	70	93.27%
0.1	0.18	0.603	342	0.784	71	50.00%
0.06	0.17	0.744	342	0.874	10	78.07%
0.14	0.17	0.402	342	0.649	92	71.93%
0.4	0.17	0.017	342	0.154	11	97.08%
0.28	0.18	0.118	342	0.309	34	70.47%
0.03	0.22	0.892	342	0.965	98	24.27%
0.47	0.17	0.005	342	0.058	31	96.78%
0.24	0.17	0.161	342	0.384	99	91.23%
-0.18	0.21	0.388	342	0.648	73	67.54%
0.1	0.15	0.523	342	0.769	5	61.99%
0.11	0.19	0.553	342	0.769	17	66.08%
0.14	0.18	0.44	342	0.692	49	86.84%
0.34	0.18	0.066	342	0.264	61	86.26%
-0.17	0.19	0.377	342	0.648	21	77.49%
-0.4	0.24	0.093	342	0.282	66	56.14%
0.4	0.18	0.024	342	0.16	75	83.04%
0.55	0.17	0.001	342	0.02	59	84.80%
-0.2	0.19	0.294	342	0.577	45	77.78%
0	0.16	0.998	342	0.998	24	71.64%
0.04	0.17	0.799	342	0.898	26	85.96%
-0.16	0.19	0.395	342	0.648	86	75.73%
0.26	0.18	0.143	342	0.348	12	92.11%
-0.06	0.19	0.752	342	0.874	79	75.15%
0.12	0.17	0.496	342	0.74	55	90.94%
-0.32	0.2	0.112	342	0.302	16	92.69%
0.21	0.18	0.233	342	0.486	4	88.30%
-0.03	0.19	0.863	342	0.949	42	85.67%
-0.53	0.26	0.038	342	0.202	2	94.74%
-0.24	0.2	0.223	342	0.485	28	82.16%
0.36	0.19	0.058	342	0.262	64	39.47%
-0.43	0.24	0.077	342	0.264	57	43.27%
-0.55	0.32	0.08	342	0.264	38	53.22%
-0.53	0.45	0.233	342	0.486	43	25.15%
0.02	0.19	0.897	342	0.965	35	85.67%
-0.8	0.26	0.002	342	0.038	39	43.57%
0.01	0.18	0.938	342	0.983	87	93.86%
-0.77	0.37	0.036	342	0.201	37	31.58%
0.08	0.17	0.661	342	0.816	1	98.25%
0	0.18	0.992	342	0.998	89	61.99%
0.54	0.16	0.001	342	0.015	22	83.33%
0.07	0.16	0.65	342	0.816	6	89.18%
-0.43	0.26	0.101	342	0.297	29	77.19%
0.16	0.17	0.349	342	0.635	94	56.43%
0	0.17	0.997	342	0.998	81	95.91%
-0.16	0.19	0.382	342	0.648	68	78.95%
0.09	0.19	0.639	342	0.816	46	67.54%
-0.09	0.17	0.591	342	0.784	83	57.02%
-0.11	0.22	0.603	342	0.784	62	40.35%

0.29	0.15	0.05	342	0.251	93	44.15%

bacteria

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__CFGB3035|o__OFGB3035|f__FGB3035|g__GGB9524|s__GGB9524_SGB1492
k__Bacteria|p__Firmicutes|c__CFGB40382|o__OFGB40382|f__FGB40382|g__GGB45491|s__GGB45491_SG
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Archaea|p__Euryarchaeota|c__Methanobacteria|o__Methanobacteriales|f__Methanobacteriaceae|g__
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB2980|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9176|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9342|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9347|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9522|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9787|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenellaceae_u
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenellaceae_u
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Intestinimonas|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Lawsonibacter|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Massilistercora|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerostipes|s__Anaeros
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_caecim
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_faecis|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_SGB48
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_sp_M
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_wexler
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Coprococcus|s__Coproco
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Coprococcus|s__Coproco
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_formicig
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_longicat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF24
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Faecalicatena|s__Faecalic

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Fusicatenibacter|s__Fusic
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__M
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__M
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__R
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__R
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__R
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Roseburia|s__Roseburia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Agathobaculum|s__Agat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Anaeromassilibacillus|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Anaerotruncus|s__Anae
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Candidatus_Cibiobacter|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Flavonifractor|s__Flavo
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9602|s__GGB9602_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9633|s__GGB9633_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9635|s__GGB9635_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9646|s__GGB9646_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9677|s__GGB9677_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9694|s__GGB9694_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9699|s__GGB9699_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9705|s__GGB9705_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9730|s__GGB9730_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Massilimaliae|s__Massil
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Neobittarella|s__Neobit
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruthenibacterium|s__R
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Faecalibacil
k__Bacteria|p__Firmicutes|c__Firmicutes_unclassified|o__Firmicutes_unclassified|f__Firmicutes_unclassifie
k__Bacteria|p__Firmicutes|c__Firmicutes_unclassified|o__Firmicutes_unclassified|f__Firmicutes_unclassifie
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Adlercreutzia|s_
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthella|s__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Verrucomicrobia|c__Verrucomicrobiae|o__Verrucomicrobiales|f__Akkermansiaceae|g__Ak
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__GGB45432|s__
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_

estimate	SE	p_val	n	fdr	ing_RandomF	prev
0.31	0.14	0.035	342	0.151	44	57.02%
0.29	0.16	0.063	342	0.216	38	45.61%
-0.93	0.31	0.002	342	0.04	35	50.29%
0.21	0.15	0.184	342	0.411	22	39.47%
0.4	0.16	0.016	342	0.13	69	59.36%
0.28	0.16	0.085	342	0.259	73	58.48%
-0.27	0.21	0.206	342	0.426	40	22.22%
-0.79	0.29	0.008	342	0.07	94	36.84%
-0.49	0.23	0.032	342	0.151	6	55.56%
-0.02	0.18	0.927	342	0.966	30	86.26%
-0.16	0.19	0.396	342	0.599	93	59.36%
-0.1	0.18	0.575	342	0.747	25	61.11%
-0.16	0.18	0.365	342	0.588	15	42.11%
-0.08	0.22	0.708	342	0.843	3	67.25%
-0.1	0.22	0.657	342	0.815	24	43.86%
-0.06	0.16	0.728	342	0.857	42	42.11%
0.29	0.17	0.092	342	0.269	51	91.23%
-0.58	0.25	0.021	342	0.13	78	31.29%
-0.18	0.2	0.376	342	0.588	57	52.63%
-0.12	0.2	0.531	342	0.718	95	55.26%
0.05	0.17	0.778	342	0.864	5	63.74%
-0.43	0.22	0.058	342	0.205	2	47.95%
-0.01	0.17	0.958	342	0.988	10	50.88%
0.14	0.18	0.43	342	0.623	58	61.70%
-0.68	0.34	0.043	342	0.161	64	23.98%
-0.34	0.23	0.136	342	0.35	4	52.05%
-0.67	0.29	0.02	342	0.13	14	35.09%
-0.17	0.19	0.373	342	0.588	1	72.51%
-0.25	0.19	0.184	342	0.411	54	51.46%
0.28	0.16	0.082	342	0.256	28	73.68%
0.24	0.15	0.111	342	0.301	43	26.61%
0.59	0.17	0.001	342	0.015	65	95.32%
-0.03	0.18	0.851	342	0.915	98	87.13%
0.02	0.15	0.88	342	0.937	67	12.87%
-0.17	0.24	0.472	342	0.664	12	45.03%
-0.24	0.25	0.328	342	0.576	27	56.43%
-0.11	0.19	0.565	342	0.747	33	36.55%
0.2	0.17	0.249	342	0.469	53	99.42%
-0.08	0.19	0.669	342	0.815	96	28.95%
0.25	0.16	0.132	342	0.348	80	99.42%
0.04	0.17	0.829	342	0.901	17	86.26%
0.33	0.16	0.038	342	0.151	90	60.23%
0.37	0.16	0.02	342	0.13	11	99.42%
0.23	0.17	0.189	342	0.411	76	85.67%
0.37	0.17	0.032	342	0.151	99	90.06%
0.63	0.17	0	342	0.015	77	96.20%
0.47	0.16	0.004	342	0.056	87	68.42%
0.55	0.16	0	342	0.015	48	76.32%
0.06	0.17	0.744	342	0.863	61	78.07%

0.4	0.17	0.017	342	0.13	13	97.08%
0.47	0.17	0.005	342	0.058	60	96.78%
0.14	0.18	0.44	342	0.628	81	86.84%
-0.17	0.19	0.377	342	0.588	8	77.49%
0.4	0.18	0.024	342	0.133	82	83.04%
0.18	0.16	0.265	342	0.491	46	34.21%
-0.21	0.23	0.361	342	0.588	86	50.88%
0.25	0.16	0.111	342	0.301	37	53.51%
0.55	0.17	0.001	342	0.02	55	84.80%
0	0.16	0.998	342	0.998	70	71.64%
0.26	0.18	0.143	342	0.35	20	92.11%
-0.06	0.19	0.752	342	0.863	74	75.15%
-0.17	0.2	0.381	342	0.588	89	47.08%
0.12	0.17	0.496	342	0.689	39	90.94%
0.21	0.18	0.233	342	0.456	47	88.30%
-0.53	0.26	0.038	342	0.151	62	94.74%
-0.24	0.2	0.223	342	0.446	56	82.16%
0.13	0.16	0.417	342	0.614	75	75.15%
-0.27	0.2	0.189	342	0.411	23	64.04%
-0.13	0.2	0.526	342	0.718	92	40.94%
-0.66	0.24	0.007	342	0.067	19	53.80%
-0.22	0.19	0.248	342	0.469	34	47.08%
-0.43	0.24	0.077	342	0.256	84	43.27%
-0.55	0.32	0.08	342	0.256	7	53.22%
0.02	0.19	0.897	342	0.944	18	85.67%
-0.73	0.27	0.006	342	0.066	100	52.34%
0.15	0.18	0.412	342	0.614	97	77.19%
0.22	0.17	0.193	342	0.411	66	61.99%
0.35	0.16	0.031	342	0.151	59	36.84%
-0.09	0.22	0.676	342	0.815	68	63.45%
-0.77	0.37	0.036	342	0.151	16	31.58%
0.05	0.18	0.76	342	0.863	32	63.74%
-0.3	0.2	0.143	342	0.35	9	68.71%
-0.28	0.22	0.209	342	0.426	26	54.68%
-0.45	0.22	0.039	342	0.151	21	63.74%
-0.18	0.19	0.342	342	0.588	85	63.74%
0.08	0.17	0.661	342	0.815	45	98.25%
0.54	0.16	0.001	342	0.015	29	83.33%
0.07	0.16	0.65	342	0.815	49	89.18%
-0.72	0.32	0.022	342	0.13	31	35.67%
-0.11	0.2	0.568	342	0.747	63	90.35%
0.05	0.18	0.768	342	0.863	88	88.30%
-0.43	0.26	0.101	342	0.289	71	77.19%
0	0.18	0.994	342	0.998	83	58.77%
0.04	0.19	0.819	342	0.9	79	84.80%
0	0.17	0.997	342	0.998	91	95.91%
-0.16	0.19	0.382	342	0.588	41	78.95%
0.09	0.19	0.639	342	0.815	36	67.54%
-0.33	0.24	0.173	342	0.411	72	81.58%
-0.19	0.19	0.318	342	0.568	50	85.38%

-0.2	0.19	0.296	342	0.539	52	77.19%

bacteria

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__CFGB3035|o__OFGB3035|f__FGB3035|g__GGB9524|s__GGB9524_SGB1492
k__Bacteria|p__Firmicutes|c__CFGB9612|o__OFGB9612|f__FGB9612|g__GGB45495|s__GGB45495_SGB631
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Archaea|p__Euryarchaeota|c__Methanobacteria|o__Methanobacteriales|f__Methanobacteriaceae|g__
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9176|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9342|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9347|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9522|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9787|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenellaceae_u
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenellaceae_u
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenellaceae_u
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Intestinimonas|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Intestinimonas|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Lawsonibacter|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteri
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerobutyricum|s__Ana
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerostipes|s__Anaeros
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_massili
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_sp_AF
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_wexler
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Coprococcus|s__Coproco

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_formicig
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_longicat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_longicat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Faecalicatena|s__Faecalic
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Fusicatenibacter|s__Fusic
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lacrimispora|s__Lacrimis
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__M
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__M
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__R
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Roseburia|s__Roseburia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Roseburia|s__Roseburia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Roseburia|s__Roseburia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Intestinibacter|s__
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Agathobaculum|s__Agat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Anaeromassilibacillus|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Candidatus_Cibiobacter|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9632|s__GGB9632_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9635|s__GGB9635_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9677|s__GGB9677_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9694|s__GGB9694_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9699|s__GGB9699_
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Collinsella|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruthenibacterium|s__R
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Faecalibacil
k__Bacteria|p__Firmicutes|c__Firmicutes_unclassified|o__Firmicutes_unclassified|f__Firmicutes_unclassifie
k__Bacteria|p__Firmicutes|c__Firmicutes_unclassified|o__Firmicutes_unclassified|f__Firmicutes_unclassifie
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Adlercreutzia|s_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Verrucomicrobia|c__Verrucomicrobiae|o__Verrucomicrobiales|f__Akkermansiaceae|g__Ak
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Gordonibacter|
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact

k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillales_unclassified|g__Gemella|s__Gemella_sangu

estimate	SE	p_val	n	fdr	ing_RandomF	prev
0.31	0.14	0.035	342	0.204	57	57.02%
0.09	0.13	0.507	342	0.799	52	92.40%
0.23	0.14	0.104	342	0.319	83	96.78%
0.29	0.16	0.063	342	0.284	33	45.61%
-0.93	0.31	0.002	342	0.048	49	50.29%
-0.3	0.27	0.258	342	0.537	64	31.29%
0.4	0.16	0.016	342	0.16	44	59.36%
-0.24	0.22	0.28	342	0.56	48	19.30%
0.05	0.17	0.791	342	0.898	68	48.83%
-0.49	0.23	0.032	342	0.198	3	55.56%
-0.02	0.18	0.927	342	0.986	67	86.26%
-0.16	0.19	0.396	342	0.682	28	59.36%
-0.1	0.18	0.575	342	0.799	6	61.11%
-0.08	0.22	0.708	342	0.885	4	67.25%
-0.1	0.22	0.657	342	0.846	9	43.86%
-0.06	0.16	0.728	342	0.894	75	42.11%
0.12	0.17	0.478	342	0.784	58	68.13%
-0.38	0.24	0.109	342	0.319	20	24.27%
-0.12	0.2	0.531	342	0.799	55	55.26%
0.05	0.17	0.778	342	0.898	2	63.74%
-0.43	0.22	0.058	342	0.274	15	47.95%
-0.01	0.17	0.958	342	0.998	29	50.88%
-0.68	0.34	0.043	342	0.228	77	23.98%
-0.34	0.23	0.136	342	0.369	35	52.05%
-0.67	0.29	0.02	342	0.16	23	35.09%
-0.17	0.19	0.373	342	0.672	98	72.51%
-0.25	0.19	0.184	342	0.437	22	51.46%
0.11	0.18	0.539	342	0.799	66	50.00%
0.28	0.16	0.082	342	0.303	81	73.68%
0.24	0.15	0.111	342	0.319	70	26.61%
0.59	0.17	0.001	342	0.015	25	95.32%
0.11	0.19	0.561	342	0.799	31	78.95%
-0.03	0.18	0.851	342	0.937	71	87.13%
-0.48	0.3	0.111	342	0.319	36	34.21%
0.05	0.19	0.79	342	0.898	97	84.21%
-0.11	0.19	0.553	342	0.799	80	72.81%
0.28	0.16	0.08	342	0.303	1	61.40%
-0.05	0.19	0.785	342	0.898	45	43.57%
0.06	0.18	0.733	342	0.894	32	83.33%
-0.04	0.19	0.853	342	0.937	84	53.80%
-0.17	0.24	0.472	342	0.784	11	45.03%
-0.24	0.25	0.328	342	0.62	17	56.43%
0.22	0.16	0.172	342	0.423	38	73.39%
0.6	0.17	0.001	342	0.015	95	94.74%
0.2	0.17	0.249	342	0.529	46	99.42%
0.38	0.17	0.024	342	0.16	60	92.98%
-0.51	0.3	0.095	342	0.319	42	48.25%
0.37	0.16	0.02	342	0.16	19	99.42%
0.23	0.17	0.189	342	0.439	51	85.67%

0.63	0.17	0	342	0.015	54	96.20%
0.29	0.16	0.08	342	0.303	85	89.18%
0.47	0.16	0.004	342	0.066	82	68.42%
0.06	0.17	0.744	342	0.895	8	78.07%
0.4	0.17	0.017	342	0.16	12	97.08%
0.47	0.17	0.005	342	0.067	14	96.78%
0.24	0.17	0.161	342	0.414	92	91.23%
-0.18	0.21	0.388	342	0.681	91	67.54%
0.1	0.15	0.523	342	0.799	10	61.99%
0.11	0.19	0.553	342	0.799	41	66.08%
0.14	0.18	0.44	342	0.745	24	86.84%
-0.17	0.19	0.377	342	0.672	26	77.49%
-0.4	0.24	0.093	342	0.319	87	56.14%
0.4	0.18	0.024	342	0.16	94	83.04%
0.18	0.16	0.265	342	0.541	90	34.21%
0.26	0.17	0.125	342	0.347	93	81.87%
-0.2	0.19	0.294	342	0.577	65	77.78%
0	0.16	0.998	342	0.998	27	71.64%
0.04	0.17	0.799	342	0.898	86	85.96%
0.14	0.16	0.362	342	0.67	89	63.74%
0.26	0.18	0.143	342	0.376	5	92.11%
-0.06	0.19	0.752	342	0.895	50	75.15%
0.12	0.17	0.496	342	0.799	40	90.94%
-0.32	0.2	0.112	342	0.319	37	92.69%
0.21	0.18	0.233	342	0.506	7	88.30%
-0.03	0.19	0.863	342	0.938	69	85.67%
-0.53	0.26	0.038	342	0.213	21	94.74%
-0.24	0.2	0.223	342	0.496	47	82.16%
0.07	0.17	0.668	342	0.846	79	75.44%
-0.66	0.24	0.007	342	0.084	39	53.80%
-0.43	0.24	0.077	342	0.303	63	43.27%
-0.55	0.32	0.08	342	0.303	13	53.22%
0.02	0.19	0.897	342	0.965	16	85.67%
0.11	0.18	0.547	342	0.799	88	82.46%
0.01	0.18	0.938	342	0.987	99	93.86%
0.08	0.17	0.661	342	0.846	18	98.25%
0.54	0.16	0.001	342	0.015	62	83.33%
0.07	0.16	0.65	342	0.846	34	89.18%
-0.72	0.32	0.022	342	0.16	72	35.67%
-0.11	0.2	0.568	342	0.799	56	90.35%
-0.43	0.26	0.101	342	0.319	30	77.19%
0	0.18	0.994	342	0.998	76	58.77%
0.2	0.16	0.196	342	0.445	100	47.08%
0	0.18	0.983	342	0.998	73	86.84%
0	0.17	0.997	342	0.998	53	95.91%
0.09	0.19	0.639	342	0.846	43	67.54%
-0.09	0.17	0.591	342	0.809	59	57.02%
-0.33	0.24	0.173	342	0.423	74	81.58%
-0.19	0.19	0.318	342	0.611	96	85.38%
-0.11	0.22	0.603	342	0.815	61	40.35%

0.29	0.15	0.05	342	0.251	78	44.15%

bacteria
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__CFGB3047|o__OFGB3047|f__FGB3047|g__GGB9557|s__GGB9557_SGB1496
k__Bacteria|p__Firmicutes|c__CFGB9612|o__OFGB9612|f__FGB9612|g__GGB45495|s__GGB45495_SGB631
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Archaea|p__Euryarchaeota|c__Methanobacteria|o__Methanobacteriales|f__Methanobacteriaceae|g__
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB2980|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9342|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9347|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9522|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9787|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenellaceae_u
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Micrococcaceae|g__Rothia|s__Roth
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacteriaceae_unclassifie
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteri
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteri
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerostipes|s__Anaeros
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_SGB48
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_wexler
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Coprococcus|s__Coproco
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Coprococcus|s__Coproco
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_formicig
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_longicat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_longicat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF3
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Faecalicatena|s__Faecalic
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Fusicatenibacter|s__Fusic
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3571|s__GGB3571_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lacrimispora|s__Lacrimis
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__M
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__R
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__R
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Roseburia|s__Roseburia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Roseburia|s__Roseburia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Intestinibacter|s__
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Romboutsia|s__Ro
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Agathobaculum|s__Agat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Anaeromassilibacillus|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Bittarella|s__Bittarella_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Candidatus_Cibiobacter|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9633|s__GGB9633_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9694|s__GGB9694_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9694|s__GGB9694_
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Collinsella|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9730|s__GGB9730_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Phocea|s__Phocea_mas
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruthenibacterium|s__R
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Faecalibacil
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Holdemania
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Solobacteri
k__Bacteria|p__Firmicutes|c__Firmicutes_unclassified|o__Firmicutes_unclassified|f__Firmicutes_unclassifie
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__Phascolarc
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Veillonella|s__Veillon
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Adlercreutzia|s_
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__GGB45432|s__
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillales_unclassified|g__Gemella|s__Gemella_sang

k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact

estimate	SE	p_val	n	fdr	ranking_RandomForest	prev
0.27	0.14	0.049	342	0.21	18	45.32%
0.31	0.14	0.035	342	0.174	13	57.02%
0.14	0.13	0.266	342	0.516	85	39.47%
0.29	0.16	0.063	342	0.24	6	45.61%
0.17	0.17	0.325	342	0.58	97	46.78%
-0.3	0.27	0.258	342	0.516	47	31.29%
0.4	0.16	0.016	342	0.141	36	59.36%
0.38	0.16	0.015	342	0.141	53	66.96%
-0.49	0.23	0.032	342	0.174	15	55.56%
-0.02	0.18	0.927	342	0.986	69	86.26%
0.28	0.16	0.083	342	0.267	87	41.52%
-0.1	0.18	0.575	342	0.767	9	61.11%
-0.08	0.22	0.708	342	0.873	5	67.25%
-0.1	0.22	0.657	342	0.827	19	43.86%
-0.06	0.16	0.728	342	0.873	39	42.11%
0.29	0.17	0.092	342	0.286	92	91.23%
0.05	0.17	0.778	342	0.894	2	63.74%
-0.43	0.22	0.058	342	0.23	44	47.95%
-0.01	0.17	0.958	342	0.991	25	50.88%
0.14	0.18	0.43	342	0.661	76	61.70%
-0.34	0.23	0.136	342	0.369	3	52.05%
-0.67	0.29	0.02	342	0.146	55	35.09%
-0.17	0.19	0.373	342	0.626	88	72.51%
-0.25	0.19	0.184	342	0.459	40	51.46%
0.28	0.16	0.082	342	0.267	32	73.68%
0.59	0.17	0.001	342	0.015	27	95.32%
0.43	0.15	0.004	342	0.056	49	56.43%
0.28	0.16	0.08	342	0.267	12	61.40%
0.12	0.17	0.468	342	0.698	68	57.02%
0.31	0.15	0.034	342	0.174	91	27.19%
0.06	0.18	0.733	342	0.873	65	83.33%
-0.18	0.22	0.413	342	0.646	42	41.52%
0.22	0.16	0.172	342	0.44	89	73.39%
0.2	0.18	0.268	342	0.516	84	67.54%
0.2	0.17	0.249	342	0.516	43	99.42%
0.04	0.17	0.829	342	0.901	82	86.26%
0.37	0.16	0.02	342	0.146	8	99.42%
0.23	0.17	0.189	342	0.461	58	85.67%
0.37	0.17	0.032	342	0.174	35	90.06%
0.63	0.17	0	342	0.015	46	96.20%
0.29	0.16	0.08	342	0.267	21	89.18%
0.47	0.16	0.004	342	0.056	59	68.42%
0.56	0.16	0.001	342	0.015	38	93.27%
0.06	0.17	0.744	342	0.874	22	78.07%
0.4	0.17	0.017	342	0.141	77	97.08%
0.28	0.18	0.118	342	0.336	80	70.47%
0.47	0.17	0.005	342	0.058	29	96.78%
-0.18	0.21	0.388	342	0.626	37	67.54%
0.1	0.15	0.523	342	0.751	11	61.99%

0.14	0.18	0.44	342	0.666	52	86.84%
-0.17	0.19	0.377	342	0.626	33	77.49%
0.33	0.16	0.038	342	0.174	31	78.36%
0.18	0.16	0.265	342	0.516	34	34.21%
0.55	0.17	0.001	342	0.02	41	84.80%
0.26	0.17	0.125	342	0.347	99	81.87%
0	0.16	0.998	342	0.998	28	71.64%
0.04	0.17	0.799	342	0.898	24	85.96%
-0.1	0.17	0.553	342	0.757	94	49.71%
0.01	0.17	0.962	342	0.991	62	86.55%
0.26	0.18	0.143	342	0.376	16	92.11%
-0.06	0.19	0.752	342	0.874	83	75.15%
0.06	0.17	0.717	342	0.873	90	86.84%
0.12	0.17	0.496	342	0.729	14	90.94%
-0.32	0.2	0.112	342	0.328	66	92.69%
0.21	0.18	0.233	342	0.516	61	88.30%
-0.53	0.26	0.038	342	0.174	23	94.74%
-0.24	0.2	0.223	342	0.516	72	82.16%
-0.13	0.2	0.526	342	0.751	71	40.94%
-0.55	0.32	0.08	342	0.267	4	53.22%
-0.53	0.45	0.233	342	0.516	50	25.15%
0.11	0.18	0.547	342	0.757	100	82.46%
0.15	0.18	0.412	342	0.646	79	77.19%
0.19	0.17	0.286	342	0.539	81	40.64%
0.01	0.18	0.938	342	0.987	86	93.86%
-0.77	0.37	0.036	342	0.174	54	31.58%
0.05	0.18	0.789	342	0.896	98	60.23%
-0.49	0.23	0.03	342	0.174	95	58.48%
0.08	0.17	0.661	342	0.827	30	98.25%
0.54	0.16	0.001	342	0.015	57	83.33%
0.38	0.15	0.014	342	0.141	26	50.58%
0.15	0.16	0.336	342	0.587	73	48.25%
0.07	0.16	0.65	342	0.827	10	89.18%
-0.25	0.22	0.244	342	0.516	75	43.27%
0.02	0.14	0.867	342	0.932	17	41.52%
-0.11	0.2	0.568	342	0.767	96	90.35%
0.04	0.18	0.829	342	0.901	64	80.99%
-0.43	0.26	0.101	342	0.306	7	77.19%
0.04	0.19	0.819	342	0.901	48	84.80%
0.1	0.17	0.552	342	0.757	67	79.53%
0	0.18	0.983	342	0.998	74	86.84%
0.09	0.17	0.609	342	0.791	63	74.85%
0	0.17	0.997	342	0.998	78	95.91%
-0.2	0.21	0.34	342	0.587	45	60.82%
0.19	0.17	0.264	342	0.516	60	32.75%
-0.2	0.19	0.296	342	0.539	70	77.19%
0.15	0.17	0.385	342	0.626	20	71.64%
-0.11	0.22	0.603	342	0.791	1	40.35%
-0.22	0.21	0.296	342	0.539	56	88.01%
0.29	0.15	0.05	342	0.21	93	44.15%

-0.36	0.31	0.249	342	0.516	51	26.02%

bacteria	estimate	SE	p_val	n	fdr	ing_RandomF
k__Bacteria|p	0.31	0.14	0.035	342	0.165	35
k__Bacteria|p	0.23	0.14	0.104	342	0.305	30
k__Bacteria|p	0.28	0.16	0.079	342	0.273	62
k__Bacteria|p	0.29	0.16	0.063	342	0.261	7
k__Bacteria|p	-0.93	0.31	0.002	342	0.04	47
k__Bacteria|p	-0.08	0.17	0.626	342	0.773	39
k__Bacteria|p	-0.3	0.27	0.258	342	0.477	50
k__Bacteria|p	0.4	0.16	0.016	342	0.121	41
k__Bacteria|p	0.38	0.16	0.015	342	0.121	100
k__Bacteria|p	-0.43	0.26	0.092	342	0.288	88
k__Bacteria|p	-0.49	0.23	0.032	342	0.161	66
k__Bacteria|p	-0.02	0.18	0.927	342	0.95	18
k__Bacteria|p	-0.16	0.19	0.396	342	0.582	22
k__Bacteria|p	-0.1	0.18	0.575	342	0.747	27
k__Bacteria|p	-0.16	0.18	0.365	342	0.57	56
k__Bacteria|p	-0.08	0.22	0.708	342	0.824	25
k__Bacteria|p	-0.06	0.18	0.748	342	0.84	74
k__Bacteria|p	0.29	0.17	0.092	342	0.288	97
k__Bacteria|p	0.05	0.17	0.778	342	0.845	44
k__Bacteria|p	-0.39	0.25	0.117	342	0.316	4
k__Bacteria|p	-0.34	0.23	0.136	342	0.35	1
k__Bacteria|p	-0.67	0.29	0.02	342	0.128	96
k__Bacteria|p	-0.17	0.19	0.373	342	0.57	95
k__Bacteria|p	-0.25	0.19	0.184	342	0.4	87
k__Bacteria|p	0.11	0.18	0.539	342	0.743	54
k__Bacteria|p	0.28	0.16	0.082	342	0.273	21
k__Bacteria|p	-0.3	0.21	0.149	342	0.355	52
k__Bacteria|p	0.59	0.17	0.001	342	0.015	63
k__Bacteria|p	0.43	0.15	0.004	342	0.052	82
k__Bacteria|p	0.11	0.18	0.557	342	0.743	83
k__Bacteria|p	-0.11	0.19	0.553	342	0.743	73
k__Bacteria|p	0.28	0.16	0.08	342	0.273	37
k__Bacteria|p	0.06	0.18	0.733	342	0.84	68
k__Bacteria|p	-0.19	0.19	0.313	342	0.535	38
k__Bacteria|p	-0.24	0.25	0.328	342	0.538	28
k__Bacteria|p	0.2	0.18	0.268	342	0.479	60
k__Bacteria|p	0.6	0.17	0.001	342	0.015	59
k__Bacteria|p	0.2	0.17	0.249	342	0.469	34
k__Bacteria|p	-0.08	0.19	0.669	342	0.795	16
k__Bacteria|p	0.38	0.17	0.024	342	0.141	72
k__Bacteria|p	0.04	0.17	0.829	342	0.873	31
k__Bacteria|p	0.42	0.17	0.014	342	0.121	71
k__Bacteria|p	0.37	0.16	0.02	342	0.128	3
k__Bacteria|p	0.23	0.17	0.189	342	0.4	26
k__Bacteria|p	0.37	0.17	0.032	342	0.161	90
k__Bacteria|p	0.29	0.16	0.08	342	0.273	75
k__Bacteria|p	0.56	0.16	0.001	342	0.015	67
k__Bacteria|p	0.06	0.17	0.744	342	0.84	92
k__Bacteria|p	0.4	0.17	0.017	342	0.121	42

k__Bacteria|p	-0.11	0.21	0.607	342	0.765	53
k__Bacteria|p	0.47	0.17	0.005	342	0.058	77
k__Bacteria|p	0.24	0.17	0.161	342	0.375	79
k__Bacteria|p	0.34	0.18	0.066	342	0.266	40
k__Bacteria|p	0.13	0.17	0.445	342	0.636	51
k__Bacteria|p	-0.17	0.19	0.377	342	0.57	2
k__Bacteria|p	0.18	0.16	0.265	342	0.479	89
k__Bacteria|p	-0.21	0.23	0.361	342	0.57	49
k__Bacteria|p	0.25	0.16	0.111	342	0.31	14
k__Bacteria|p	0.55	0.17	0.001	342	0.02	23
k__Bacteria|p	0.26	0.17	0.125	342	0.328	46
k__Bacteria|p	0	0.16	0.998	342	0.998	65
k__Bacteria|p	0.26	0.18	0.143	342	0.35	57
k__Bacteria|p	0.12	0.17	0.496	342	0.698	93
k__Bacteria|p	-0.32	0.2	0.112	342	0.31	81
k__Bacteria|p	0.21	0.18	0.233	342	0.447	11
k__Bacteria|p	-0.53	0.26	0.038	342	0.171	98
k__Bacteria|p	-0.24	0.2	0.223	342	0.437	64
k__Bacteria|p	0.13	0.16	0.417	342	0.605	55
k__Bacteria|p	0.08	0.17	0.644	342	0.786	61
k__Bacteria|p	-0.27	0.2	0.189	342	0.4	80
k__Bacteria|p	0.07	0.17	0.668	342	0.795	48
k__Bacteria|p	-0.66	0.24	0.007	342	0.067	70
k__Bacteria|p	-0.55	0.32	0.08	342	0.273	19
k__Bacteria|p	0.02	0.19	0.897	342	0.935	5
k__Bacteria|p	-0.73	0.27	0.006	342	0.066	69
k__Bacteria|p	0.11	0.18	0.547	342	0.743	91
k__Bacteria|p	0.22	0.17	0.193	342	0.4	33
k__Bacteria|p	-0.09	0.22	0.676	342	0.795	9
k__Bacteria|p	0.05	0.18	0.76	342	0.844	36
k__Bacteria|p	-0.3	0.2	0.143	342	0.35	32
k__Bacteria|p	0.05	0.18	0.789	342	0.848	76
k__Bacteria|p	0.2	0.15	0.188	342	0.4	99
k__Bacteria|p	-0.28	0.22	0.209	342	0.418	29
k__Bacteria|p	-0.49	0.23	0.03	342	0.161	12
k__Bacteria|p	-0.45	0.22	0.039	342	0.171	20
k__Bacteria|p	-0.18	0.19	0.342	342	0.552	10
k__Bacteria|p	0.54	0.16	0.001	342	0.015	13
k__Bacteria|p	-0.11	0.2	0.568	342	0.747	78
k__Bacteria|p	0.05	0.18	0.768	342	0.844	6
k__Bacteria|p	-0.43	0.26	0.101	342	0.305	94
k__Bacteria|p	0.04	0.19	0.819	342	0.872	15
k__Bacteria|p	0.2	0.16	0.196	342	0.4	85
k__Bacteria|p	0	0.17	0.997	342	0.998	86
k__Bacteria|p	0.09	0.18	0.612	342	0.765	58
k__Bacteria|p	-0.16	0.19	0.382	342	0.57	17
k__Bacteria|p	-0.1	0.19	0.604	342	0.765	43
k__Bacteria|p	-0.19	0.19	0.318	342	0.535	24
k__Bacteria|p	-0.2	0.19	0.296	342	0.52	8
k__Bacteria|p	-0.02	0.18	0.931	342	0.95	84

k__Bacteria|p	-0.19	0.19	0.321	342	0.535	45

prev
57.02%
96.78%
77.78%
45.61%
50.29%
51.75%
31.29%
59.36%
66.96%
22.22%
55.56%
86.26%
59.36%
61.11%
42.11%
67.25%
33.92%
91.23%
63.74%
35.67%
52.05%
35.09%
72.51%
51.46%
50.00%
73.68%
28.95%
95.32%
56.43%
49.42%
72.81%
61.40%
83.33%
54.39%
56.43%
67.54%
94.74%
99.42%
28.95%
92.98%
86.26%
92.40%
99.42%
85.67%
90.06%
89.18%
93.27%
78.07%
97.08%

82.75%
96.78%
91.23%
86.26%
70.18%
77.49%
34.21%
50.88%
53.51%
84.80%
81.87%
71.64%
92.11%
90.94%
92.69%
88.30%
94.74%
82.16%
75.15%
89.47%
64.04%
75.44%
53.80%
53.22%
85.67%
52.34%
82.46%
61.99%
63.45%
63.74%
68.71%
60.23%
48.25%
54.68%
58.48%
63.74%
63.74%
83.33%
90.35%
88.30%
77.19%
84.80%
47.08%
95.91%
81.58%
78.95%
73.10%
85.38%
77.19%
85.67%

34.50%

bacteria	estimate	SE	p_val	n	fdr	ing_RandomF
k__Bacteria|p	0.31	0.14	0.035	342	0.192	19
k__Bacteria|p	0.09	0.13	0.507	342	0.793	40
k__Bacteria|p	0.23	0.14	0.104	342	0.345	32
k__Bacteria|p	0.28	0.16	0.079	342	0.303	20
k__Bacteria|p	0.29	0.16	0.063	342	0.272	1
k__Bacteria|p	0.54	0.16	0.001	342	0.014	34
k__Bacteria|p	-0.3	0.27	0.258	342	0.559	8
k__Bacteria|p	0.4	0.16	0.016	342	0.141	53
k__Bacteria|p	-0.49	0.23	0.032	342	0.186	5
k__Bacteria|p	-0.02	0.18	0.927	342	0.977	59
k__Bacteria|p	-0.16	0.19	0.396	342	0.67	66
k__Bacteria|p	-0.1	0.18	0.575	342	0.81	4
k__Bacteria|p	-0.08	0.22	0.708	342	0.883	12
k__Bacteria|p	-0.1	0.22	0.657	342	0.87	10
k__Bacteria|p	-0.06	0.18	0.748	342	0.883	67
k__Bacteria|p	0.29	0.17	0.092	342	0.327	51
k__Bacteria|p	0.05	0.17	0.778	342	0.884	2
k__Archaea|p	-0.43	0.22	0.058	342	0.262	6
k__Bacteria|p	-0.39	0.25	0.117	342	0.354	83
k__Bacteria|p	-0.01	0.17	0.958	342	0.981	7
k__Bacteria|p	-0.34	0.23	0.136	342	0.371	3
k__Bacteria|p	-0.67	0.29	0.02	342	0.146	21
k__Bacteria|p	-0.17	0.19	0.373	342	0.67	35
k__Bacteria|p	0.09	0.16	0.565	342	0.81	16
k__Bacteria|p	0.15	0.16	0.338	342	0.637	24
k__Bacteria|p	-0.3	0.22	0.181	342	0.42	77
k__Bacteria|p	0.11	0.18	0.539	342	0.81	31
k__Bacteria|p	0.28	0.16	0.082	342	0.303	13
k__Bacteria|p	0.59	0.17	0.001	342	0.012	62
k__Bacteria|p	0.11	0.19	0.561	342	0.81	18
k__Bacteria|p	0.05	0.19	0.79	342	0.888	95
k__Bacteria|p	0.28	0.16	0.08	342	0.303	15
k__Bacteria|p	0.06	0.18	0.733	342	0.883	37
k__Bacteria|p	-0.19	0.19	0.313	342	0.618	25
k__Bacteria|p	-0.17	0.24	0.472	342	0.773	46
k__Bacteria|p	0.22	0.16	0.172	342	0.413	14
k__Bacteria|p	0.2	0.18	0.268	342	0.559	64
k__Bacteria|p	0.25	0.16	0.132	342	0.371	88
k__Bacteria|p	0.04	0.17	0.829	342	0.901	65
k__Bacteria|p	0.37	0.16	0.02	342	0.146	23
k__Bacteria|p	0.63	0.17	0	342	0.012	71
k__Bacteria|p	0.47	0.16	0.004	342	0.049	33
k__Bacteria|p	0.55	0.16	0	342	0.012	39
k__Bacteria|p	0.56	0.16	0.001	342	0.012	92
k__Bacteria|p	0.1	0.18	0.603	342	0.823	100
k__Bacteria|p	0.06	0.17	0.744	342	0.883	29
k__Bacteria|p	0.4	0.17	0.017	342	0.141	9
k__Bacteria|p	0.47	0.17	0.005	342	0.052	26
k__Bacteria|p	0.24	0.17	0.161	342	0.403	68

k__Bacteria|p	0.1	0.15	0.523	342	0.804	44
k__Bacteria|p	-0.17	0.19	0.377	342	0.67	58
k__Bacteria|p	0.33	0.16	0.038	342	0.192	82
k__Bacteria|p	0.18	0.16	0.265	342	0.559	94
k__Bacteria|p	0.25	0.16	0.111	342	0.349	91
k__Bacteria|p	0.55	0.17	0.001	342	0.014	22
k__Bacteria|p	0.26	0.17	0.125	342	0.367	41
k__Bacteria|p	0	0.16	0.998	342	0.998	72
k__Bacteria|p	0.04	0.17	0.799	342	0.888	55
k__Bacteria|p	-0.16	0.19	0.395	342	0.67	80
k__Bacteria|p	0.01	0.17	0.962	342	0.981	81
k__Bacteria|p	0.26	0.18	0.143	342	0.371	48
k__Bacteria|p	-0.06	0.19	0.752	342	0.883	99
k__Bacteria|p	-0.17	0.2	0.381	342	0.67	36
k__Bacteria|p	0.06	0.17	0.717	342	0.883	78
k__Bacteria|p	0.12	0.17	0.496	342	0.787	63
k__Bacteria|p	-0.32	0.2	0.112	342	0.349	27
k__Bacteria|p	0.21	0.18	0.233	342	0.517	28
k__Bacteria|p	-0.53	0.26	0.038	342	0.192	38
k__Bacteria|p	-0.66	0.24	0.007	342	0.067	97
k__Bacteria|p	-0.55	0.32	0.08	342	0.303	17
k__Bacteria|p	0.02	0.19	0.897	342	0.965	90
k__Bacteria|p	0.11	0.18	0.547	342	0.81	89
k__Bacteria|p	0.15	0.18	0.412	342	0.687	57
k__Bacteria|p	0.22	0.17	0.193	342	0.439	50
k__Bacteria|p	0.35	0.16	0.031	342	0.186	93
k__Bacteria|p	0.01	0.18	0.938	342	0.977	75
k__Bacteria|p	-0.09	0.22	0.676	342	0.878	11
k__Bacteria|p	0.05	0.18	0.76	342	0.883	84
k__Bacteria|p	-0.3	0.2	0.143	342	0.371	60
k__Bacteria|p	0.08	0.17	0.661	342	0.87	43
k__Bacteria|p	0.54	0.16	0.001	342	0.012	49
k__Bacteria|p	-0.11	0.2	0.568	342	0.81	79
k__Bacteria|p	0.05	0.18	0.768	342	0.883	54
k__Bacteria|p	-0.43	0.26	0.101	342	0.345	56
k__Bacteria|p	0.25	0.17	0.145	342	0.371	76
k__Bacteria|p	0.04	0.19	0.819	342	0.9	30
k__Bacteria|p	-0.65	0.29	0.024	342	0.159	61
k__Bacteria|p	-0.15	0.22	0.487	342	0.785	85
k__Bacteria|p	0.09	0.17	0.609	342	0.823	86
k__Bacteria|p	0	0.17	0.997	342	0.998	73
k__Bacteria|p	0.05	0.18	0.757	342	0.883	98
k__Bacteria|p	-0.1	0.19	0.604	342	0.823	74
k__Bacteria|p	-0.07	0.19	0.701	342	0.883	45
k__Bacteria|p	-0.33	0.24	0.173	342	0.413	87
k__Bacteria|p	-0.19	0.19	0.318	342	0.618	47
k__Bacteria|p	-0.02	0.18	0.931	342	0.977	69
k__Bacteria|p	-0.21	0.2	0.3	342	0.612	52
k__Bacteria|p	0.15	0.17	0.385	342	0.67	70
k__Bacteria|p	0.29	0.15	0.05	342	0.239	42

k__Bacteria|p	-0.19	0.19	0.321	342	0.618	96

prev
57.02%
92.40%
96.78%
77.78%
45.61%
68.42%
31.29%
59.36%
55.56%
86.26%
59.36%
61.11%
67.25%
43.86%
33.92%
91.23%
63.74%
47.95%
35.67%
50.88%
52.05%
35.09%
72.51%
25.73%
44.15%
23.98%
50.00%
73.68%
95.32%
78.95%
84.21%
61.40%
83.33%
54.39%
45.03%
73.39%
67.54%
99.42%
86.26%
99.42%
96.20%
68.42%
76.32%
93.27%
50.00%
78.07%
97.08%
96.78%
91.23%

61.99%
77.49%
78.36%
34.21%
53.51%
84.80%
81.87%
71.64%
85.96%
75.73%
86.55%
92.11%
75.15%
47.08%
86.84%
90.94%
92.69%
88.30%
94.74%
53.80%
53.22%
85.67%
82.46%
77.19%
61.99%
36.84%
93.86%
63.45%
63.74%
68.71%
98.25%
83.33%
90.35%
88.30%
77.19%
31.58%
84.80%
72.81%
75.15%
74.85%
95.91%
83.63%
73.10%
49.12%
81.58%
85.38%
85.67%
16.37%
71.64%
44.15%

34.50%

bacteria	estimate	SE	p_val	n	fdr	ing_RandomF
k__Bacteria|p	0.31	0.14	0.035	342	0.174	11
k__Bacteria|p	0.09	0.13	0.507	342	0.74	61
k__Bacteria|p	0.23	0.14	0.104	342	0.32	21
k__Bacteria|p	0.28	0.16	0.079	342	0.294	94
k__Bacteria|p	0.1	0.16	0.526	342	0.751	73
k__Bacteria|p	-0.93	0.31	0.002	342	0.04	47
k__Bacteria|p	-0.15	0.2	0.453	342	0.708	100
k__Bacteria|p	0.38	0.16	0.015	342	0.15	5
k__Bacteria|p	-0.49	0.23	0.032	342	0.174	9
k__Bacteria|p	0.29	0.16	0.069	342	0.276	59
k__Bacteria|p	-0.02	0.18	0.927	342	0.966	13
k__Bacteria|p	0.12	0.18	0.511	342	0.74	80
k__Bacteria|p	-0.15	0.18	0.407	342	0.656	63
k__Bacteria|p	-0.16	0.18	0.365	342	0.642	33
k__Bacteria|p	-0.06	0.18	0.748	342	0.849	12
k__Bacteria|p	-0.06	0.16	0.728	342	0.842	57
k__Bacteria|p	0.29	0.17	0.092	342	0.32	19
k__Bacteria|p	-0.58	0.25	0.021	342	0.15	49
k__Bacteria|p	-0.18	0.2	0.376	342	0.642	90
k__Bacteria|p	-0.38	0.24	0.109	342	0.32	20
k__Bacteria|p	0.05	0.17	0.778	342	0.864	28
k__Archaea|p	-0.43	0.22	0.058	342	0.25	2
k__Bacteria|p	-0.34	0.23	0.136	342	0.35	38
k__Bacteria|p	-0.17	0.19	0.373	342	0.642	1
k__Bacteria|p	-0.25	0.19	0.184	342	0.421	70
k__Bacteria|p	0.09	0.16	0.565	342	0.758	91
k__Bacteria|p	0.59	0.17	0.001	342	0.012	54
k__Bacteria|p	0.43	0.15	0.004	342	0.052	97
k__Bacteria|p	-0.03	0.18	0.851	342	0.915	40
k__Bacteria|p	0.06	0.18	0.733	342	0.842	74
k__Bacteria|p	0.28	0.17	0.105	342	0.32	42
k__Bacteria|p	-0.28	0.22	0.199	342	0.433	79
k__Bacteria|p	-0.17	0.24	0.472	342	0.725	84
k__Bacteria|p	0.6	0.17	0.001	342	0.012	93
k__Bacteria|p	0.2	0.17	0.249	342	0.497	6
k__Bacteria|p	-0.08	0.19	0.669	342	0.811	88
k__Bacteria|p	0.25	0.16	0.132	342	0.348	41
k__Bacteria|p	0.38	0.17	0.024	342	0.15	92
k__Bacteria|p	0.31	0.17	0.073	342	0.281	55
k__Bacteria|p	0.04	0.17	0.829	342	0.901	26
k__Bacteria|p	0.42	0.18	0.022	342	0.15	72
k__Bacteria|p	-0.51	0.3	0.095	342	0.32	65
k__Bacteria|p	0.33	0.16	0.038	342	0.174	46
k__Bacteria|p	0.06	0.16	0.682	342	0.811	68
k__Bacteria|p	0.37	0.16	0.02	342	0.15	8
k__Bacteria|p	0.23	0.17	0.189	342	0.421	89
k__Bacteria|p	0.37	0.17	0.032	342	0.174	29
k__Bacteria|p	0.63	0.17	0	342	0.012	25
k__Bacteria|p	0.56	0.16	0.001	342	0.012	36

k__Bacteria|p	0.4	0.17	0.017	342	0.15	10
k__Bacteria|p	0.47	0.17	0.005	342	0.058	52
k__Bacteria|p	0.24	0.17	0.161	342	0.393	48
k__Bacteria|p	0.16	0.15	0.302	342	0.56	37
k__Bacteria|p	0.1	0.18	0.582	342	0.766	81
k__Bacteria|p	0.11	0.19	0.553	342	0.757	66
k__Bacteria|p	0.4	0.18	0.024	342	0.15	31
k__Bacteria|p	0.25	0.16	0.111	342	0.32	15
k__Bacteria|p	0.26	0.17	0.125	342	0.337	96
k__Bacteria|p	-0.2	0.19	0.294	342	0.559	53
k__Bacteria|p	-0.02	0.17	0.912	342	0.96	23
k__Bacteria|p	-0.16	0.19	0.395	342	0.647	50
k__Bacteria|p	-0.1	0.17	0.553	342	0.757	83
k__Bacteria|p	0.01	0.17	0.962	342	0.981	4
k__Bacteria|p	0.26	0.18	0.143	342	0.357	7
k__Bacteria|p	0.06	0.17	0.717	342	0.842	14
k__Bacteria|p	0.12	0.17	0.496	342	0.74	56
k__Bacteria|p	-0.38	0.23	0.1	342	0.32	35
k__Bacteria|p	0.21	0.18	0.233	342	0.475	30
k__Bacteria|p	-0.03	0.19	0.863	342	0.918	82
k__Bacteria|p	-0.53	0.26	0.038	342	0.174	32
k__Bacteria|p	-0.24	0.2	0.223	342	0.465	16
k__Bacteria|p	0.13	0.16	0.417	342	0.662	3
k__Bacteria|p	0.08	0.17	0.644	342	0.805	24
k__Bacteria|p	0.28	0.14	0.037	342	0.174	60
k__Bacteria|p	-0.27	0.2	0.189	342	0.421	22
k__Bacteria|p	-0.33	0.21	0.115	342	0.32	17
k__Bacteria|p	0.11	0.18	0.547	342	0.757	64
k__Bacteria|p	0.01	0.18	0.938	342	0.967	75
k__Bacteria|p	-0.09	0.22	0.676	342	0.811	99
k__Bacteria|p	-0.28	0.22	0.209	342	0.444	18
k__Bacteria|p	0.08	0.17	0.661	342	0.811	45
k__Bacteria|p	0.54	0.16	0.001	342	0.012	69
k__Bacteria|p	-0.72	0.32	0.022	342	0.15	76
k__Bacteria|p	0.24	0.15	0.115	342	0.32	44
k__Bacteria|p	-0.11	0.2	0.568	342	0.758	78
k__Bacteria|p	0.05	0.18	0.768	342	0.863	87
k__Bacteria|p	0.04	0.19	0.819	342	0.9	58
k__Bacteria|p	0	0.18	0.983	342	0.992	67
k__Bacteria|p	0.28	0.15	0.069	342	0.276	98
k__Bacteria|p	-0.15	0.22	0.487	342	0.738	39
k__Bacteria|p	0.09	0.17	0.609	342	0.785	86
k__Bacteria|p	0	0.17	0.997	342	0.997	95
k__Bacteria|p	0.09	0.18	0.612	342	0.785	43
k__Bacteria|p	-0.28	0.2	0.17	342	0.405	85
k__Bacteria|p	-0.16	0.19	0.382	342	0.642	34
k__Bacteria|p	0.09	0.19	0.639	342	0.805	51
k__Bacteria|p	-0.19	0.19	0.318	342	0.578	62
k__Bacteria|p	-0.2	0.19	0.296	342	0.559	27
k__Bacteria|p	0.15	0.17	0.385	342	0.642	77

k__Bacteria|p	-0.22	0.21	0.296	342	0.559	71

prev
57.02%
92.40%
96.78%
77.78%
83.92%
50.29%
54.97%
66.96%
55.56%
63.74%
86.26%
73.10%
54.97%
42.11%
33.92%
42.11%
91.23%
31.29%
52.63%
24.27%
63.74%
47.95%
52.05%
72.51%
51.46%
25.73%
95.32%
56.43%
87.13%
83.33%
51.17%
58.77%
45.03%
94.74%
99.42%
28.95%
99.42%
92.98%
97.08%
86.26%
77.19%
48.25%
60.23%
59.36%
99.42%
85.67%
90.06%
96.20%
93.27%

97.08%
96.78%
91.23%
37.43%
44.74%
66.08%
83.04%
53.51%
81.87%
77.78%
85.96%
75.73%
49.71%
86.55%
92.11%
86.84%
90.94%
62.57%
88.30%
85.67%
94.74%
82.16%
75.15%
89.47%
59.65%
64.04%
68.42%
82.46%
93.86%
63.45%
54.68%
98.25%
83.33%
35.67%
34.21%
90.35%
88.30%
84.80%
86.84%
39.47%
75.15%
74.85%
95.91%
81.58%
85.38%
78.95%
67.54%
85.38%
77.19%
71.64%

88.01%

Bacteria

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerobutyricum|s__Ana
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerobutyricum|s__Ana
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerobutyricum|s__Ana
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerobutyricum|s__Ana
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerobutyricum|s__Ana
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerobutyricum|s__Ana
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_formicig
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_formicig
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_formicig
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_formicig
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_formicig
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_formicig
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_longicat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_longicat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_longicat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_longicat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_longicat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_longicat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF24
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF24
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF24
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF24
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF24
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF24
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF36
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF36
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF36
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF36
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF36
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF36
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__Ru
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__Ru
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__Ru
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__Ru
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__Ru
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__Ru
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Faecalibacill
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Faecalibacill
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Faecalibacill
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Faecalibacill
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Faecalibacill
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Faecalibacill

Comorbidities	rho	p-value	fdr	n	prevalence
aHEI	-0.037	0.498	0.929	342	94.74%
DBP	0.028	0.610	0.929	342	94.74%
SBP	-0.046	0.401	0.929	342	94.74%
HDL	-0.015	0.780	0.929	342	94.74%
Total cholesterol	-0.006	0.906	0.929	342	94.74%
Triglycerides	-0.005	0.929	0.929	342	94.74%
aHEI	-0.108	0.045	0.273	342	96.20%
DBP	-0.048	0.375	0.658	342	96.20%
SBP	-0.084	0.120	0.359	342	96.20%
HDL	0.006	0.906	0.906	342	96.20%
Total cholesterol	-0.042	0.439	0.658	342	96.20%
Triglycerides	-0.018	0.745	0.894	342	96.20%
aHEI	0.012	0.823	0.915	342	68.42%
DBP	0.006	0.915	0.915	342	68.42%
SBP	-0.009	0.863	0.915	342	68.42%
HDL	-0.006	0.905	0.915	342	68.42%
Total cholesterol	-0.091	0.091	0.548	342	68.42%
Triglycerides	-0.054	0.320	0.915	342	68.42%
aHEI	-0.113	0.037	0.222	342	76.32%
DBP	0.028	0.605	0.907	342	76.32%
SBP	0.032	0.561	0.907	342	76.32%
HDL	0.000	0.999	0.999	342	76.32%
Total cholesterol	-0.036	0.510	0.907	342	76.32%
Triglycerides	-0.004	0.942	0.999	342	76.32%
aHEI	-0.038	0.478	0.759	342	93.27%
DBP	0.093	0.087	0.262	342	93.27%
SBP	0.096	0.075	0.262	342	93.27%
HDL	-0.017	0.758	0.768	342	93.27%
Total cholesterol	-0.016	0.768	0.768	342	93.27%
Triglycerides	0.036	0.506	0.759	342	93.27%
aHEI	-0.089	0.101	0.608	342	84.80%
DBP	0.040	0.466	0.855	342	84.80%
SBP	0.012	0.819	0.983	342	84.80%
HDL	0.001	0.983	0.983	342	84.80%
Total cholesterol	0.035	0.523	0.855	342	84.80%
Triglycerides	-0.031	0.570	0.855	342	84.80%
aHEI	-0.010	0.848	0.931	342	83.33%
DBP	0.046	0.400	0.800	342	83.33%
SBP	-0.048	0.374	0.800	342	83.33%
HDL	0.061	0.261	0.800	342	83.33%
Total cholesterol	0.005	0.931	0.931	342	83.33%
Triglycerides	-0.015	0.783	0.931	342	83.33%

Bacteria

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerobutyricum|s__Ana
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_formicig
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_longicat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF24
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF3
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__Ru
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Faecalibacill
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerobutyricum|s__Ana
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_formicig
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_longicat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF24
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF3
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__Ru
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Faecalibacill

Comorbidities	p-value	fdr	n	prevalence
Current smoker	0.128	0.256	342	94.74%
Current smoker	0.246	0.262	342	96.20%
Current smoker	0.042	0.083	342	68.42%
Current smoker	0.476	0.830	342	76.32%
Current smoker	0.451	0.451	342	93.27%
Current smoker	0.912	0.912	342	96.78%
Current smoker	0.689	0.849	342	84.80%
Current smoker	0.486	0.546	342	83.33%
Sports	0.913	0.913	342	94.74%
Sports	0.262	0.262	342	96.20%
Sports	0.750	0.750	342	68.42%
Sports	0.830	0.830	342	76.32%
Sports	0.331	0.451	342	93.27%
Sports	0.849	0.849	342	84.80%
Sports	0.546	0.546	342	83.33%

Metabolite	Comorbidities	rho	p-value	fdr	n
Caffeine	aHEI	-0.035	0.521	0.626	342
Caffeine	DBP	-0.041	0.447	0.626	342
Caffeine	SBP	0.028	0.600	0.626	342
Caffeine	HDL	0.036	0.504	0.626	342
Caffeine	Total cholestero	-0.036	0.51	0.626	342
Caffeine	Triglycerides	-0.026	0.626	0.626	342
Nicotinate	aHEI	-0.062	0.252	0.755	342
Nicotinate	DBP	0.014	0.802	0.809	342
Nicotinate	SBP	0.014	0.790	0.809	342
Nicotinate	HDL	-0.013	0.809	0.809	342
Nicotinate	Total cholestero	-0.015	0.785	0.809	342
Nicotinate	Triglycerides	0.072	0.182	0.755	342
Uridine	aHEI	-0.077	0.154	0.308	342
Uridine	DBP	0.057	0.297	0.329	342
Uridine	SBP	0.098	0.070	0.308	342
Uridine	HDL	-0.053	0.329	0.329	342
Uridine	Total cholestero	-0.057	0.30	0.329	342
Uridine	Triglycerides	0.079	0.143	0.308	342
Serine	aHEI	-0.045	0.404	0.791	342
Serine	DBP	-0.011	0.836	0.836	342
Serine	SBP	0.033	0.543	0.791	342
Serine	HDL	-0.024	0.659	0.791	342
Serine	Total cholestero	-0.054	0.316	0.791	342
Serine	Triglycerides	0.043	0.427	0.791	342
Cholesterol	aHEI	-0.103	0.057	0.341	342
Cholesterol	DBP	0.034	0.531	0.825	342
Cholesterol	SBP	-0.019	0.726	0.825	342
Cholesterol	HDL	0.014	0.796	0.825	342
Cholesterol	Total cholestero	0.037	0.494	0.825	342
Cholesterol	Triglycerides	0.012	0.825	0.825	342
1-methylxantl	aHEI	-0.068	0.207	0.622	342
1-methylxantl	DBP	-0.052	0.337	0.675	342
1-methylxantl	SBP	-0.028	0.604	0.818	342
1-methylxantl	HDL	-0.003	0.960	0.960	342
1-methylxantl	Total cholestero	0.022	0.682	0.818	342
1-methylxantl	Triglycerides	0.084	0.121	0.622	342
Protoporphyri	aHEI	0.057	0.294	0.469	342
Protoporphyri	DBP	0.133	0.014	0.081	342
Protoporphyri	SBP	0.097	0.074	0.223	342
Protoporphyri	HDL	0.039	0.469	0.469	342
Protoporphyri	Total cholestero	0.052	0.336	0.469	342
Protoporphyri	Triglycerides	0.041	0.453	0.469	342
Glucuronate	aHEI	-0.039	0.468	0.608	342
Glucuronate	DBP	0.032	0.560	0.608	342
Glucuronate	SBP	0.028	0.608	0.608	342
Glucuronate	HDL	-0.118	0.030	0.089	342
Glucuronate	Total cholestero	-0.119	0.028	0.089	342
Glucuronate	Triglycerides	0.079	0.147	0.295	342

Metabolite	Comorbidities	p-value
Caffeine	Current smoker	0.110
Nicotinate	Current smoker	0.262
Uridine	Current smoker	0.602
Serine	Current smoker	0.299
Cholesterol	Current smoker	0.220
1-methylxanthine	Current smoker	0.422
protoporphyrin IX	Current smoker	0.662
Glucuronate	Current smoker	0.122
Caffeine	Sports	0.395
Nicotinate	Sports	0.000
Uridine	Sports	0.064
Serine	Sports	0.018
Cholesterol	Sports	0.440
1-methylxanthine	Sports	0.017
protoporphyrin IX	Sports	0.056
Glucuronate	Sports	0.003

fdr	**n**
0.219	342
0.262	342
0.602	342
0.299	342
0.440	342
0.422	342
0.662	342
0.122	342
0.395	342
0.001	342
0.128	342
0.035	342
0.440	342
0.034	342
0.112	342
0.007	342

Bacteria name
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerostipes|s__Anaeros
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_faecis|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_wexler
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruthenibacterium|s__Ru
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_obeum
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Fusicatenibacter|s__Fusic
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_formicig
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerobutyricum|s__Ana
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fae
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF3
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_massili
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fae
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_SGB48
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Agathobaculum|s__Agat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Candidatus_Cibiobacter|
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Adlercreutzia|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Coprococcus|s__Coproco
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Gemmiger|s__Gemmige
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_longicat
k__Bacteria|p__Firmicutes|c__Firmicutes_unclassified|o__Firmicutes_unclassified|f__Firmicutes_unclassifie
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthella|s__
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fae
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Bittarella|s__Bittarella_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Romboutsia|s__Ro
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_SGB48
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Roseburia|s__Roseburia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Roseburia|s__Roseburia_i
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__Parabacteroides|s__
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Coprococcus|s__Coproco
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fae
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9699|s__GGB9699_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Odoribacteraceae|g__Odoribacter|s__O
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__GGB45432|s__
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__Ru

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Oscillospiraceae|g__Dysosmobacter|s__Dysos
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Phocaeic
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Faecalibacill
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__M
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospira|s__Lachnosp
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Collinsella|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__R
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Barnesiellaceae|g__Barnesiella|s__Barn
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Promicromonosporaceae|g__Isopte
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lacrimispora|s__Lacrimis
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Faecalicatena|s__Faecalic
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Roseburia|s__Roseburia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_SGB48
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9730|s__GGB9730_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_AF24
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcus|s__Rumi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Oscillospiraceae|g__Oscillibacter|s__Oscillibac
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacteriaceae_unclassifie
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9632|s__GGB9632_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Anaeromassilibacillus|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Flavonifractor|s__Flavon
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenellaceae_u
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteri
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerobutyricum|s__Ana
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Gordonibacter|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9522|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Faecalicatena|s__Faecalic
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Roseburia|s__Roseburia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcus|s__Rumi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3571|s__GGB3571_S

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__CFGB42691|o__OFGB42691|f__FGB42691|g__GGB51441|s__GGB51441_SG
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_longicat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9615|s__GGB9615_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteriu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__Parabacteroides|s__
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Phocaeico
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9667|s__GGB9667_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9602|s__GGB9602_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Intestinibacter|s__
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_glucer
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fae
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Massilimaliae|s__Massili
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Erysipelatoc
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB2980|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9758|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospira|s__Lachnosp
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_sp_MS
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Gemmiger|s__Gemmige
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_sp_MS
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9707|s__GGB9707_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Intestinimonas|s_
k__Bacteria|p__Verrucomicrobia|c__Verrucomicrobiae|o__Verrucomicrobiales|f__Akkermansiaceae|g__Ak
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteri
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Oscillospiraceae|g__Dysosmobacter|s__Dysos
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3746|s__GGB3746_S
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Lawsonibacter|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3570|s__GGB3570_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Roseburia|s__Roseburia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lacrimispora|s__Lacrimis
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_sp_OF
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__M
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Intestinimonas|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9635|s__GGB9635_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteri
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__R
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_obeu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9694|s__GGB9694_
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Turicibacter
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9705|s__GGB9705_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Massilimaliae|s__Massili
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9705|s__GGB9705_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9342|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|
k__Bacteria|p__Firmicutes|c__CFGB3048|o__OFGB3048|f__FGB3048|g__GGB9559|s__GGB9559_SGB1496
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9787|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Evtepia|s__Evtep
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__R
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Holdemania
k__Bacteria|p__Firmicutes|c__CFGB3035|o__OFGB3035|f__FGB3035|g__GGB9524|s__GGB9524_SGB1492
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenellaceae_u
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Eisenbergiella|s__Eisenbe
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB3005|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9494|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Intestinibacter|s__

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoclostridium|s__Clo
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Coprococcus|s__Coprococ
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Lactococcus|s__Lactococc
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_sp_AF
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Solobacteri
k__Archaea|p__Euryarchaeota|c__Methanobacteria|o__Methanobacteriales|f__Methanobacteriaceae|g__
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Gordonibacter|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospira|s__Lachnosp
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Anaerotruncus|s__Anae
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9646|s__GGB9646_
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Turicibacter
k__Bacteria|p__Firmicutes|c__CFGB3047|o__OFGB3047|f__FGB3047|g__GGB9557|s__GGB9557_SGB1496
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3537|s__GGB3537_S
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Dialister|s__Dialister_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Butyricicoccus|s__Butyricico
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Candidatus_Saccharibacteria|c__Candidatus_Saccharibacteria_unclassified|o__Candidatus_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerotignum|s__Anaero
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__GGB3034|s
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinobac
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Catenibacillus|s__Catenib
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Intestinimonas|s_
k__Bacteria|p__Firmicutes|c__CFGB3053|o__OFGB3053|f__FGB3053|g__GGB9581|s__GGB9581_SGB1499
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillales_unclassified|g__Gemella|s__Gemella_sang
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenella|s__Ch
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Firmicutes|c__CFGB1434|o__OFGB1434|f__FGB1434|g__GGB3510|s__GGB3510_SGB4687|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9712|s__GGB9712_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Firmicutes|c__CFGB3608|o__OFGB3608|f__FGB3608|g__GGB58158|s__GGB58158_SGB797
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9677|s__GGB9677_

k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__Phascolarc

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Massilioclostridium|s__Mas

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__M

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__GGB4456|s__GGB4

k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Faecalibacill

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenellaceae_u

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9634|s__GGB9634_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacteriaceae_unclassifie

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerosacchariphilus|s__

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9608|s__GGB9608_

k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Veillonella|s__Veillone

k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacteriaceae_unclassifie

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9633|s__GGB9633_

k__Bacteria|p__Firmicutes|c__CFGB12277|o__OFGB12277|f__FGB12277|g__GGB35068|s__GGB35068_SG

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Phocea|s__Phocea_mas

k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact

k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact

k__Bacteria|p__Firmicutes|c__CFGB1217|o__OFGB1217|f__FGB1217|g__GGB2982|s__GGB2982_SGB3964|

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9627|s__GGB9627_

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Barnesiellaceae|g__Coprobacter|s__Co

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla

k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Sutterellaceae|g__Parasutter

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi

k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Erysipelato

k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto

k__Bacteria|p__Firmicutes|c__CFGB2916|o__OFGB2916|f__FGB2916|g__GGB9237|s__GGB9237_SGB1417

k__Bacteria|p__Firmicutes|c__CFGB40382|o__OFGB40382|f__FGB40382|g__GGB45491|s__GGB45491_SG

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9614|s__GGB9614_

k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Erysipelato

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB2977|

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Coprococcus|s__Coproco

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__M

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Enterocloster|s__Enterocl

k__Bacteria|p__Firmicutes|c__CFGB1340|o__OFGB1340|f__FGB1340|g__GGB3256|s__GGB3256_SGB4303|

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Actinobacteria|c__CFGB9370|o__OFGB9370|f__FGB9370|g__GGB51959|s__GGB51959_SG

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__Cl

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9621|s__GGB9621_

k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Sutterellaceae|g__Sutterella|

k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Trueperell

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenella|s__Ch
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Neobittarella|s__Neobit
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Massilistercora|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Holdemania
k__Bacteria|p__Firmicutes|c__Firmicutes_unclassified|o__Firmicutes_unclassified|f__Firmicutes_unclassifie
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Hydrogeniiclostidium|s_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pasteurellales|f__Pasteurellaceae|g__Haemo
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9347|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lacticaseibacillus|s__Lactic
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Senegalima
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__M
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB3293|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9640|s__GGB9640_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Eisenbergiella|s__Eisenbe
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Veillonella|s__Veillon
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Monoglobus|s__
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcus|s__Rumi
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Sellimonas|s__Sellimonas
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Phocaeic

k__Bacteria|p__Firmicutes|c__CFGB9612|o__OFGB9612|f__FGB9612|g__GGB45495|s__GGB45495_SGB631
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Marinilabiliales|f__Marinilabiliaceae|g__GGB58233|s__G
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9694|s__GGB9694_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Lancefieldella|s
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriia_unclassified|f__Coriobacteriia_unclassif
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_hydrog
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Enterocloster|s__Enterocl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4585|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Anaerofustis|s__Anaerofus
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Gemmiger|s__Gemmige
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9619|s__GGB9619_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9633|s__GGB9633_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Firmicutes|c__Firmicutes_unclassified|o__Firmicutes_unclassified|f__Firmicutes_unclassifie
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|s
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteriu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3433|s__GGB3433_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9512|s__GGB9512_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|s
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_caecim
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9642|s__GGB9642_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcus|s__Rumi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Harryflintia|s__Harryflin
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__GGB3478|s__GGB3478_SGB
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Micrococcaceae|g__Rothia|s__Roth
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9590|s__GGB9590_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Micrococcaceae|g__Rothia|s__Roth
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol
k__Bacteria|p__Bacteroidetes|c__CFGB602|o__OFGB602|f__FGB602|g__GGB1420|s__GGB1420_SGB1957|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Oscillospiraceae|g__Oscillospiraceae_unclassifi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9615|s__GGB9615_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteri
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Massilimicr
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenellaceae_u
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Barnesiellaceae|g__Coprobacter|s__Co
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Veillonella|s__Veillon
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Odoribacteraceae|g__Butyricimonas|s__
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Catabacteriaceae|g__Catabacter|s__Catabacte
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Holdemania
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Pauljense
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__GGB33516|s__GGB33516_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9694|s__GGB9694_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Erysipelotri
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Odoribacteraceae|g__Butyricimonas|s__
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lacticaseibacillus|s__Lactic
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoclostridium|s__Clo
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9176|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenella|s__Ch
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Anaerotruncus|s__Anae
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Odoribacteraceae|g__Butyricimonas|s__
k__Bacteria|p__Firmicutes|c__CFGB2882|o__OFGB2882|f__FGB2882|g__GGB9186|s__GGB9186_SGB1412
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4599|
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Slackia|s__Slack
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lactobacillus|s__Lactobacil
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9709|s__GGB9709_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB3278|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Neglecta|s__Neglecta_ti
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__Parabacteroides|s__

k__Bacteria|p__Firmicutes|c__CFGB24517|o__OFGB24517|f__FGB24517|g__GGB45620|s__GGB45620_SG
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenellaceae_u
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Coprobacill
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_sterco
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Paraprevotella|s__Pa
k__Bacteria|p__Firmicutes|c__CFGB11737|o__OFGB11737|f__FGB11737|g__GGB34228|s__GGB34228_SG
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_schink
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Tyzzerella|s__Tyzzerella_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Anaerotruncus|s__Anae
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Sutterellaceae|g__Sutterella|
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB3277|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9644|s__GGB9644_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Pseudoflavonifractor|s__
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcus|s__Rumi
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__CFGB3048|o__OFGB3048|f__FGB3048|g__GGB9561|s__GGB9561_SGB1497
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Oscillospiraceae|g__Oscillibacter|s__Oscillibac
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9631|s__GGB9631_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Gordonibacter|
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9618|s__GGB9618_
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Alphaproteobacteria_unclassified|f__Alphaprot
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9636|s__GGB9636_
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Faecalitalea
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4603|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Alphaproteobacteria_unclassified|f__Alphaprot
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Oxalobacteraceae|g__GGB66
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Propionibacteriales|f__Propionibacteriaceae|g__Propi

k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Raoultibacter|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4596|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Erysipelato
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Parvimonas|s__Parvim
k__Bacteria|p__Firmicutes|c__CFGB3048|o__OFGB3048|f__FGB3048|g__GGB9559|s__GGB9559_SGB1496
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Lactonifactor|s__Lactonifact
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Enterocloster|s__Enteroc
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Anaerofilum|s__Anaero
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Massilimicr
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Rhizobiales|f__Phyllobacteriaceae|g__GGB381
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4566|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Oscillospiraceae|g__Oscillibacter|s__Oscillibac
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Negativibacillus|s__Neg
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Pseudoruminococcus|s_
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Veillonella|s__Veillon
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoclostridium|s__Lac
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Dielma|s__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Raoultibacter|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Hungatella|s__Hungatella_h
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3614|s__GGB3614_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Merdimonas|s__Merdim
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Sutterellaceae|g__Parasutter
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Kytococcaceae|g__Kytococcus|s__
k__Bacteria|p__Firmicutes|c__CFGB2801|o__OFGB2801|f__FGB2801|g__GGB8965|s__GGB8965_SGB1382
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9623|s__GGB9623_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Hungatella|s__Hungatella_h
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Pseudoflavonifractor|s_
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Erysipelotri
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Longicatena
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Alphaproteobacteria_unclassified|f__Alphaprot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9774|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9501|s__GGB9501_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcus|s__Rumi
k__Bacteria|p__Bacteroidetes|c__Flavobacteriia|o__Flavobacteriales|f__Flavobacteriales_unclassified|g__G
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9350|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3677|s__GGB3677_S
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Aeromonadales|f__Aeromonadaceae|g__GG
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Alloscard
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Carnobacteriaceae|g__Granulicatella|s__Granul
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lacrimispora|s__Lacrimis
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9691|s__GGB9691_
k__Bacteria|p__Firmicutes|c__CFGB9736|o__OFGB9736|f__FGB9736|g__GGB45599|s__GGB45599_SGB63
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__Cl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_produ
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Enterocloster|s__Enterocl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__CFGB1218|o__OFGB1218|f__FGB1218|g__GGB2983|s__GGB2983_SGB3965|
k__Bacteria|p__Firmicutes|c__CFGB1425|o__OFGB1425|f__FGB1425|g__GGB3491|s__GGB3491_SGB4665|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__GGB9568|s__GGB9568_SGB
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Scardovia|
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Enorma|s__
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4569|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Coprococcus|s__Coproco
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospira|s__Lachnosp
k__Bacteria|p__Firmicutes|c__Firmicutes_unclassified|o__Firmicutes_unclassified|f__Firmicutes_unclassifie
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB58485|s__GGB5848
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Verrucomicrobia|c__Verrucomicrobiae|o__Verrucomicrobiales|f__Akkermansiaceae|g__Ak
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__GGB1681|s__GGB168
k__Bacteria|p__Firmicutes|c__CFGB11371|o__OFGB11371|f__FGB11371|g__GGB33432|s__GGB33432_SG
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerostipes|s__Anaeros
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9608|s__GGB9608_
k__Bacteria|p__Planctomycetes|c__Planctomycetia|o__Pirellulales|f__Pirellulaceae|g__GGB6601|s__GGB6
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Lancefieldella|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Lactococcus|s__Lactococc
k__Bacteria|p__Firmicutes|c__CFGB1798|o__OFGB1798|f__FGB1798|g__GGB4769|s__GGB4769_SGB6602|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9537|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__GGB3486|s__GGB3486_SGB
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Roseburia|s__Roseburia_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Peptidipha
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Schaalia|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9610|s__GGB9610_

k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Enteroscipio|s__

k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9695|s__GGB9695_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla

k__Bacteria|p__Candidatus_Saccharibacteria|c__Candidatus_Saccharimonia|o__Candidatus_Saccharimonale

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9532|

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|

k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__Phascolarc

k__Bacteria|p__Synergistetes|c__Synergistia|o__Synergistales|f__Synergistaceae|g__Cloacibacillus|s__Cloa

k__Eukaryota|p__Ascomycota|c__Saccharomycetes|o__Saccharomycetales|f__Saccharomycetaceae|g__Sac

k__Bacteria|p__Firmicutes|c__CFGB1538|o__OFGB1538|f__FGB1538|g__GGB3892|s__GGB3892_SGB5290|

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4588|

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9634|s__GGB9634_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9695|s__GGB9695_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Leuconostoc|s__Leucono

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_faecic

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoclostridium|s__Lac

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospira|s__Lachnosp

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Marvinbryantia|s__Marvi

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9623|s__GGB9623_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcus|s__Rumi

k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Allisonella|s__Allisone

k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Enorma|s__

k__Bacteria|p__Firmicutes|c__CFGB2950|o__OFGB2950|f__FGB2950|g__GGB9291|s__GGB9291_SGB1424

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9059|

k__Bacteria|p__Candidatus_Saccharibacteria|c__Candidatus_Nanosyncoccalia|o__Candidatus_Nanogingival

k__Bacteria|p__Firmicutes|c__Clostridia|o__Candidatus_Borkfalkiales|f__Candidatus_Borkfalkiaceae|g__Ca

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3463|s__GGB3463_S

k__Bacteria|p__Actinobacteria|c__CFGB25442|o__OFGB25442|f__FGB25442|g__GGB51960|s__GGB51960_

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9768|

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteri

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9635|s__GGB9635_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9697|s__GGB9697_

k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Catenibacte

k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Tissierellaceae|g__Urmitella|s__Urmitella_ti

k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1266|s__GGB12
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9239|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__GGB9778|s__GGB9778_SG
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__Parabacteroides|s__
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4750|s__GGB47
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9551|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Enterocloster|s__Enterocl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9615|s__GGB9615_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Propionibacteriales|f__Propionibacteriaceae|g__GGB
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae_
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__GGB9361|s__G
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4584|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Enterocloster|s__Enterocl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Dialister|s__Dialister_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillales_unclassified|g__Gemella|s__Gemella_morb
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lactobacillus|s__Lactobacil
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcus|s__Rumi
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Erysipelotric
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Traorella|s_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Mycobacteriaceae|g__Mycobac
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Phocaeic
k__Bacteria|p__Firmicutes|c__CFGB1798|o__OFGB1798|f__FGB1798|g__GGB4768|s__GGB4768_SGB6601|
k__Bacteria|p__Firmicutes|c__CFGB40183|o__OFGB40183|f__FGB40183|g__GGB42389|s__GGB42389_SG
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Intestinibacillus|s__Intestin
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3569|s__GGB3569_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9631|s__GGB9631_
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__Acidamino
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Butyrivibrio|s__Butyrivibr
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3637|s__GGB3637_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Oscillospiraceae|g__Oscillibacter|s__Oscillibac
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9454|s__GGB9454_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Phocaeic
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4710|s__GGB47
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Limosilactobacillus|s__Lim

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__GGB4482|s__GGB4482_SGB
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Collinsella|
k__Bacteria|p__Firmicutes|c__CFGB20074|o__OFGB20074|f__FGB20074|g__GGB48169|s__GGB48169_SGB
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Leuconostoc|s__Leucono
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Leuconostoc|s__Leucono
k__Bacteria|p__Firmicutes|c__CFGB14246|o__OFGB14246|f__FGB14246|g__GGB38987|s__GGB38987_SGB
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Lawsonibacter|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Cuneatibacter|s__Cuneati
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptococcaceae|g__Peptococcaceae_unclassifi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9618|s__GGB9618_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4676|s__GGB46
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Latilactobacillus|s__Latilact
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__CFGB1424|o__OFGB1424|f__FGB1424|g__GGB3490|s__GGB3490_SGB4664|
k__Bacteria|p__Firmicutes|c__CFGB16911|o__OFGB16911|f__FGB16911|g__GGB49418|s__GGB49418_SGB
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4569|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoclostridium|s__Lac
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB3189|s__GGB3189_
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Merdibacte
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_produ
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Peptostreptococcu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB3343|s__GGB3343_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9695|s__GGB9695_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Micrococcaceae|g__Rothia|s__Rot
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenella|s__Ch
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__GGB4491|s__GGB4491_SGB
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Faecalimonas|s__Faecali
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Subdoligranulum|s__Sub
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4713|s__GGB47
k__Bacteria|p__Firmicutes|c__CFGB3053|o__OFGB3053|f__FGB3053|g__GGB9581|s__GGB9581_SGB7982
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4579|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__GGB3532|s__GGB3532_SGB
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3523|s__GGB3523_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB3341|s__GGB3341_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9622|s__GGB9622_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9635|s__GGB9635_
k__Bacteria|p__Firmicutes|c__Firmicutes_unclassified|o__Firmicutes_unclassified|f__Firmicutes_unclassifie
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lactobacillus|s__Lactobacil
k__Bacteria|p__Firmicutes|c__CFGB1298|o__OFGB1298|f__FGB1298|g__GGB3118|s__GGB3118_SGB4130|
k__Bacteria|p__Firmicutes|c__CFGB2829|o__OFGB2829|f__FGB2829|g__GGB9045|s__GGB9045_SGB1394
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Sutterellaceae|g__Mesosutte
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3474|s__GGB3474_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Parascard
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__CFGB12541|o__OFGB12541|f__FGB12541|g__GGB35551|s__GGB35551_SG
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4554|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_sp_An
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Angelakisella|s__Angela
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Flavonifractor|s__Flavon
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9620|s__GGB9620_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9730|s__GGB9730_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__Acidamino
k__Bacteria|p__Tenericutes|c__Mollicutes|o__Acholeplasmatales|f__Acholeplasmatales_unclassified|g__Ac
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Rikenellaceae_unclass
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Verrucomicrobia|c__Opitutae|o__Opitutales|f__Opitutales_unclassified|g__Opitutales_uncl
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Collinsella|
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Slackia|s__Slack
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9288|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacteriaceae_unclassifie
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9637|s__GGB9637_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Propionibacteriales|f__Propionibacteriaceae|g__Arac
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Collinsella|
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae
k__Bacteria|p__Bacteria_unclassified|c__Bacteria_unclassified|o__Bacteria_unclassified|f__Bacteria_unclas
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillales_unclassified|g__Gemella|s__Gemella_hae
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lactiplantibacillus|s__Lacti
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Butyricicoccus|s__Butyricico
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteri
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9603|s__GGB9603_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcus|s__Rumi
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__GGB1689|s__GGB168
k__Bacteria|p__Candidatus_Saccharibacteria|c__Candidatus_Saccharibacteria_unclassified|o__Candidatus_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4651|s__GGB46
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__GGB4482|s__GGB4482_SGB
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Anaerofustis|s__Anaerofus

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3678|s__GGB3678_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3733|s__GGB3733_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Terrisporobacter|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fae
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9597|s__GGB9597_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Holdemanel
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Massilicoli|
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Enterorhabdus|
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillales_unclassified|g__Gemella|s__Gemella_haem
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__CFGB1302|o__OFGB1302|f__FGB1302|g__GGB3123|s__GGB3123_SGB4135|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4549|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9348|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Eisenbergiella|s__Eisenbe
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassif
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassif
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Roseburia|s__Roseburia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9593|s__GGB9593_
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Amedibacill
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriia_unclassified|f__Coriobacteriia_unclassif
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB3111|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Frisingicoccus|s__Frisingic
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassif
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9595|s__GGB9595_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Lentisphaerae|c__Lentisphaeria|o__Lentisphaeria_unclassified|f__Lentisphaeria_unclassifie
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Oxalobacteraceae|g__Oxalob
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Varibaculu
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae_
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae_
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Odoribacteraceae|g__Butyricimonas|s__
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Rikenellaceae_unclass
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__GGB9574|s__GGB9574_SGB
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Intestinimonas|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoclostridium|s__Lac
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9636|s__GGB9636_
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Bulleidia|s_
k__Bacteria|p__Lentisphaerae|c__Lentisphaeria|o__Lentisphaeria_unclassified|f__Lentisphaeria_unclassifie
k__Bacteria|p__Bacteroidetes|c__Flavobacteriia|o__Flavobacteriales|f__Flavobacteriales_unclassified|g__Fl
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__Em
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Coprococcus|s__Coproco
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoclostridium|s__Lac
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptococcaceae|g__Peptococcaceae_unclassifi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptococcaceae|g__Peptococcaceae_unclassifi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Peptostreptococcu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9591|s__GGB9591_
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Selenomonadales|f__Selenomonadaceae|g__Megamonas|
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriia_unclassified|f__Coriobacteriia_unclassif
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Slackia|s__Slack
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__GGB1387|s__GGB13
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Leuconostoc|s__Leucono
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Weissella|s__Weissella_c
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4602|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Pseudoflavonifractor|s__
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Anaerococcus|s__Anae
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Propionibacteriales|f__Propionibacteriaceae|g__Propi
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Phocaeic
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Porphyromonadaceae|g__Sanguibacter
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__GGB1680|s__GGB168

k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Dellaglioa|s__Dellaglioa_al
k__Bacteria|p__Firmicutes|c__CFGB11481|o__OFGB11481|f__FGB11481|g__GGB33665|s__GGB33665_SG
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_hanse
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Faecalicatena|s__Faecalic
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3678|s__GGB3678_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Lentisphaerae|c__Lentisphaeria|o__Victivallales|f__Victivallaceae|g__Victivallis|s__Victivall
k__Bacteria|p__Verrucomicrobia|c__Verrucomicrobiae|o__Verrucomicrobiales|f__Akkermansiaceae|g__Ak
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Mobiluncu
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Enorma|s__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Adlercreutzia|s_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__GGB1495
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Ligilactobacillus|s__Ligilact
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__Cl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_phocae
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3583|s__GGB3583_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoclostridium|s__Clo
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoclostridium|s__Lac
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Flavonifractor|s__Flavon
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9582|s__GGB9582_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9701|s__GGB9701_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__GGB4239|
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Alphaproteobacteria_unclassified|f__Alphaprot
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Fannyhess
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Schaalia|s
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Collinsella|
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Slackia|s__Slack
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4711|s__GGB47
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Ligilactobacillus|s__Ligilact
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__CFGB2897|o__OFGB2897|f__FGB2897|g__GGB9209|s__GGB9209_SGB1414

k__Bacteria|p__Firmicutes|c__CFGB3035|o__OFGB3035|f__FGB3035|g__GGB9523|s__GGB9523_SGB1492
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9332|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenellaceae_u
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Hungatella|s__Hungatella_h
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteri
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_produ
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Faecalicocc
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__GGB4277|s__GGB427
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Rhodobacterales|f__Rhodobacteraceae|g__Rh
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Pseudomonadaceae|g_
k__Archaea|p__Candidatus_Thermoplasmatota|c__Thermoplasmata|o__Methanomassiliicoccales|f__Meth
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Senegalima
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriales_unclassified|g__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__GGB9434|s__G
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Leuconostoc|s__Leucono
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Bariatricus|s__Bariatricus
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Extibacter|s__Extibacter_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB3185|s__GGB3185_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9582|s__GGB9582_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9677|s__GGB9677_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9696|s__GGB9696_
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Erysipelotri
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Sutterellaceae|g__Sutterella|
k__Bacteria|p__Synergistetes|c__Synergistia|o__Synergistales|f__Synergistaceae|g__Cloacibacillus|s__Cloa
k__Archaea|p__Euryarchaeota|c__Methanobacteria|o__Methanobacteriales|f__Methanobacteriaceae|g__
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__Microbacteri
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Collinsella|
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__GGB9423|s__G
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_unc
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Staphylococcaceae|g__Staphylococcus|s__Staphyloc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lactobacillus|s__Lactobacil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__CFGB3606|o__OFGB3606|f__FGB3606|g__GGB42689|s__GGB42689_SGB59
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__M
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9455|s__GGB9455_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9634|s__GGB9634_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9710|s__GGB9710_
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Amedibacte
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Parvimonas|s__Parvim
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Peptoniphilus|s__Pepto
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Propionibacteriales|f__Propionibacteriaceae|g__Arac
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_unc
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Paraprevotella|s__Pa
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Rikenellaceae_unclass
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4661|s__GGB46
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4669|s__GGB46
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4700|s__GGB47
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Limosilactobacillus|s__Lim
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Leuconostoc|s__Leucono
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Weissella|s__Weissella_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Lactococcus|s__Lactococ
k__Bacteria|p__Firmicutes|c__CFGB3048|o__OFGB3048|f__FGB3048|g__GGB9560|s__GGB9560_SGB6917
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4550|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4557|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Intestinibacillus|s__Intesti
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Peptostreptococcu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Subdoligranulum|s__Sub
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Erysipelotri
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__GGB4266|s__GGB426
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Sutterellaceae|g__Sutterella|
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__

k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae_
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__GGB1153|s__GGB11
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__Parabacteroides|s__
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Aerococcaceae|g__Abiotrophia|s__Abiotrophia_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Fructilactobacillus|s__Fruct
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Latilactobacillus|s__Latilact
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Pediococcus|s__Pediococc
k__Bacteria|p__Firmicutes|c__CFGB20164|o__OFGB20164|f__FGB20164|g__GGB42184|s__GGB42184_SG
k__Bacteria|p__Firmicutes|c__CFGB9501|o__OFGB9501|f__FGB9501|g__GGB28369|s__GGB28369_SGB40
k__Bacteria|p__Firmicutes|c__CFGB9830|o__OFGB9830|f__FGB9830|g__GGB29535|s__GGB29535_SGB42
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB3303|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__GGB4487|s__GGB4487_SGB
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Lactonifactor|s__Lactonifact
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Levyella|s__Levy
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerotignum|s__Anaero
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptococcaceae|g__Peptococcus|s__Peptococ
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9452|s__GGB9452_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9634|s__GGB9634_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9673|s__GGB9673_
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Alphaproteobacteria_unclassified|f__Alphaprot
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Sutterellaceae|g__Duodenib
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Spirochaetes|c__Spirochaetia|o__Brachyspirales|f__Brachyspiraceae|g__Brachyspira|s__Br
k__Bacteria|p__Verrucomicrobia|c__Verrucomicrobiae|o__Verrucomicrobiales|f__Akkermansiaceae|g__Ak
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Gardnerel
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Gardnerel
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Gardnerel
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Lancefieldella|s
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthella|s__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__GGB9358|s__G
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Slackia|s__Slack
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Odoribacteraceae|g__Odoribacter|s__O
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Porphyromonadaceae|g__Porphyromon
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__GGB1632|s__GGB163

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__GGB1407|s__GGB14
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4701|s__GGB47
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Levilactobacillus|s__Levilac
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__CFGB1872|o__OFGB1872|f__FGB1872|g__GGB4964|s__GGB4964_SGB6927|
k__Bacteria|p__Firmicutes|c__CFGB41366|o__OFGB41366|f__FGB41366|g__GGB45537|s__GGB45537_SG
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB3817|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4546|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9278|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__GGB9580|s__GGB9580_SGB
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Fenollaria|s__Fer
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9635|s__GGB9635_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9694|s__GGB9694_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Erysipelato
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Longibaculu
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Parvimonas|s__Parvim
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Comamonadaceae|g__Coma
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Sutterellaceae|g__Sutterella|
k__Bacteria|p__Proteobacteria|c__CFGB2395|o__OFGB2395|f__FGB2395|g__GGB6547|s__GGB6547_SGB9
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Mycobacteriaceae|g__Mycobac
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Atopobium|s__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthella|s__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__GGB1691|s__GGB169
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Rikenellaceae_unclass
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_
k__Bacteria|p__Candidatus_Saccharibacteria|c__Candidatus_Nanoperiomorbia|o__Candidatus_Nanoperiom
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Staphylococcaceae|g__Staphylococcus|s__Staphyloc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4667|s__GGB46

k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4739|s__GGB47
k__Bacteria|p__Firmicutes|c__CFGB12855|o__OFGB12855|f__FGB12855|g__GGB36331|s__GGB36331_SG
k__Bacteria|p__Firmicutes|c__CFGB1456|o__OFGB1456|f__FGB1456|g__GGB3654|s__GGB3654_SGB4965|
k__Bacteria|p__Firmicutes|c__CFGB25373|o__OFGB25373|f__FGB25373|g__GGB45597|s__GGB45597_SG
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4590|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9047|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Intestinimonas|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_argi|t_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_hanse
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Stomatobaculum|s__Sto
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Oscillospiraceae|g__Oscillospiraceae_unclassifi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptococcaceae|g__Peptococcaceae_unclassifi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Agathobaculum|s__Agat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Drancourtella|s__Dranc
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9457|s__GGB9457_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9635|s__GGB9635_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9687|s__GGB9687_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9694|s__GGB9694_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__GGB4263|s__GGB426
k__Bacteria|p__Fusobacteria|c__Fusobacteriia|o__Fusobacteriales|f__Fusobacteriaceae|g__Fusobacterium
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Oxalobacteraceae|g__GGB66
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Oxalobacteraceae|g__Oxalob
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Hafniaceae|g__Hafnia|s
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Pseudomonadaceae|g_
k__Bacteria|p__Verrucomicrobia|c__CFGB2164|o__OFGB2164|f__FGB2164|g__GGB6132|s__GGB6132_SG
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Schaalia|s
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Lawsonellaceae|g__Lawsonella|
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__GGB25442|s__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Parolsenella|s__

k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Collinsella|
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Gordonibacter|
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Odoribacteraceae|g__GGB1332|s__GG
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Porphyromonadaceae|g__Porphyromon
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Porphyromonadaceae|g__Porphyromon
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Porphyromonadaceae|g__Porphyromon
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__GGB1631|s__GGB163
k__Bacteria|p__Bacteroidetes|c__CFGB540|o__OFGB540|f__FGB540|g__GGB1110|s__GGB1110_SGB1424|
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4671|s__GGB46
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4686|s__GGB46
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4702|s__GGB47
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Limosilactobacillus|s__Lact
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Limosilactobacillus|s__Lim
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Pediococcus|s__Pediococc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Lactococcus|s__Lactococc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4598|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9333|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__GGB9580|s__GGB9580_SG
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacteriaceae_unclassifie
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_sp_An
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Frisingicoccus|s__Frisingi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3606|s__GGB3606_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3643|s__GGB3643_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Murimonas|s__Murimon
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptococcaceae|g__Peptococcaceae_unclassifi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9589|s__GGB9589_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9631|s__GGB9631_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9739|s__GGB9739_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Pseudoflavonifractor|s__
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Anaerococcus|s__Anae

k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Peptoniphilus|s__Pepto

k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Sutterellaceae|g__Turicimona

k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__

k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Morganellaceae|g__Prot

k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Micrococcaceae|g__Rothia|s__Roth

k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Collinsella|

k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Adlercreutzia|s_

k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae_

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_uncl

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__GGB1538

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Porphyromonadaceae|g__Porphyromon

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Porphyromonadaceae|g__Porphyromon

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Rikenellaceae_unclass

k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_

k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_

k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_

k__Bacteria|p__Candidatus_Saccharibacteria|c__CFGB4355|o__OFGB4355|f__FGB4355|g__GGB12788|s__

k__Bacteria|p__Candidatus_Saccharibacteria|c__CFGB4356|o__OFGB4356|f__FGB4356|g__GGB12790|s__

k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s

k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s

k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s

k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s

k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4641|s__GGB46

k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4706|s__GGB47

k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4708|s__GGB47

k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4727|s__GGB47

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Carnobacteriaceae|g__Carnobacterium|s__Carn

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Carnobacteriaceae|g__Granulicatella|s__Granul

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Lactococcus|s__Lactococc

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto

k__Bacteria|p__Firmicutes|c__CFGB1799|o__OFGB1799|f__FGB1799|g__GGB4770|s__GGB4770_SGB6604|

k__Bacteria|p__Firmicutes|c__CFGB3035|o__OFGB3035|f__FGB3035|g__GGB9524|s__GGB9524_SGB1492

k__Bacteria|p__Firmicutes|c__CFGB9612|o__OFGB9612|f__FGB9612|g__GGB45540|s__GGB45540_SGB63

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9270|

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenella|s__Ch

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteri

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3523|s__GGB3523_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3623|s__GGB3623_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Oribacterium|s__Oribacte
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptococcaceae|g__Peptococcaceae_unclassifi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9668|s__GGB9668_
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Candidatus_
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Erysipelotri
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Selenomonadales|f__Selenomonadaceae|g__Mitsuokella|
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Megasphaera|s__Meg
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Finegoldia|s__Finegoldi
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Peptoniphilus|s__Pepto
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Peptoniphilus|s__Pepto
k__Bacteria|p__Lentisphaerae|c__Lentisphaeria|o__Lentisphaeria_unclassified|f__Lentisphaeria_unclassifie
k__Bacteria|p__Lentisphaerae|c__Lentisphaeria|o__Lentisphaeria_unclassified|f__Lentisphaeria_unclassifie
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Hafniaceae|g__Hafnia|s
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pasteurellales|f__Pasteurellaceae|g__Haemo
k__Bacteria|p__Verrucomicrobia|c__Opitutae|o__Puniceicoccales|f__Puniceicoccaceae|g__Puniceicoccacea
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Trueperell
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Scardovia|
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Propionibacteriales|f__Propionibacteriaceae|g__Acidi
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Propionibacteriales|f__Propionibacteriaceae|g__Arac
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Collinsella|
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Enorma|s__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Enorma|s__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__GGB9379|s
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Adlercreutzia|s_
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Gordonibacter|
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__GGB1154|s__GGB11
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Mediterranea|s__M
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__GGB1551
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Odoribacteraceae|g__Butyricimonas|s__
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Odoribacteraceae|g__Butyricimonas|s__
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Odoribacteraceae|g__Butyricimonas|s__

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_

k__Bacteria|p__Bacteroidetes|c__CFGB1285|o__OFGB1285|f__FGB1285|g__GGB3100|s__GGB3100_SGB41

k__Bacteria|p__Bacteroidetes|c__CFGB618|o__OFGB618|f__FGB618|g__GGB1456|s__GGB1456_SGB2019|

k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G

k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G

k__Bacteria|p__Candidatus_Saccharibacteria|c__Candidatus_Nanosyncoccalia|o__Candidatus_Nanogingivale

k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4638|s__GGB46

k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4693|s__GGB46

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Aerococcaceae|g__Facklamia|s__Facklamia_hor

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Carnobacteriaceae|g__Carnobacterium|s__Carn

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lactobacillus|s__Lactobacil

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Limosilactobacillus|s__Lact

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Lactococcus|s__Lactococc

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto

k__Bacteria|p__Firmicutes|c__CFGB1470|o__OFGB1470|f__FGB1470|g__GGB3717|s__GGB3717_SGB5040|

k__Bacteria|p__Firmicutes|c__CFGB8972|o__OFGB8972|f__FGB8972|g__GGB26772|s__GGB26772_SGB38

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB3004|

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB3264|

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4568|

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4576|

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9074|

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9260|

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9530|

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Butyricicoccus|s__Butyricico

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__GGB25047|s__GGB25047_S

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__Alt

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__Ba

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__Clo

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Coprococcus|s__Coproco

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3617|s__GGB3617_S

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Paeniclostridium|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Terrisporobacter|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Flavonifractor|s__Flavon
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Fournierella|s__Fournier
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB3236|s__GGB3236_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9583|s__GGB9583_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9621|s__GGB9621_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Megasphaera|s__Meg
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Veillonella|s__Veillon
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Peptoniphilus|s__Pepto
k__Bacteria|p__Lentisphaerae|c__Lentisphaeria|o__Lentisphaeria_unclassified|f__Lentisphaeria_unclassifie
k__Bacteria|p__Lentisphaerae|c__Lentisphaeria|o__Lentisphaeria_unclassified|f__Lentisphaeria_unclassifie
k__Bacteria|p__Planctomycetes|c__Planctomycetia|o__Pirellulales|f__Pirellulaceae|g__GGB6565|s__GGB6
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Alphaproteobacteria_unclassified|f__Alphaprot
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Sutterellaceae|g__GGB6580|
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pasteurellales|f__Pasteurellaceae|g__Haemo
k__Eukaryota|p__Eukaryota_unclassified|c__Eukaryota_unclassified|o__Eukaryota_unclassified|f__Eukaryot
k__Archaea|p__Crenarchaeota|c__Thermoprotei|o__Thermoproteales|f__Thermofilaceae|g__GGB1567|s__
k__Archaea|p__Euryarchaeota|c__CFGB343|o__OFGB343|f__FGB343|g__GGB781|s__GGB781_SGB1024|t_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinobacteria_unclassified|f__Actinobacteria_unclas
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Schaalia|s_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Gardnerel
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__Mycetocola|
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Propionibacteriales|f__Propionibacteriaceae|g__Arac
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Adlercreutzia|s_
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_unc
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_unc
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_unc
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Phocaeic
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Porphyromonadaceae|g__Porphyromon
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1215|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1219|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1227|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1235|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__GGB1410|s__GGB14

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__Parabacteroides|s__
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__Parabacteroides|s__
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__Parabacteroides|s__
k__Bacteria|p__Bacteroidetes|c__CFGB536|o__OFGB536|f__FGB536|g__GGB1102|s__GGB1102_SGB1416|
k__Bacteria|p__Bacteroidetes|c__CFGB618|o__OFGB618|f__FGB618|g__GGB1455|s__GGB1455_SGB2018|
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Bacillus|s__Bacillus_sp_FJAT_22090|t
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Lysinibacillus|s__Lysinibacillus_fusifor
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Psychrobacillus|s__Psychrobacillus_s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillales_unclassified|g__Gemella|s__Gemella_SGB
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Paenibacillaceae|g__Paenibacillus|s__Paenibacillus_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4616|s__GGB46
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4652|s__GGB46
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4674|s__GGB46
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4714|s__GGB47
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4773|s__GGB47
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Aerococcaceae|g__Abiotrophia|s__Abiotrophia_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lactobacillus|s__Lactobacil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lentilactobacillus|s__Lentil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Lactococcus|s__Lactococc
k__Bacteria|p__Firmicutes|c__CFGB1013|o__OFGB1013|f__FGB1013|g__GGB2658|s__GGB2658_SGB3579|
k__Bacteria|p__Firmicutes|c__CFGB10719|o__OFGB10719|f__FGB10719|g__GGB32463|s__GGB32463_SG
k__Bacteria|p__Firmicutes|c__CFGB11478|o__OFGB11478|f__FGB11478|g__GGB33657|s__GGB33657_SG
k__Bacteria|p__Firmicutes|c__CFGB11875|o__OFGB11875|f__FGB11875|g__GGB34476|s__GGB34476_SG
k__Bacteria|p__Firmicutes|c__CFGB1379|o__OFGB1379|f__FGB1379|g__GGB3360|s__GGB3360_SGB4444|
k__Bacteria|p__Firmicutes|c__CFGB4549|o__OFGB4549|f__FGB4549|g__GGB55957|s__GGB55957_SGB77
k__Bacteria|p__Firmicutes|c__CFGB9475|o__OFGB9475|f__FGB9475|g__GGB42711|s__GGB42711_SGB59
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB3003|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4542|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9101|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9104|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9284|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9303|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__Cl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteri
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteri
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Hungateiclostridiaceae|g__GGB3012|s__GGB3
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Faecalicatena|s__Faecalic
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3632|s__GGB3632_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3737|s__GGB3737_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoclostridium|s__Lac
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoclostridium|s__Lac
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Stomatobaculum|s__Sto
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Paraclostridium|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Peptostreptococcu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Anaeromassilibacillus|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Candidatus_Soleaferrea|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Flavonifractor|s__Flavo
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Gemmiger|s__Gemmige
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB3204|s__GGB3204_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB3344|s__GGB3344_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9604|s__GGB9604_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9628|s__GGB9628_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9636|s__GGB9636_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9727|s__GGB9727_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Firmicutes_unclassified|o__Firmicutes_unclassified|f__Firmicutes_unclassifie
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__Acidamino
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Megasphaera|s__Meg
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Finegoldia|s__Finegoldi
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Helcococcus|s__Helcoc
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Peptoniphilus|s__Pepto
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Peptoniphilus|s__Pepto
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellia_unclassified|f__Tissierellia_unclassified|g__Ezakiell
k__Bacteria|p__Fusobacteria|c__Fusobacteriia|o__Fusobacteriales|f__Fusobacteriaceae|g__Fusobacterium

k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Sutterellaceae|g__GGB6572|
k__Bacteria|p__Proteobacteria|c__CFGB1062|o__OFGB1062|f__FGB1062|g__GGB2734|s__GGB2734_SGB3
k__Bacteria|p__Proteobacteria|c__CFGB2397|o__OFGB2397|f__FGB2397|g__GGB6561|s__GGB6561_SGB9
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Verrucomicrobia|c__CFGB2165|o__OFGB2165|f__FGB2165|g__GGB6133|s__GGB6133_SG
k__Bacteria|p__Verrucomicrobia|c__CFGB6128|o__OFGB6128|f__FGB6128|g__GGB52930|s__GGB52930_S
k__Archaea|p__Euryarchaeota|c__Methanobacteria|o__Methanobacteriales|f__Methanobacteriaceae|g__
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinotign
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Arcanobac
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Gleimia|s_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Schaalia|s_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Lawsonellaceae|g__Lawsonella|
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Nocardiaceae|g__Rhodococcus|
k__Bacteria|p__Actinobacteria|c__CFGB4469|o__OFGB4469|f__FGB4469|g__GGB18381|s__GGB18381_SG
k__Bacteria|p__Actinobacteria|c__CFGB4469|o__OFGB4469|f__FGB4469|g__GGB18384|s__GGB18384_SG
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Atopobiaceae_u
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Collinsella|
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Collinsella|
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Cryptobacterium
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Paraeggerthella
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Raoultibacter|s_
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Slackia|s__Slack
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_unc
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_unc
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__GGB1095|s__GGB10
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__GGB1392|s__GGB13
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__GGB1548
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__GGB1582
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Barnesiellaceae|g__Barnesiella|s__Barn
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Muribaculaceae|g__Muribaculum|s__M
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Odoribacteraceae|g__Culturomica|s__C
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1239|s__GGB12

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1247|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1250|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1256|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1264|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotellamassilia|s_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__GGB1621|s__GGB162
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__GGB27776|s__GGB27
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Rikenella|s__Rikenella
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Rikenellaceae_unclass
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Rikenellaceae_unclass
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Rikenellaceae_unclass
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Rikenellaceae_unclass
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__GGB1407|s__GGB14
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__GGB1408|s__GGB14
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__Parabacteroides|s__
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__Parabacteroides|s__
k__Bacteria|p__Bacteroidetes|c__CFGB12541|o__OFGB12541|f__FGB12541|g__GGB35550|s__GGB35550_
k__Bacteria|p__Bacteroidetes|c__CFGB540|o__OFGB540|f__FGB540|g__GGB1109|s__GGB1109_SGB1423|
k__Bacteria|p__Bacteroidetes|c__CFGB637|o__OFGB637|f__FGB637|g__GGB1556|s__GGB1556_SGB2143|
k__Bacteria|p__Bacteroidetes|c__CFGB637|o__OFGB637|f__FGB637|g__GGB1562|s__GGB1562_SGB2149|
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_
k__Bacteria|p__Candidatus_Saccharibacteria|c__Candidatus_Nanosyncoccalia|o__Candidatus_Nanogingival
k__Bacteria|p__Candidatus_Saccharibacteria|c__Candidatus_Nanosyncoccalia|o__Candidatus_Nanogingival
k__Bacteria|p__Candidatus_Saccharibacteria|c__Candidatus_Saccharibacteria_unclassified|o__Candidatus_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Lysinibacillus|s__Lysinibacillus_boroni
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Lysinibacillus|s__Lysinibacillus_sp_20
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Peribacillus|s__Peribacillus_psychrosa
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Peribacillus|s__Peribacillus_simplex|
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Psychrobacillus|s__Psychrobacillus_ps
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillales_unclassified|g__Gemella|s__Gemella_asac
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillales_unclassified|g__Gemella|s__Gemella_berg
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Paenibacillaceae|g__Paenibacillus|s__Paenibacillus_e
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Paenibacillaceae|g__Paenibacillus|s__Paenibacillus_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Staphylococcaceae|g__Staphylococcus|s__Staphyloc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4640|s__GGB46
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4672|s__GGB46
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4687|s__GGB46
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Companilactobacillus|s__C

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lacticaseibacillus|s__Lactic
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lactiplantibacillus|s__Lacti
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lactiplantibacillus|s__Lacti
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lactobacillus|s__Lactobacil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lentilactobacillus|s__Lentil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lentilactobacillus|s__Lentil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Ligilactobacillus|s__Ligilact
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Limosilactobacillus|s__Lact
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Limosilactobacillus|s__Lact
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Limosilactobacillus|s__Lact
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Leuconostoc|s__Leucono
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Weissella|s__Weissella_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Weissella|s__Weissella_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__CFGB1192|o__OFGB1192|f__FGB1192|g__GGB2945|s__GGB2945_SGB3918|
k__Bacteria|p__Firmicutes|c__CFGB1281|o__OFGB1281|f__FGB1281|g__GGB3095|s__GGB3095_SGB4103|
k__Bacteria|p__Firmicutes|c__CFGB12952|o__OFGB12952|f__FGB12952|g__GGB36472|s__GGB36472_SG
k__Bacteria|p__Firmicutes|c__CFGB1394|o__OFGB1394|f__FGB1394|g__GGB3385|s__GGB3385_SGB4471|
k__Bacteria|p__Firmicutes|c__CFGB1677|o__OFGB1677|f__FGB1677|g__GGB4197|s__GGB4197_SGB5684|
k__Bacteria|p__Firmicutes|c__CFGB2832|o__OFGB2832|f__FGB2832|g__GGB9054|s__GGB9054_SGB1395
k__Bacteria|p__Firmicutes|c__CFGB3546|o__OFGB3546|f__FGB3546|g__GGB58071|s__GGB58071_SGB79
k__Bacteria|p__Firmicutes|c__CFGB3601|o__OFGB3601|f__FGB3601|g__GGB42674|s__GGB42674_SGB66
k__Bacteria|p__Firmicutes|c__CFGB42358|o__OFGB42358|f__FGB42358|g__GGB51510|s__GGB51510_SG
k__Bacteria|p__Firmicutes|c__CFGB9153|o__OFGB9153|f__FGB9153|g__GGB27097|s__GGB27097_SGB39
k__Bacteria|p__Firmicutes|c__CFGB9572|o__OFGB9572|f__FGB9572|g__GGB45461|s__GGB45461_SGB63
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB3139|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4609|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9331|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9528|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9540|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__GGB3528|s__GGB3528_SGB
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__Cl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__Cl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__M
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_sp_Ma
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3424|s__GGB3424_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3640|s__GGB3640_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3859|s__GGB3859_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3862|s__GGB3862_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoanaerobaculum|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoanaerobaculum|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoclostridium|s__Lac
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Oribacterium|s__Oribacte
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptococcaceae|g__Peptococcaceae_unclassifi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Peptostreptococca
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Romboutsia|s__Ro
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Flavonifractor|s__Flavon
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB30473|s__GGB3047
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB3247|s__GGB3247_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcus|s__Rumi
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__GGB4888|s_
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__Acidamino
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__Acidamino
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__Acidamino
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__GGB4249|
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__GGB4250|
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Selenomonadales|f__Selenomonadaceae|g__GGB4979|s__
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Selenomonadales|f__Selenomonadaceae|g__Mitsuokella|
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Dialister|s__Dialister_
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Dialister|s__Dialister_
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__GGB4262|s__GGB426
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Megasphaera|s__Meg
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Megasphaera|s__Meg
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Peptoniphilus|s__Pepto

k__Bacteria|p__Fusobacteria|c__Fusobacteriia|o__Fusobacteriales|f__Fusobacteriaceae|g__Cetobacterium
k__Bacteria|p__Fusobacteria|c__Fusobacteriia|o__Fusobacteriales|f__Fusobacteriaceae|g__Fusobacterium
k__Bacteria|p__Fusobacteria|c__Fusobacteriia|o__Fusobacteriales|f__Fusobacteriaceae|g__Fusobacterium
k__Bacteria|p__Fusobacteria|c__Fusobacteriia|o__Fusobacteriales|f__Leptotrichiaceae|g__Sneathia|s__Sne
k__Bacteria|p__Lentisphaerae|c__Lentisphaeria|o__Lentisphaeria_unclassified|f__Lentisphaeria_unclassifie
k__Bacteria|p__Lentisphaerae|c__Lentisphaeria|o__Lentisphaeria_unclassified|f__Lentisphaeria_unclassifie
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Oxalobacteraceae|g__Oxalob
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Sutterellaceae|g__GGB6574|
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Sutterellaceae|g__Parasutter
k__Bacteria|p__Proteobacteria|c__CFGB2395|o__OFGB2395|f__FGB2395|g__GGB6546|s__GGB6546_SGB9
k__Bacteria|p__Proteobacteria|c__CFGB40154|o__OFGB40154|f__FGB40154|g__GGB52382|s__GGB52382_
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Proteobacteria|c__Epsilonproteobacteria|o__Campylobacterales|f__Campylobacteraceae|g
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Morganellaceae|g__Mor
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Yersiniaceae|g__Yersinia
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pasteurellales|f__Pasteurellaceae|g__Aggreg
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Moraxellaceae|g__Acin
k__Bacteria|p__Synergistetes|c__Synergistia|o__Synergistales|f__Synergistaceae|g__Synergistaceae_unclas
k__Bacteria|p__Verrucomicrobia|c__Opitutae|o__Opitutales|f__Opitutales_unclassified|g__Opitutales_uncl
k__Archaea|p__Candidatus_Thermoplasmatota|c__Thermoplasmata|o__Methanomassiliicoccales|f__Metha
k__Archaea|p__Euryarchaeota|c__Methanobacteria|o__Methanobacteriales|f__Methanobacteriaceae|g__
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinobac
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Gardnerel
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Gardnerel
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Gordoniaceae|g__Gordonia|s__
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Brevibacteriaceae|g__Brevibacteriu
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Dermabacteraceae|g__Brachybacte
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Dermabacteraceae|g__Brachybacte
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__Microbacteri
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__Microbacteri
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__Plantibacter|
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Micrococcaceae|g__Arthrobacter|s

k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Micrococcaceae|g__Arthrobacter|s
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Micrococcaceae|g__Rothia|s__Roth
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Propionibacteriales|f__Propionibacteriaceae|g__Cutib
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Streptomycetales|f__Streptomycetaceae|g__GGB357
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Atopobium|s__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__GGB25443|s__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Collinsella|
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Collinsella|
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Collinsella|
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Olegusella|
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthella|s__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_unc
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_unc
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_unc
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_unc
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__GGB1350|s__GGB13
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__GGB1355|s__GGB13
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__GGB1379|s__GGB13
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__GGB1380|s__GGB13
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__GGB1457
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__GGB1515
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__GGB1536
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__GGB1547
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__GGB1573
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Phocaeic

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Barnesiellaceae|g__Barnesiella|s__Barn
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Muribaculaceae|g__GGB14009|s__GGB
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Porphyromonadaceae|g__Porphyromon
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1223|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1229|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1249|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1250|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1267|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1270|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1278|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1341|s__GGB13
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Alistipes|s__Alistipes_
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__GGB1620|s__GGB162
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__GGB1630|s__GGB163
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__GGB1672|s__GGB167
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Rikenellaceae_unclass
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__Parabacteroides|s__
k__Bacteria|p__Bacteroidetes|c__CFGB544|o__OFGB544|f__FGB544|g__GGB1123|s__GGB1123_SGB1437|
k__Bacteria|p__Bacteroidetes|c__CFGB602|o__OFGB602|f__FGB602|g__GGB1421|s__GGB1421_SGB1959|
k__Bacteria|p__Bacteroidetes|c__CFGB636|o__OFGB636|f__FGB636|g__GGB1554|s__GGB1554_SGB2141|
k__Bacteria|p__Bacteroidetes|c__CFGB637|o__OFGB637|f__FGB637|g__GGB27860|s__GGB27860_SGB402
k__Bacteria|p__Bacteroidetes|c__CFGB7480|o__OFGB7480|f__FGB7480|g__GGB27697|s__GGB27697_SGB
k__Bacteria|p__Bacteroidetes|c__Flavobacteriia|o__Flavobacteriales|f__Flavobacteriaceae|g__GGB5975|s_
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G
k__Bacteria|p__Candidatus_Saccharibacteria|c__Candidatus_Saccharibacteria_unclassified|o__Candidatus_S
k__Bacteria|p__Candidatus_Saccharibacteria|c__Candidatus_Saccharibacteria_unclassified|o__Candidatus_S
k__Bacteria|p__Candidatus_Saccharibacteria|c__CFGB4356|o__OFGB4356|f__FGB4356|g__GGB12790|s__
k__Bacteria|p__Cyanobacteria|c__Cyanobacteria_unclassified|o__Oscillatoriales|f__Microcoleaceae|g__Art
k__Bacteria|p__Cyanobacteria|c__Cyanobacteria_unclassified|o__Synechococcales|f__Prochloraceae|g__Pr
k__Bacteria|p__Elusimicrobia|c__Elusimicrobia|o__Elusimicrobiales|f__Elusimicrobiales_unclassified|g__GG
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Bacillus|s__Bacillus_cereus|t__SGB76
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Bacillus|s__Bacillus_nealsonii|t__SGB
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Bacillus|s__Bacillus_pumilus|t__SGB7
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Cytobacillus|s__Cytobacillus_hornecki
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Geobacillus|s__Geobacillus_stearothe
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Psychrobacillus|s__Psychrobacillus_ps
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Psychrobacillus|s__Psychrobacillus_sp
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Paenibacillaceae|g__Paenibacillus|s__Paenibacillus_a

k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Paenibacillaceae|g__Paenibacillus|s__Paenibacillus_b
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Planococcaceae|g__Kurthia|s__Kurthia_gibsonii|t__S
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Planococcaceae|g__Rummeliibacillus|s__Rummeliiba
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Planococcaceae|g__Solibacillus|s__Solibacillus_isrone
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Planococcaceae|g__Solibacillus|s__Solibacillus_silves
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Staphylococcaceae|g__Macrococcus|s__Macrococcu
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Staphylococcaceae|g__Staphylococcus|s__Staphyloc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Staphylococcaceae|g__Staphylococcus|s__Staphyloc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4662|s__GGB46
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4691|s__GGB46
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4698|s__GGB46
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Carnobacteriaceae|g__Dolosigranulum|s__Dolo
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Companilactobacillus|s__C
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Companilactobacillus|s__C
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lactobacillus|s__Lactobacil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lactobacillus|s__Lactobacil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Latilactobacillus|s__Latilact
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Latilactobacillus|s__Latilact
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lentilactobacillus|s__Lentil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Levilactobacillus|s__Levilac
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Levilactobacillus|s__Levilac
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Ligilactobacillus|s__Ligilact
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Limosilactobacillus|s__Lact
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Limosilactobacillus|s__Lact
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Paucilactobacillus|s__Lacto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Pediococcus|s__Pediococc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Leuconostoc|s__Leucono
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Weissella|s__Weissella_j
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Weissella|s__Weissella_s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto

k__Bacteria|p__Firmicutes|c__CFGB12479|o__OFGB12479|f__FGB12479|g__GGB35456|s__GGB35456_SG
k__Bacteria|p__Firmicutes|c__CFGB1328|o__OFGB1328|f__FGB1328|g__GGB3180|s__GGB3180_SGB4202|
k__Bacteria|p__Firmicutes|c__CFGB14246|o__OFGB14246|f__FGB14246|g__GGB38987|s__GGB38987_SG
k__Bacteria|p__Firmicutes|c__CFGB1788|o__OFGB1788|f__FGB1788|g__GGB4751|s__GGB4751_SGB6580|
k__Bacteria|p__Firmicutes|c__CFGB20102|o__OFGB20102|f__FGB20102|g__GGB42690|s__GGB42690_SG
k__Bacteria|p__Firmicutes|c__CFGB43318|o__OFGB43318|f__FGB43318|g__GGB48540|s__GGB48540_SG
k__Bacteria|p__Firmicutes|c__CFGB4614|o__OFGB4614|f__FGB4614|g__GGB13418|s__GGB13418_SGB20
k__Bacteria|p__Firmicutes|c__CFGB4737|o__OFGB4737|f__FGB4737|g__GGB13743|s__GGB13743_SGB21
k__Bacteria|p__Firmicutes|c__CFGB8240|o__OFGB8240|f__FGB8240|g__GGB25267|s__GGB25267_SGB37
k__Bacteria|p__Firmicutes|c__CFGB9732|o__OFGB9732|f__FGB9732|g__GGB45600|s__GGB45600_SGB63
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4569|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4608|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4610|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9055|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9086|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9104|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9145|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9168|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9169|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9276|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9285|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridiaceae_unclassified|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__Cl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__M
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Fenollaria|s__Fer
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Hungateiclostridiaceae|g__Fastidiosipila|s__Fa
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerostipes|s__Anaeros
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_sp_LZL
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Coprococcus|s__Coproco
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3632|s__GGB3632_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3743|s__GGB3743_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3887|s__GGB3887_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoclostridium|s__Lac
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Marvinbryantia|s__Marvi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__M
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Muricomes|s__Muricome
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Robinsoniella|s__Robinso
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Roseburia|s__Roseburia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Shuttleworthia|s__Shuttle
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Oscillospiraceae|g__Oscillibacter|s__Oscillibac
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Oscillospiraceae|g__Oscillospiraceae_unclassifi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Criibacterium|s__C

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Romboutsia|s__Ro
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Romboutsia|s__Ro
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Terrisporobacter|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Agathobaculum|s__Agat
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Anaerofilum|s__Anaerof
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fae
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Gemmiger|s__Gemmige
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Gemmiger|s__Gemmige
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB13472|s__GGB1347
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB3159|s__GGB3159_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB3161|s__GGB3161_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB41366|s__GGB4136
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9595|s__GGB9595_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9635|s__GGB9635_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9673|s__GGB9673_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9674|s__GGB9674_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9686|s__GGB9686_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9689|s__GGB9689_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9716|s__GGB9716_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9729|s__GGB9729_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Pygmaiobacter|s__Pygm
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Absicoccus|
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Coprobacillu
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Eggerthia|s_
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__GGB31184|
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Turicibacter
k__Bacteria|p__Firmicutes|c__Firmicutes_unclassified|o__Firmicutes_unclassified|f__Firmicutes_unclassifie
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__Acidamino
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__GGB4237|s
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Selenomonadales|f__Selenomonadales_unclassified|g__Se
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Anaeroglobus|s__Ana
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Dialister|s__Dialister_
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Dialister|s__Dialister_
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__GGB4261|s__GGB426
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__GGB4261|s__GGB426
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Megasphaera|s__Meg
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Megasphaera|s__Meg
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Negativicoccus|s__Ne
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Veillonella|s__Veillone
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Veillonella|s__Veillone
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Veillonellaceae_unclas
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Anaerococcus|s__Anae

k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Anaerococcus|s__Anae
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Anaerococcus|s__Anae
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Anaerococcus|s__Anae
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Lagierella|s__Lagierella
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Peptoniphilus|s__Pepto
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Peptoniphilus|s__Pepto
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Peptoniphilus|s__Pepto
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Peptoniphilus|s__Pepto
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Peptoniphilus|s__Pepto
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Urinicoccus|s__Urinico
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellia_unclassified|f__Tissierellia_unclassified|g__Kallipy
k__Bacteria|p__Fusobacteria|c__Fusobacteriia|o__Fusobacteriales|f__Fusobacteriaceae|g__Fusobacteriace
k__Bacteria|p__Fusobacteria|c__Fusobacteriia|o__Fusobacteriales|f__Fusobacteriaceae|g__Fusobacterium
k__Bacteria|p__Fusobacteria|c__Fusobacteriia|o__Fusobacteriales|f__Fusobacteriaceae|g__Fusobacterium
k__Bacteria|p__Fusobacteria|c__Fusobacteriia|o__Fusobacteriales|f__Fusobacteriaceae|g__Fusobacterium
k__Bacteria|p__Fusobacteria|c__Fusobacteriia|o__Fusobacteriales|f__Fusobacteriaceae|g__Fusobacterium
k__Bacteria|p__Fusobacteria|c__Fusobacteriia|o__Fusobacteriales|f__Fusobacteriaceae|g__Fusobacterium
k__Bacteria|p__Lentisphaerae|c__Lentisphaeria|o__Lentisphaeria_unclassified|f__Lentisphaeria_unclassifie
k__Bacteria|p__Lentisphaerae|c__Lentisphaeria|o__Lentisphaeria_unclassified|f__Lentisphaeria_unclassifie
k__Bacteria|p__Planctomycetes|c__Planctomycetia|o__Pirellulales|f__Pirellulaceae|g__GGB6566|s__GGB6
k__Bacteria|p__Planctomycetes|c__Planctomycetia|o__Pirellulales|f__Pirellulaceae|g__GGB6567|s__GGB6
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Alphaproteobacteria_unclassified|f__Alphaprot
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Alphaproteobacteria_unclassified|f__Alphaprot
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Kordiimonadales|f__Kordiimonadales_unclassifi
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Burkholderiales_unclassified|
k__Bacteria|p__Proteobacteria|c__CFGB2394|o__OFGB2394|f__FGB2394|g__GGB6544|s__GGB6544_SGB9
k__Bacteria|p__Proteobacteria|c__CFGB2394|o__OFGB2394|f__FGB2394|g__GGB6544|s__GGB6544_SGB9
k__Bacteria|p__Proteobacteria|c__CFGB2395|o__OFGB2395|f__FGB2395|g__GGB6554|s__GGB6554_SGB9
k__Bacteria|p__Proteobacteria|c__CFGB2395|o__OFGB2395|f__FGB2395|g__GGB6554|s__GGB6554_SGB9
k__Bacteria|p__Proteobacteria|c__CFGB2412|o__OFGB2412|f__FGB2412|g__GGB6624|s__GGB6624_SGB9
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Proteobacteria|c__Epsilonproteobacteria|o__Campylobacterales|f__Campylobacteraceae|g
k__Bacteria|p__Proteobacteria|c__Epsilonproteobacteria|o__Campylobacterales|f__Campylobacteraceae|g
k__Bacteria|p__Proteobacteria|c__Epsilonproteobacteria|o__Campylobacterales|f__Campylobacteraceae|g
k__Bacteria|p__Proteobacteria|c__Epsilonproteobacteria|o__Campylobacterales|f__Campylobacteraceae|g
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Aeromonadales|f__Succinivibrionaceae|g__S
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Cardiobacteriales|f__Cardiobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Yersiniaceae|g__Serratia
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pasteurellales|f__Pasteurellaceae|g__Haemo
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pasteurellales|f__Pasteurellaceae|g__Haemo
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pasteurellales|f__Pasteurellaceae|g__Haemo
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Moraxellaceae|g__Acin
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Moraxellaceae|g__Psy
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Pseudomonadaceae|g_

k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Xanthomonadales|f__Xanthomonadaceae|g_
k__Bacteria|p__Synergistetes|c__Synergistia|o__Synergistales|f__Synergistaceae|g__GGB29961|s__GGB29
k__Bacteria|p__Synergistetes|c__Synergistia|o__Synergistales|f__Synergistaceae|g__Jonquetella|s__Jonque
k__Bacteria|p__Synergistetes|c__Synergistia|o__Synergistales|f__Synergistaceae|g__Pyramidobacter|s__P
k__Bacteria|p__Synergistetes|c__Synergistia|o__Synergistales|f__Synergistaceae|g__Pyramidobacter|s__P
k__Bacteria|p__Tenericutes|c__Mollicutes|o__Acholeplasmatales|f__Acholeplasmatales_unclassified|g__Ac
k__Bacteria|p__Verrucomicrobia|c__Opitutae|o__Opitutales|f__Opitutales_unclassified|g__GGB6127|s__G
k__Bacteria|p__Verrucomicrobia|c__Opitutae|o__Opitutales|f__Opitutales_unclassified|g__Opitutales_uncl
k__Archaea|p__Candidatus_Thermoplasmatota|c__Thermoplasmata|o__Methanomassiliicoccales|f__Candi
k__Archaea|p__Candidatus_Thermoplasmatota|c__Thermoplasmata|o__Methanomassiliicoccales|f__Metha
k__Archaea|p__Candidatus_Thermoplasmatota|c__Thermoplasmata|o__Methanomassiliicoccales|f__Metha
k__Archaea|p__Candidatus_Thermoplasmatota|c__Thermoplasmata|o__Methanomassiliicoccales|f__Metha
k__Archaea|p__Candidatus_Thermoplasmatota|c__Thermoplasmata|o__Methanomassiliicoccales|f__Metha
k__Archaea|p__Candidatus_Thermoplasmatota|c__Thermoplasmata|o__Methanomassiliicoccales|f__Metha
k__Archaea|p__Euryarchaeota|c__Methanobacteria|o__Methanobacteriales|f__Methanobacteriaceae|g__
k__Archaea|p__Euryarchaeota|c__Methanobacteria|o__Methanobacteriales|f__Methanobacteriaceae|g__
k__Archaea|p__Euryarchaeota|c__Methanobacteria|o__Methanobacteriales|f__Methanobacteriaceae|g__
k__Archaea|p__Euryarchaeota|c__Methanobacteria|o__Methanobacteriales|f__Methanobacteriaceae|g__
k__Archaea|p__Euryarchaeota|c__Methanobacteria|o__Methanobacteriales|f__Methanobacteriaceae|g__
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Actinomyc
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Ancrocorti
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Fannyhess
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Mobilunc
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Varibacul
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Varibacul
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Winkia|s_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Actinomycetales|f__Actinomycetaceae|g__Winkia|s_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Bifidobacteriales|f__Bifidobacteriaceae|g__Bifidobact
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Corynebacteriaceae|g__Coryne

k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Gordoniaceae|g__Gordonia|s__
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Lawsonellaceae|g__GGB2722|s_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Mycobacteriaceae|g__Mycobac
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Mycobacteriaceae|g__Mycolicib
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Mycobacteriaceae|g__Mycolicib
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Nocardiaceae|g__Rhodococcus|
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Corynebacteriales|f__Nocardiaceae|g__Rhodococcus|
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Brevibacteriaceae|g__Brevibacteriu
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Dermabacteraceae|g__Brachybacte
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Dermabacteraceae|g__Brachybacte
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Dermabacteraceae|g__Dermabacte
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__Clavibacter|s
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__Frigoribacter
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__GGB33356|s
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__Gulosibacter
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__Gulosibacter
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__Leucobacter
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__Leucobacter
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__Microbacteri
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__Microbacteri
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__Microbacteri
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__Microbacteri
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__Microbacteri
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__Microbacteri
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__Pseudoclavib
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Microbacteriaceae|g__Pseudoclavib
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Micrococcaceae|g__Arthrobacter|s_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Micrococcaceae|g__Auritidibacter|s
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Micrococcaceae|g__Glutamicibacte
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Micrococcaceae|g__Kocuria|s__Koc
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Micrococcaceae|g__Kocuria|s__Koc
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Micrococcaceae|g__Kocuria|s__Koc
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Micrococcaceae|g__Kocuria|s__Koc
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Micrococcaceae|g__Micrococcus|s_
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Micrococcaceae|g__Pseudoglutami
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Promicromonosporaceae|g__Cellulo
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Sanguibacteraceae|g__Sanguibacter
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Micrococcales|f__Tropherymataceae|g__Tropheryma
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Propionibacteriales|f__Propionibacteriaceae|g__Cutib
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Propionibacteriales|f__Propionibacteriaceae|g__Cutib
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Propionibacteriales|f__Propionibacteriaceae|g__Tessa
k__Bacteria|p__Actinobacteria|c__Actinobacteria|o__Streptomycetales|f__Streptomycetaceae|g__Streptom
k__Bacteria|p__Actinobacteria|c__CFGB10515|o__OFGB10515|f__FGB10515|g__GGB48227|s__GGB48227_
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Atopobium|s__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Atopobium|s__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__GGB9369|s__G
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol

k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Olsenella|s__Ol
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Atopobiaceae|g__Parolsenella|s__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Collinsella|
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__Collinsella|
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriaceae|g__GGB9394|s
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Coriobacteriales|f__Coriobacteriales_unclassified|g__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Arabia|s__Arabi
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthella|s__
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae_
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Eggerthellaceae_
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__GGB30048|s__G
k__Bacteria|p__Actinobacteria|c__Coriobacteriia|o__Eggerthellales|f__Eggerthellaceae|g__Phoenicibacter|
k__Bacteria|p__Bacteria_unclassified|c__Bacteria_unclassified|o__Bacteria_unclassified|f__Bacteria_unclas
k__Bacteria|p__Bacteria_unclassified|c__Bacteria_unclassified|o__Bacteria_unclassified|f__Bacteria_unclas
k__Bacteria|p__Bacteria_unclassified|c__Bacteria_unclassified|o__Bacteria_unclassified|f__Bacteria_unclas
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_uncl
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_uncl
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_uncl
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_uncl
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_uncl
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_uncl
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_uncl
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroidaceae_uncl
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Bacteroides|s__Bact
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__GGB1116|s__GGB11
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__GGB1387|s__GGB13
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__GGB27959|s__GGB2
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__GGB28265|s__GGB2
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidaceae|g__Mediterranea|s__M
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Bacteroid
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__GGB1460
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__GGB1525
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__GGB1530
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__GGB1543
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__GGB2787
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__GGB2788
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Phocaeic
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Phocaeic
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Bacteroidales_unclassified|g__Phocaeic
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Barnesiellaceae|g__Barnesiella|s__Barn
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Dysgonomonadaceae|g__Dysgonomona
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Dysgonomonadaceae|g__Dysgonomona
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Dysgonomonadaceae|g__Dysgonomona
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Muribaculaceae|g__Duncaniella|s__Du
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Muribaculaceae|g__GGB14014|s__GGB
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Muribaculaceae|g__GGB1503|s__GGB1
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Muribaculaceae|g__GGB1503|s__GGB1
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Muribaculaceae|g__GGB1511|s__GGB1
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Muribaculaceae|g__Muribaculaceae_un
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Muribaculaceae|g__Muribaculaceae_un
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Muribaculaceae|g__Muribaculum|s__M
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Muribaculaceae|g__Paramuribaculum|s
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Odoribacteraceae|g__Odoribacter|s__O
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Porphyromonadaceae|g__Porphyromon
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Porphyromonadaceae|g__Porphyromon
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Porphyromonadaceae|g__Sanguibacter
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Alloprevotella|s__All
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1219|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1221|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1222|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1223|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1228|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1243|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1244|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1246|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB1277|s__GGB12
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB12985|s__GGB1
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__GGB23947|s__GGB2
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot

k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotella|s__Prevot
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Prevotellaceae|g__Prevotellaceae_uncla
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__GGB1617|s__GGB161
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__GGB1629|s__GGB162
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__GGB1671|s__GGB167
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__GGB27782|s__GGB27
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Millionella|s__Million
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Rikenellaceae_unclass
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Rikenellaceae_unclass
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Rikenellaceae_unclass
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Rikenellaceae|g__Rikenellaceae_unclass
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__GGB1405|s__GGB14
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__Parabacteroides|s__
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__Parabacteroides|s__
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__Parabacteroides|s__
k__Bacteria|p__Bacteroidetes|c__Bacteroidia|o__Bacteroidales|f__Tannerellaceae|g__Tannerella|s__Tanne
k__Bacteria|p__Bacteroidetes|c__CFGB1505|o__OFGB1505|f__FGB1505|g__GGB46145|s__GGB46145_SGB
k__Bacteria|p__Bacteroidetes|c__CFGB4425|o__OFGB4425|f__FGB4425|g__GGB27908|s__GGB27908_SGB
k__Bacteria|p__Bacteroidetes|c__CFGB602|o__OFGB602|f__FGB602|g__GGB1421|s__GGB1421_SGB1958|
k__Bacteria|p__Bacteroidetes|c__CFGB636|o__OFGB636|f__FGB636|g__GGB14001|s__GGB14001_SGB214
k__Bacteria|p__Bacteroidetes|c__CFGB640|o__OFGB640|f__FGB640|g__GGB1566|s__GGB1566_SGB2153|
k__Bacteria|p__Bacteroidetes|c__CFGB671|o__OFGB671|f__FGB671|g__GGB1669|s__GGB1669_SGB2285|
k__Bacteria|p__Bacteroidetes|c__Chitinophagia|o__Chitinophagales|f__Chitinophagaceae|g__Hydrobacter|
k__Bacteria|p__Bacteroidetes|c__Flavobacteriia|o__Flavobacteriales|f__Weeksellaceae|g__Epilithonimonas
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G
k__Bacteria|p__Candidatus_Melainabacteria|c__Candidatus_Melainabacteria_unclassified|o__Candidatus_G
k__Bacteria|p__Candidatus_Saccharibacteria|c__Candidatus_Saccharibacteria_unclassified|o__Candidatus_S
k__Bacteria|p__Candidatus_Saccharibacteria|c__Candidatus_Saccharimonia|o__Candidatus_Nanosynbacter
k__Bacteria|p__Candidatus_Saccharibacteria|c__CFGB4354|o__OFGB4354|f__FGB4354|g__GGB12787|s__
k__Bacteria|p__Chloroflexi|c__Anaerolineae|o__Anaerolineales|f__Anaerolineaceae|g__Anaerolineaceae_u
k__Bacteria|p__Elusimicrobia|c__Elusimicrobia|o__Elusimicrobiales|f__Elusimicrobiales_unclassified|g__Elu
k__Bacteria|p__Elusimicrobia|c__Elusimicrobia|o__Elusimicrobiales|f__Elusimicrobiales_unclassified|g__Elu
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Bacillus|s__Bacillus_altitudinis|t__SG
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Bacillus|s__Bacillus_badius|t__SGB77
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Bacillus|s__Bacillus_circulans|t__SGB
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Bacillus|s__Bacillus_endophyticus|t__
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Bacillus|s__Bacillus_farraginis|t__SGB
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Bacillus|s__Bacillus_safensis|t__SGB7
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Bacillus|s__Bacillus_sp_AGMB_02131
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Bacillus|s__Bacillus_sp_FJAT_27916|t

k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Bacillus|s__Bacillus_sp_PK3_68|t__SG
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Bacillus|s__Bacillus_subtilis|t__SGB77
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Bacillus|s__Bacillus_tequilensis|t__SG
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Bacillus|s__Bacillus_testis|t__SGB302
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Bacillus|s__Bacillus_vallismortis|t__S
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Cytobacillus|s__Cytobacillus_kochii|t_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Cytobacillus|s__Cytobacillus_sp_Sa5Y
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Lysinibacillus|s__Lysinibacillus_endop
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Lysinibacillus|s__Lysinibacillus_haloto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Lysinibacillus|s__Lysinibacillus_pakist
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Lysinibacillus|s__Lysinibacillus_sphaer
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Bacillaceae|g__Neobacillus|s__Neobacillus_fumarioli
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Listeriaceae|g__Brochothrix|s__Brochothrix_thermos
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Listeriaceae|g__Listeria|s__Listeria_monocytogenes|
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Paenibacillaceae|g__Paenibacillus|s__Paenibacillus_p
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Paenibacillaceae|g__Paenibacillus|s__Paenibacillus_s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Paenibacillaceae|g__Paenibacillus|s__Paenibacillus_t
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Paenibacillaceae|g__Paenibacillus|s__Paenibacillus_x
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Paenibacillaceae|g__Paenibacillus|s__Paenibacillus_x
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Planococcaceae|g__Bhargavaea|s__Bhargavaea_gins
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Planococcaceae|g__Rummeliibacillus|s__Rummeliiba
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Staphylococcaceae|g__Mammaliicoccus|s__Mammal
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Staphylococcaceae|g__Staphylococcus|s__Staphylocc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Staphylococcaceae|g__Staphylococcus|s__Staphylocc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Staphylococcaceae|g__Staphylococcus|s__Staphylocc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Staphylococcaceae|g__Staphylococcus|s__Staphylocc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Staphylococcaceae|g__Staphylococcus|s__Staphylocc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Staphylococcaceae|g__Staphylococcus|s__Staphylocc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Staphylococcaceae|g__Staphylococcus|s__Staphylocc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacillales|f__Staphylococcaceae|g__Staphylococcus|s__Staphylocc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s_

k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Bacilli_unclassified|s
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__Candidatus_Harrysm
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4673|s__GGB46
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4677|s__GGB46
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4678|s__GGB46
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4712|s__GGB47
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4726|s__GGB47
k__Bacteria|p__Firmicutes|c__Bacilli|o__Bacilli_unclassified|f__Bacilli_unclassified|g__GGB4780|s__GGB47
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Aerococcaceae|g__Aerococcus|s__Aerococcus_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Aerococcaceae|g__Aerococcus|s__Aerococcus_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Aerococcaceae|g__Aerococcus|s__Aerococcus_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Aerococcaceae|g__Aerococcus|s__Aerococcus_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Aerococcaceae|g__Eremococcus|s__Eremococc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Carnobacteriaceae|g__Carnobacterium|s__Carn
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Carnobacteriaceae|g__Carnobacterium|s__Carn
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Carnobacteriaceae|g__Carnobacterium|s__Carn
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Carnobacteriaceae|g__Marinilactibacillus|s__M
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Enterococcus|s__Enteroco
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Tetragenococcus|s__Tetra
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Enterococcaceae|g__Tetragenococcus|s__Tetra
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Companilactobacillus|s__C
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Companilactobacillus|s__C
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Companilactobacillus|s__C
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Companilactobacillus|s__C
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Companilactobacillus|s__C
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Fructilactobacillus|s__Fruct
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Fructilactobacillus|s__Fruct
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Furfurilactobacillus|s__Furf
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Furfurilactobacillus|s__Furf
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lacticaseibacillus|s__Lactic
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lactobacillus|s__Lactobacil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lactobacillus|s__Lactobacil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lactobacillus|s__Lactobacil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lactobacillus|s__Lactobacil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lactobacillus|s__Lactobacil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lentilactobacillus|s__Lentil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lentilactobacillus|s__Lentil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lentilactobacillus|s__Lentil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lentilactobacillus|s__Lentil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lentilactobacillus|s__Lentil

k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lentilactobacillus|s__Lentil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lentilactobacillus|s__Lentil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Lentilactobacillus|s__Lentil
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Levilactobacillus|s__Levilac
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Levilactobacillus|s__Levilac
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Ligilactobacillus|s__Ligilact
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Limosilactobacillus|s__Lact
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Limosilactobacillus|s__Lact
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Limosilactobacillus|s__Lact
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Loigolactobacillus|s__Lacto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Paucilactobacillus|s__Lacto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Pediococcus|s__Pediococc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Pediococcus|s__Pediococc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Pediococcus|s__Pediococc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Schleiferilactobacillus|s__L
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Schleiferilactobacillus|s__L
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Secundilactobacillus|s__La
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Secundilactobacillus|s__La
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillaceae|g__Sharpea|s__Sharpea_azab
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Lactobacillales_unclassified|g__Lactobacillales_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Fructobacillus|s__Fructo
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Leuconostoc|s__Leucono
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Leuconostoc|s__Leucono
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Leuconostoc|s__Leucono
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Weissella|s__Weissella_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Weissella|s__Weissella_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Weissella|s__Weissella_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Leuconostocaceae|g__Weissella|s__Weissella_
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Lactococcus|s__Lactococc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Lactococcus|s__Lactococc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Lactococcus|s__Lactococc
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__Bacilli|o__Lactobacillales|f__Streptococcaceae|g__Streptococcus|s__Strepto
k__Bacteria|p__Firmicutes|c__CFGB10238|o__OFGB10238|f__FGB10238|g__GGB31227|s__GGB31227_SG
k__Bacteria|p__Firmicutes|c__CFGB11480|o__OFGB11480|f__FGB11480|g__GGB33664|s__GGB33664_SG
k__Bacteria|p__Firmicutes|c__CFGB1287|o__OFGB1287|f__FGB1287|g__GGB3103|s__GGB3103_SGB4112|
k__Bacteria|p__Firmicutes|c__CFGB1289|o__OFGB1289|f__FGB1289|g__GGB3106|s__GGB3106_SGB4115|
k__Bacteria|p__Firmicutes|c__CFGB1350|o__OFGB1350|f__FGB1350|g__GGB3297|s__GGB3297_SGB4356|
k__Bacteria|p__Firmicutes|c__CFGB1363|o__OFGB1363|f__FGB1363|g__GGB3329|s__GGB3329_SGB4407|
k__Bacteria|p__Firmicutes|c__CFGB14246|o__OFGB14246|f__FGB14246|g__GGB38987|s__GGB38987_SG
k__Bacteria|p__Firmicutes|c__CFGB2862|o__OFGB2862|f__FGB2862|g__GGB9146|s__GGB9146_SGB1408
k__Bacteria|p__Firmicutes|c__CFGB2938|o__OFGB2938|f__FGB2938|g__GGB9272|s__GGB9272_SGB1422
k__Bacteria|p__Firmicutes|c__CFGB3011|o__OFGB3011|f__FGB3011|g__GGB9478|s__GGB9478_SGB1487
k__Bacteria|p__Firmicutes|c__CFGB3035|o__OFGB3035|f__FGB3035|g__GGB25362|s__GGB25362_SGB37
k__Bacteria|p__Firmicutes|c__CFGB4460|o__OFGB4460|f__FGB4460|g__GGB51533|s__GGB51533_SGB71
k__Bacteria|p__Firmicutes|c__CFGB4546|o__OFGB4546|f__FGB4546|g__GGB25065|s__GGB25065_SGB36
k__Bacteria|p__Firmicutes|c__CFGB4621|o__OFGB4621|f__FGB4621|g__GGB13431|s__GGB13431_SGB20
k__Bacteria|p__Firmicutes|c__CFGB6280|o__OFGB6280|f__FGB6280|g__GGB18162|s__GGB18162_SGB26
k__Bacteria|p__Firmicutes|c__CFGB8975|o__OFGB8975|f__FGB8975|g__GGB26776|s__GGB26776_SGB38
k__Bacteria|p__Firmicutes|c__CFGB9158|o__OFGB9158|f__FGB9158|g__GGB27106|s__GGB27106_SGB45

k__Bacteria|p__Firmicutes|c__CFGB9184|o__OFGB9184|f__FGB9184|g__GGB27146|s__GGB27146_SGB39
k__Bacteria|p__Firmicutes|c__CFGB9618|o__OFGB9618|f__FGB9618|g__GGB28779|s__GGB28779_SGB41
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Candidatu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__Clostridia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB1353
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB2562
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB2968
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB3179
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB3271|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4574|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB4577|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9050|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9051|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9052|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9058|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridia_unclassified|f__Clostridia_unclassified|g__GGB9067|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Christensenellaceae|g__Christensenella|s__Ch
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Beduini|s__Beduini_massilie
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Butyricicoccus|s__Butyricico
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__Clostridium|s__Clostridium_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiaceae|g__GGB28989|s__GGB28989_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__A
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__Cl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__Cl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__E
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_Family_XIII_Incertae_Sedis|g__E
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Clostridiales_unclassified|g__Clostridiales_uncl
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacteriaceae_unclassifie
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteri
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteri

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteri
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Eubacterium|s__Eubacteri
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__GGB28645|s__GGB28645_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__GGB3725|s__GGB3725_SG
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Eubacteriaceae|g__Pseudoramibacter|s__Pseu
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerocolumna|s__Anae
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerosporobacter|s__A
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Anaerostipes|s__Anaeros
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_coccoi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_homin
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_schink
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Blautia|s__Blautia_SGB71
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Cellulosilyticum|s__Cellul
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Coprococcus|s__Coproco
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Coprococcus|s__Coproco
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Dorea|s__Dorea_sp_D27|
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Faecalicatena|s__Faecalic
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB25053|s__GGB25053
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB28879|s__GGB28879
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3420|s__GGB3420_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3636|s__GGB3636_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3738|s__GGB3738_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3751|s__GGB3751_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__GGB3753|s__GGB3753_S
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoanaerobaculum|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoclostridium|s__Lac
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoclostridium|s__Lac
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnoclostridium|s__Lac
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lachnospiraceae_unclassi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Lacrimispora|s__Lacrimis
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Mediterraneibacter|s__M
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Niameybacter|s__Niamey
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Oribacterium|s__Oribacte
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Roseburia|s__Roseburia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Roseburia|s__Roseburia_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Lachnospiraceae|g__Schaedlerella|s__Schaedl

k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Oscillospiraceae|g__Oscillospiraceae_unclassifi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Oscillospiraceae|g__Oscillospiraceae_unclassifi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Clostridioides|s__C
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Clostridioides|s__C
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Paeniclostridium|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Peptostreptococcaceae|g__Romboutsia|s__Ro
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Anaeromassilibacillus|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Faecalibacterium|s__Fae
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Flavonifractor|s__Flavon
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Flavonifractor|s__Flavon
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB13489|s__GGB1348
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB13580|s__GGB1358
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB29848|s__GGB2984
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB30297|s__GGB3029
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB3183|s__GGB3183_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB3226|s__GGB3226_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB5201|s__GGB5201_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9510|s__GGB9510_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9592|s__GGB9592_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9594|s__GGB9594_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9645|s__GGB9645_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9671|s__GGB9671_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9672|s__GGB9672_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9676|s__GGB9676_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9676|s__GGB9676_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9702|s__GGB9702_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9712|s__GGB9712_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9717|s__GGB9717_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9732|s__GGB9732_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__GGB9734|s__GGB9734_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Pseudoflavonifractor|s_
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcaceae_uncla
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcus|s__Rumi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Ruminococcus|s__Rumi
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Ruminococcaceae|g__Subdoligranulum|s__Sub
k__Bacteria|p__Firmicutes|c__Clostridia|o__Clostridiales|f__Xylanivirgaceae|g__Xylanivirga|s__Xylanivirga_
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Allobaculum
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Faecalicoccu
k__Bacteria|p__Firmicutes|c__Erysipelotrichia|o__Erysipelotrichales|f__Erysipelotrichaceae|g__Turicibacter
k__Bacteria|p__Firmicutes|c__Firmicutes_unclassified|o__Firmicutes_unclassified|f__Firmicutes_unclassified
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__Acidaminoc
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__Acidaminoc
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__Acidaminoc

k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__GGB24843
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__GGB4238|
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__GGB4247|
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__GGB4248|
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__GGB4250|
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Acidaminococcales|f__Acidaminococcaceae|g__GGB4254|
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Selenomonadales|f__Selenomonadaceae|g__Mitsuokella|s
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Selenomonadales|f__Selenomonadaceae|g__Pectinatus|s_
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Selenomonadales|f__Selenomonadaceae|g__Selenomonas
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Selenomonadales|f__Selenomonadaceae|g__Selenomonas
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Selenomonadales|f__Selenomonadaceae|g__Selenomonas
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Selenomonadales|f__Selenomonadaceae|g__Selenomonas
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Selenomonadales|f__Selenomonadaceae|g__Selenomonas
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Selenomonadales|f__Selenomonadaceae|g__Selenomonas
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Selenomonadales|f__Selenomonadales_unclassified|g__Se
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Colibacter|s__Colibact
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__GGB4269|s__GGB426
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__GGB4272|s__GGB427
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__GGB4285|s__GGB428
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Megasphaera|s__Meg
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Megasphaera|s__Meg
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Megasphaera|s__Meg
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Megasphaera|s__Meg
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Megasphaera|s__Meg
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Veillonella|s__Veillon
k__Bacteria|p__Firmicutes|c__Negativicutes|o__Veillonellales|f__Veillonellaceae|g__Veillonella|s__Veillon
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Anaerococcus|s__Anae
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Anaerococcus|s__Anae
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Anaerococcus|s__Anae
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Anaerococcus|s__Anae
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Anaerococcus|s__Anae
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Murdochiella|s__Murd
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Murdochiella|s__Murd
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Peptoniphilus|s__Pepto
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Peptoniphilus|s__Pepto
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Peptoniphilus|s__Pepto
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Peptoniphilaceae|g__Urinicoccus|s__Urinico
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Tissierellaceae|g__Sporanaerobacter|s__Spo
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellales|f__Tissierellaceae|g__Tissierella|s__Tissierella_s
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellia_unclassified|f__Tissierellia_unclassified|g__Ezakiell
k__Bacteria|p__Firmicutes|c__Tissierellia|o__Tissierellia_unclassified|f__Tissierellia_unclassified|g__Ezakiell
k__Bacteria|p__Fusobacteria|c__Fusobacteriia|o__Fusobacteriales|f__Fusobacteriaceae|g__Fusobacteriace
k__Bacteria|p__Fusobacteria|c__Fusobacteriia|o__Fusobacteriales|f__Fusobacteriaceae|g__Fusobacteriace
k__Bacteria|p__Fusobacteria|c__Fusobacteriia|o__Fusobacteriales|f__Fusobacteriaceae|g__Fusobacterium
k__Bacteria|p__Fusobacteria|c__Fusobacteriia|o__Fusobacteriales|f__Fusobacteriaceae|g__Fusobacterium
k__Bacteria|p__Fusobacteria|c__Fusobacteriia|o__Fusobacteriales|f__Leptotrichiaceae|g__Sneathia|s__Sn
k__Bacteria|p__Kiritimatiellaeota|c__Kiritimatiellae|o__Kiritimatiellae_unclassified|f__Kiritimatiellae_unclas
k__Bacteria|p__Lentisphaerae|c__Lentisphaeria|o__Lentisphaeria_unclassified|f__Lentisphaeria_unclassifie
k__Bacteria|p__Lentisphaerae|c__Lentisphaeria|o__Lentisphaeria_unclassified|f__Lentisphaeria_unclassifie
k__Bacteria|p__Lentisphaerae|c__Lentisphaeria|o__Lentisphaeria_unclassified|f__Lentisphaeria_unclassifie

k__Bacteria|p__Lentisphaerae|c__Lentisphaeria|o__Victivallales|f__Victivallales_unclassified|g__Victivallale
k__Bacteria|p__Planctomycetes|c__Planctomycetia|o__Pirellulales|f__Pirellulaceae|g__GGB6567|s__GGB6
k__Bacteria|p__Planctomycetes|c__Planctomycetia|o__Pirellulales|f__Pirellulaceae|g__GGB6568|s__GGB6
k__Bacteria|p__Planctomycetes|c__Planctomycetia|o__Planctomycetales|f__Planctomycetaceae|g__GGB41
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Alphaproteobacteria_unclassified|f__Alphaprot
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Alphaproteobacteria_unclassified|f__Alphaprot
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Alphaproteobacteria_unclassified|f__Alphaprot
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Alphaproteobacteria_unclassified|f__Alphaprot
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Alphaproteobacteria_unclassified|f__Alphaprot
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Alphaproteobacteria_unclassified|f__Alphaprot
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Alphaproteobacteria_unclassified|f__Alphaprot
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Alphaproteobacteria_unclassified|f__Alphaprot
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Rhizobiales|f__Bradyrhizobiaceae|g__Bradyrhiz
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Rhizobiales|f__Bradyrhizobiaceae|g__Bradyrhiz
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Rhizobiales|f__Brucellaceae|g__Ochrobactrum|
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Rhizobiales|f__Methylobacteriaceae|g__Methy
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Rhizobiales|f__Rhizobiaceae|g__Shinella|s__Sh
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Rhodobacterales|f__Rhodobacteraceae|g__Ha
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Rhodobacterales|f__Rhodobacteraceae|g__Par
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Rhodospirillales|f__Acetobacteraceae|g__Rose
k__Bacteria|p__Proteobacteria|c__Alphaproteobacteria|o__Rickettsiales|f__Anaplasmataceae|g__GGB396
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Alcaligenaceae|g__Bordetell
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Alcaligenaceae|g__Oligella|s
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Burkholderiaceae|g__Lautro
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Burkholderiaceae|g__Ralston
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Burkholderiaceae|g__Ralston
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Sutterellaceae|g__Sutterella|
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Sutterellaceae|g__Sutterella|
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Burkholderiales|f__Sutterellaceae|g__Sutterella|
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Neisseriales|f__Chromobacteriaceae|g__Laribac
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Neisseriales|f__Neisseriaceae|g__Eikenella|s__E
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Neisseriales|f__Neisseriaceae|g__Neisseria|s__
k__Bacteria|p__Proteobacteria|c__Betaproteobacteria|o__Rhodocyclales|f__Rhodocyclaceae|g__GGB2525
k__Bacteria|p__Proteobacteria|c__CFGB1062|o__OFGB1062|f__FGB1062|g__GGB2731|s__GGB2731_SGB3
k__Bacteria|p__Proteobacteria|c__CFGB1062|o__OFGB1062|f__FGB1062|g__GGB2732|s__GGB2732_SGB5
k__Bacteria|p__Proteobacteria|c__CFGB2117|o__OFGB2117|f__FGB2117|g__GGB6038|s__GGB6038_SGB8
k__Bacteria|p__Proteobacteria|c__CFGB2413|o__OFGB2413|f__FGB2413|g__GGB6625|s__GGB6625_SGB9
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Proteobacteria|c__Deltaproteobacteria|o__Desulfovibrionales|f__Desulfovibrionaceae|g__
k__Bacteria|p__Proteobacteria|c__Epsilonproteobacteria|o__Campylobacterales|f__Campylobacteraceae|g
k__Bacteria|p__Proteobacteria|c__Epsilonproteobacteria|o__Campylobacterales|f__Campylobacteraceae|g
k__Bacteria|p__Proteobacteria|c__Epsilonproteobacteria|o__Campylobacterales|f__Campylobacteraceae|g
k__Bacteria|p__Proteobacteria|c__Epsilonproteobacteria|o__Campylobacterales|f__Campylobacteraceae|g
k__Bacteria|p__Proteobacteria|c__Epsilonproteobacteria|o__Campylobacterales|f__Campylobacteraceae|g
k__Bacteria|p__Proteobacteria|c__Epsilonproteobacteria|o__Campylobacterales|f__Helicobacteraceae|g__
k__Bacteria|p__Proteobacteria|c__Epsilonproteobacteria|o__Campylobacterales|f__Helicobacteraceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Aeromonadales|f__Aeromonadaceae|g__Aer
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Aeromonadales|f__Aeromonadaceae|g__Aer

k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Alteromonadales|f__Alteromonadaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Enterobacteriaceae|g__
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Erwiniaceae|g__Pantoe
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Morganellaceae|g__Mo
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Morganellaceae|g__Prot
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Morganellaceae|g__Prot
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Enterobacterales|f__Morganellaceae|g__Pro
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pasteurellales|f__Pasteurellaceae|g__Aggreg
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Moraxellaceae|g__Aci
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Moraxellaceae|g__Aci
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Moraxellaceae|g__Aci
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Moraxellaceae|g__Mor
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Moraxellaceae|g__Psy
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Pseudomonadaceae|g_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Pseudomonadaceae|g_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Pseudomonadaceae|g_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Pseudomonadaceae|g_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Pseudomonadaceae|g_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Pseudomonadaceae|g_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Pseudomonadaceae|g_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Pseudomonadaceae|g_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Pseudomonadaceae|g_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Pseudomonadaceae|g_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Pseudomonadaceae|g_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Pseudomonadaceae|g_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Pseudomonadaceae|g_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Pseudomonadaceae|g_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Pseudomonadaceae|g_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Pseudomonadales|f__Pseudomonadaceae|g_
k__Bacteria|p__Proteobacteria|c__Gammaproteobacteria|o__Xanthomonadales|f__Xanthomonadaceae|g_
k__Bacteria|p__Spirochaetes|c__Spirochaetia|o__Brachyspirales|f__Brachyspiraceae|g__Brachyspira|s__Br
k__Bacteria|p__Synergistetes|c__Synergistia|o__Synergistales|f__Synergistaceae|g__Cloacibacillus|s__Cloa
k__Bacteria|p__Synergistetes|c__Synergistia|o__Synergistales|f__Synergistaceae|g__Fretibacterium|s__Fre
k__Bacteria|p__Synergistetes|c__Synergistia|o__Synergistales|f__Synergistaceae|g__GGB10852|s__GGB10
k__Bacteria|p__Synergistetes|c__Synergistia|o__Synergistales|f__Synergistaceae|g__Synergistes|s__Synerg
k__Bacteria|p__Tenericutes|c__Mollicutes|o__Acholeplasmatales|f__Acholeplasmatales_unclassified|g__Ac
k__Bacteria|p__Tenericutes|c__Mollicutes|o__Entomoplasmatales|f__Spiroplasmataceae|g__GGB12293|s_

k__Bacteria|p__Tenericutes|c__Mollicutes|o__Mycoplasmatales|f__Mycoplasmataceae|g__Ureaplasma|s_
k__Bacteria|p__Verrucomicrobia|c__Opitutae|o__Opitutales|f__Opitutales_unclassified|g__GGB6128|s__G
k__Bacteria|p__Verrucomicrobia|c__Opitutae|o__Opitutales|f__Opitutales_unclassified|g__Opitutales_uncl
k__Bacteria|p__Verrucomicrobia|c__Opitutae|o__Opitutales|f__Opitutales_unclassified|g__Opitutales_uncl
k__Bacteria|p__Verrucomicrobia|c__Verrucomicrobiae|o__Verrucomicrobiales|f__Akkermansiaceae|g__GG

ero varianc	r zero varia	Prevalence
FALSE	FALSE	99.42
FALSE	FALSE	99.42
FALSE	FALSE	99.42
FALSE	FALSE	98.25
FALSE	FALSE	97.08
FALSE	FALSE	97.08
FALSE	FALSE	96.78
FALSE	FALSE	96.78
FALSE	FALSE	96.2
FALSE	FALSE	95.91
FALSE	FALSE	95.32
FALSE	FALSE	94.74
FALSE	FALSE	94.74
FALSE	FALSE	93.86
FALSE	FALSE	93.27
FALSE	FALSE	92.98
FALSE	FALSE	92.69
FALSE	FALSE	92.4
FALSE	FALSE	92.4
FALSE	FALSE	92.11
FALSE	FALSE	91.23
FALSE	FALSE	91.23
FALSE	FALSE	90.94
FALSE	FALSE	90.35
FALSE	FALSE	90.06
FALSE	FALSE	89.47
FALSE	FALSE	89.18
FALSE	FALSE	89.18
FALSE	FALSE	88.3
FALSE	FALSE	88.3
FALSE	FALSE	88.01
FALSE	FALSE	87.13
FALSE	FALSE	86.84
FALSE	FALSE	86.84
FALSE	FALSE	86.84
FALSE	FALSE	86.55
FALSE	FALSE	86.26
FALSE	FALSE	86.26
FALSE	FALSE	86.26
FALSE	FALSE	85.96
FALSE	FALSE	85.96
FALSE	FALSE	85.67
FALSE	FALSE	85.67
FALSE	FALSE	85.67
FALSE	FALSE	85.67
FALSE	FALSE	85.38
FALSE	FALSE	85.38
FALSE	FALSE	84.8
FALSE	FALSE	84.8

FALSE	FALSE	84.21
FALSE	FALSE	84.21
FALSE	FALSE	83.92
FALSE	FALSE	83.63
FALSE	FALSE	83.33
FALSE	FALSE	83.33
FALSE	FALSE	83.04
FALSE	FALSE	82.75
FALSE	FALSE	82.46
FALSE	FALSE	82.16
FALSE	FALSE	81.87
FALSE	FALSE	81.58
FALSE	FALSE	81.58
FALSE	FALSE	80.99
FALSE	FALSE	79.53
FALSE	FALSE	78.95
FALSE	FALSE	78.95
FALSE	FALSE	78.36
FALSE	FALSE	78.36
FALSE	FALSE	78.07
FALSE	FALSE	77.78
FALSE	FALSE	77.78
FALSE	FALSE	77.49
FALSE	FALSE	77.19
FALSE	FALSE	77.19
FALSE	FALSE	77.19
FALSE	FALSE	77.19
FALSE	FALSE	76.32
FALSE	FALSE	76.32
FALSE	FALSE	75.73
FALSE	FALSE	75.44
FALSE	FALSE	75.44
FALSE	FALSE	75.15
FALSE	FALSE	75.15
FALSE	FALSE	75.15
FALSE	FALSE	74.85
FALSE	FALSE	73.68
FALSE	FALSE	73.39
FALSE	FALSE	73.1
FALSE	FALSE	73.1
FALSE	FALSE	73.1
FALSE	FALSE	72.81
FALSE	FALSE	72.81
FALSE	FALSE	72.51
FALSE	FALSE	71.93
FALSE	FALSE	71.64
FALSE	FALSE	71.64
FALSE	FALSE	71.35
FALSE	FALSE	70.47
FALSE	FALSE	70.47

FALSE	FALSE	70.18
FALSE	FALSE	69.59
FALSE	FALSE	68.71
FALSE	FALSE	68.42
FALSE	FALSE	68.42
FALSE	FALSE	68.42
FALSE	FALSE	68.42
FALSE	FALSE	68.13
FALSE	FALSE	67.54
FALSE	FALSE	67.54
FALSE	FALSE	67.54
FALSE	FALSE	67.25
FALSE	FALSE	66.96
FALSE	FALSE	66.67
FALSE	FALSE	66.08
FALSE	FALSE	66.08
FALSE	FALSE	64.62
FALSE	FALSE	64.04
FALSE	FALSE	64.04
FALSE	FALSE	63.74
FALSE	FALSE	63.74
FALSE	FALSE	63.74
FALSE	FALSE	63.74
FALSE	FALSE	63.74
FALSE	FALSE	63.74
FALSE	FALSE	63.45
FALSE	FALSE	63.45
FALSE	FALSE	62.57
FALSE	FALSE	61.99
FALSE	FALSE	61.99
FALSE	FALSE	61.99
FALSE	FALSE	61.7
FALSE	FALSE	61.4
FALSE	FALSE	61.4
FALSE	FALSE	61.4
FALSE	FALSE	61.11
FALSE	FALSE	60.82
FALSE	FALSE	60.82
FALSE	FALSE	60.23
FALSE	FALSE	60.23
FALSE	FALSE	59.65
FALSE	FALSE	59.36
FALSE	FALSE	59.36
FALSE	FALSE	59.36
FALSE	FALSE	59.36
FALSE	FALSE	58.77
FALSE	FALSE	58.77
FALSE	FALSE	58.48
FALSE	FALSE	58.48
FALSE	FALSE	58.48

FALSE	FALSE	57.6
FALSE	FALSE	57.6
FALSE	FALSE	57.6
FALSE	FALSE	57.02
FALSE	FALSE	57.02
FALSE	FALSE	57.02
FALSE	FALSE	57.02
FALSE	FALSE	56.43
FALSE	FALSE	56.43
FALSE	FALSE	56.43
FALSE	FALSE	56.43
FALSE	FALSE	56.43
FALSE	FALSE	56.14
FALSE	FALSE	55.56
FALSE	FALSE	55.56
FALSE	FALSE	55.26
FALSE	FALSE	54.97
FALSE	FALSE	54.97
FALSE	FALSE	54.68
FALSE	FALSE	54.68
FALSE	FALSE	54.39
FALSE	FALSE	54.09
FALSE	FALSE	53.8
FALSE	FALSE	53.8
FALSE	FALSE	53.8
FALSE	FALSE	53.51
FALSE	FALSE	53.51
FALSE	FALSE	53.22
FALSE	FALSE	53.22
FALSE	FALSE	52.92
FALSE	FALSE	52.63
FALSE	FALSE	52.63
FALSE	FALSE	52.63
FALSE	FALSE	52.34
FALSE	FALSE	52.34
FALSE	FALSE	52.05
FALSE	FALSE	52.05
FALSE	FALSE	51.75
FALSE	FALSE	51.46
FALSE	FALSE	51.17
FALSE	FALSE	50.88
FALSE	FALSE	50.88
FALSE	FALSE	50.88
FALSE	FALSE	50.58
FALSE	FALSE	50.29
FALSE	FALSE	50
FALSE	FALSE	50
FALSE	FALSE	49.71
FALSE	FALSE	49.71
FALSE	FALSE	49.71

FALSE	FALSE	49.42
FALSE	FALSE	49.42
FALSE	FALSE	49.42
FALSE	FALSE	49.12
FALSE	FALSE	48.83
FALSE	FALSE	48.83
FALSE	FALSE	48.54
FALSE	FALSE	48.54
FALSE	FALSE	48.25
FALSE	FALSE	48.25
FALSE	FALSE	48.25
FALSE	FALSE	48.25
FALSE	FALSE	47.95
FALSE	FALSE	47.95
FALSE	FALSE	47.37
FALSE	FALSE	47.08
FALSE	FALSE	47.08
FALSE	FALSE	47.08
FALSE	FALSE	47.08
FALSE	FALSE	47.08
FALSE	FALSE	46.78
FALSE	FALSE	46.78
FALSE	FALSE	46.78
FALSE	FALSE	46.49
FALSE	FALSE	46.2
FALSE	FALSE	46.2
FALSE	FALSE	45.91
FALSE	FALSE	45.91
FALSE	FALSE	45.61
FALSE	FALSE	45.61
FALSE	FALSE	45.61
FALSE	FALSE	45.32
FALSE	FALSE	45.32
FALSE	FALSE	45.32
FALSE	FALSE	45.32
FALSE	FALSE	45.03
FALSE	FALSE	45.03
FALSE	FALSE	44.74
FALSE	FALSE	44.74
FALSE	FALSE	44.44
FALSE	FALSE	44.15
FALSE	FALSE	44.15
FALSE	FALSE	43.86
FALSE	FALSE	43.57
FALSE	FALSE	43.57
FALSE	FALSE	43.57
FALSE	FALSE	43.57
FALSE	FALSE	43.27
FALSE	FALSE	43.27
FALSE	FALSE	43.27

FALSE	FALSE	43.27
FALSE	FALSE	42.98
FALSE	FALSE	42.98
FALSE	FALSE	42.98
FALSE	FALSE	42.98
FALSE	FALSE	42.98
FALSE	FALSE	42.11
FALSE	FALSE	42.11
FALSE	FALSE	42.11
FALSE	FALSE	42.11
FALSE	FALSE	41.52
FALSE	FALSE	41.52
FALSE	FALSE	41.52
FALSE	FALSE	41.52
FALSE	FALSE	41.52
FALSE	FALSE	40.94
FALSE	FALSE	40.94
FALSE	FALSE	40.94
FALSE	FALSE	40.64
FALSE	FALSE	40.64
FALSE	FALSE	40.35
FALSE	FALSE	40.35
FALSE	FALSE	40.35
FALSE	FALSE	40.35
FALSE	FALSE	40.06
FALSE	FALSE	40.06
FALSE	FALSE	40.06
FALSE	FALSE	40.06
FALSE	FALSE	39.77
FALSE	FALSE	39.77
FALSE	FALSE	39.77
FALSE	FALSE	39.47
FALSE	FALSE	39.47
FALSE	FALSE	39.47
FALSE	FALSE	39.47
FALSE	FALSE	39.47
FALSE	FALSE	39.47
FALSE	FALSE	39.18
FALSE	FALSE	39.18
FALSE	FALSE	38.89
FALSE	FALSE	38.6
FALSE	FALSE	38.3
FALSE	FALSE	38.01
FALSE	FALSE	37.72
FALSE	FALSE	37.72
FALSE	FALSE	37.43
FALSE	FALSE	37.43
FALSE	FALSE	37.43
FALSE	FALSE	37.43
FALSE	FALSE	37.13

FALSE	FALSE	37.13
FALSE	FALSE	36.84
FALSE	FALSE	36.84
FALSE	FALSE	36.84
FALSE	FALSE	36.84
FALSE	FALSE	36.84
FALSE	FALSE	36.55
FALSE	FALSE	36.55
FALSE	FALSE	36.26
FALSE	FALSE	35.67
FALSE	FALSE	35.67
FALSE	FALSE	35.67
FALSE	FALSE	35.38
FALSE	FALSE	35.38
FALSE	FALSE	35.38
FALSE	FALSE	35.09
FALSE	FALSE	35.09
FALSE	FALSE	34.8
FALSE	FALSE	34.8
FALSE	FALSE	34.5
FALSE	FALSE	34.5
FALSE	FALSE	34.5
FALSE	FALSE	34.5
FALSE	FALSE	34.21
FALSE	FALSE	34.21
FALSE	FALSE	34.21
FALSE	FALSE	33.92
FALSE	FALSE	33.63
FALSE	FALSE	33.33
FALSE	FALSE	33.04
FALSE	FALSE	33.04
FALSE	FALSE	33.04
FALSE	FALSE	33.04
FALSE	FALSE	32.75
FALSE	FALSE	32.75
FALSE	FALSE	32.75
FALSE	FALSE	32.75
FALSE	FALSE	32.46
FALSE	FALSE	32.46
FALSE	FALSE	32.46
FALSE	FALSE	32.16
FALSE	FALSE	32.16
FALSE	FALSE	31.87
FALSE	FALSE	31.87
FALSE	FALSE	31.87
FALSE	FALSE	31.58
FALSE	FALSE	31.58
FALSE	FALSE	31.58
FALSE	FALSE	31.29
FALSE	FALSE	31.29

FALSE	FALSE	31.29
FALSE	FALSE	31.29
FALSE	FALSE	30.99
FALSE	FALSE	30.99
FALSE	FALSE	30.99
FALSE	FALSE	30.7
FALSE	FALSE	30.7
FALSE	FALSE	30.7
FALSE	FALSE	30.7
FALSE	FALSE	30.41
FALSE	FALSE	29.82
FALSE	FALSE	29.82
FALSE	FALSE	29.82
FALSE	FALSE	29.82
FALSE	FALSE	29.82
FALSE	FALSE	29.82
FALSE	FALSE	29.53
FALSE	FALSE	29.53
FALSE	FALSE	29.24
FALSE	FALSE	29.24
FALSE	FALSE	29.24
FALSE	FALSE	29.24
FALSE	FALSE	29.24
FALSE	FALSE	29.24
FALSE	FALSE	28.95
FALSE	FALSE	28.95
FALSE	FALSE	28.95
FALSE	FALSE	28.95
FALSE	FALSE	28.95
FALSE	FALSE	28.95
FALSE	FALSE	28.65
FALSE	FALSE	28.36
FALSE	FALSE	28.36
FALSE	FALSE	28.07
FALSE	FALSE	28.07
FALSE	FALSE	28.07
FALSE	FALSE	27.78
FALSE	FALSE	27.78
FALSE	FALSE	27.78
FALSE	FALSE	27.78
FALSE	FALSE	27.78
FALSE	FALSE	27.49
FALSE	FALSE	27.49
FALSE	FALSE	27.49
FALSE	FALSE	27.19
FALSE	FALSE	27.19
FALSE	FALSE	27.19
FALSE	FALSE	27.19
FALSE	FALSE	27.19
FALSE	FALSE	27.19

FALSE	FALSE	26.9
FALSE	FALSE	26.9
FALSE	FALSE	26.61
FALSE	FALSE	26.61
FALSE	FALSE	26.32
FALSE	FALSE	26.02
FALSE	FALSE	26.02
FALSE	FALSE	26.02
FALSE	FALSE	26.02
FALSE	FALSE	25.73
FALSE	FALSE	25.73
FALSE	FALSE	25.73
FALSE	FALSE	25.73
FALSE	FALSE	25.73
FALSE	FALSE	25.44
FALSE	FALSE	25.15
FALSE	FALSE	25.15
FALSE	FALSE	25.15
FALSE	FALSE	25.15
FALSE	FALSE	25.15
FALSE	FALSE	24.85
FALSE	FALSE	24.85
FALSE	FALSE	24.56
FALSE	FALSE	24.56
FALSE	FALSE	24.27
FALSE	FALSE	24.27
FALSE	FALSE	24.27
FALSE	FALSE	23.98
FALSE	FALSE	23.98
FALSE	FALSE	23.98
FALSE	FALSE	23.98
FALSE	FALSE	23.98
FALSE	FALSE	23.68
FALSE	FALSE	23.68
FALSE	FALSE	23.68
FALSE	FALSE	23.68
FALSE	FALSE	23.68
FALSE	FALSE	23.39
FALSE	FALSE	23.1
FALSE	FALSE	23.1
FALSE	FALSE	23.1
FALSE	FALSE	23.1
FALSE	FALSE	22.81
FALSE	FALSE	22.81
FALSE	FALSE	22.81
FALSE	FALSE	22.51
FALSE	FALSE	22.51
FALSE	FALSE	22.51
FALSE	FALSE	22.51
FALSE	FALSE	22.22

FALSE	FALSE	22.22
FALSE	FALSE	22.22
FALSE	FALSE	22.22
FALSE	FALSE	22.22
FALSE	FALSE	22.22
FALSE	FALSE	22.22
FALSE	FALSE	21.93
FALSE	FALSE	21.93
FALSE	FALSE	21.93
FALSE	FALSE	21.93
FALSE	FALSE	21.64
FALSE	FALSE	21.64
FALSE	FALSE	21.64
FALSE	FALSE	21.64
FALSE	FALSE	21.64
FALSE	FALSE	21.64
FALSE	FALSE	21.64
FALSE	FALSE	21.35
FALSE	FALSE	21.35
FALSE	FALSE	21.35
FALSE	FALSE	21.35
FALSE	FALSE	21.35
FALSE	FALSE	21.35
FALSE	FALSE	21.35
FALSE	FALSE	21.05
FALSE	FALSE	21.05
FALSE	FALSE	21.05
FALSE	FALSE	21.05
FALSE	FALSE	20.76
FALSE	FALSE	20.76
FALSE	FALSE	20.76
FALSE	FALSE	20.47
FALSE	FALSE	20.47
FALSE	FALSE	20.47
FALSE	FALSE	20.47
FALSE	FALSE	20.47
FALSE	FALSE	20.47
FALSE	FALSE	20.47
FALSE	FALSE	20.18
FALSE	FALSE	20.18
FALSE	FALSE	19.88
FALSE	FALSE	19.88
FALSE	FALSE	19.88
FALSE	FALSE	19.88
FALSE	FALSE	19.88
FALSE	FALSE	19.59
FALSE	FALSE	19.59
FALSE	FALSE	19.59
FALSE	FALSE	19.59
FALSE	FALSE	19.3

FALSE	FALSE	19.3
FALSE	FALSE	19.3
FALSE	FALSE	19.3
FALSE	FALSE	19.3
FALSE	FALSE	19.3
FALSE	FALSE	19.3
FALSE	FALSE	19.3
FALSE	FALSE	19.3
FALSE	FALSE	19.3
FALSE	FALSE	19.3
FALSE	FALSE	19.01
FALSE	FALSE	19.01
FALSE	FALSE	19.01
FALSE	FALSE	19.01
FALSE	FALSE	18.71
FALSE	FALSE	18.71
FALSE	FALSE	18.71
FALSE	FALSE	18.42
FALSE	FALSE	18.42
FALSE	FALSE	18.42
FALSE	FALSE	18.42
FALSE	FALSE	18.42
FALSE	FALSE	18.13
FALSE	FALSE	18.13
FALSE	FALSE	18.13
FALSE	FALSE	17.84
FALSE	FALSE	17.84
FALSE	FALSE	17.84
FALSE	FALSE	17.84
FALSE	FALSE	17.54
FALSE	FALSE	17.25
FALSE	FALSE	17.25
FALSE	FALSE	17.25
FALSE	FALSE	17.25
FALSE	FALSE	17.25
FALSE	FALSE	17.25
FALSE	FALSE	16.96
FALSE	FALSE	16.96
FALSE	FALSE	16.96
FALSE	FALSE	16.96
FALSE	FALSE	16.96
FALSE	FALSE	16.96
FALSE	FALSE	16.67
FALSE	FALSE	16.67
FALSE	FALSE	16.67
FALSE	FALSE	16.67
FALSE	FALSE	16.67
FALSE	FALSE	16.67
FALSE	FALSE	16.37
FALSE	FALSE	16.37

FALSE	FALSE	16.37
FALSE	FALSE	16.37
FALSE	FALSE	16.37
FALSE	FALSE	16.08
FALSE	FALSE	16.08
FALSE	FALSE	16.08
FALSE	FALSE	16.08
FALSE	FALSE	16.08
FALSE	FALSE	15.79
FALSE	FALSE	15.79
FALSE	FALSE	15.79
FALSE	FALSE	15.79
FALSE	FALSE	15.79
FALSE	FALSE	15.79
FALSE	FALSE	15.79
FALSE	FALSE	15.5
FALSE	FALSE	15.5
FALSE	FALSE	15.5
FALSE	FALSE	15.2
FALSE	FALSE	15.2
FALSE	FALSE	15.2
FALSE	FALSE	15.2
FALSE	FALSE	15.2
FALSE	FALSE	15.2
FALSE	FALSE	15.2
FALSE	FALSE	15.2
FALSE	FALSE	15.2
FALSE	FALSE	15.2
FALSE	FALSE	14.91
FALSE	FALSE	14.91
FALSE	FALSE	14.91
FALSE	FALSE	14.91
FALSE	FALSE	14.62
FALSE	FALSE	14.62
FALSE	FALSE	14.62
FALSE	FALSE	14.62
FALSE	FALSE	14.62
FALSE	FALSE	14.62
FALSE	FALSE	14.33
FALSE	FALSE	14.33
FALSE	FALSE	14.33
FALSE	FALSE	14.33
FALSE	FALSE	14.33
FALSE	FALSE	14.33
FALSE	FALSE	14.33
FALSE	FALSE	14.04
FALSE	FALSE	14.04
FALSE	FALSE	14.04
FALSE	FALSE	14.04
FALSE	FALSE	14.04

FALSE	FALSE	14.04
FALSE	FALSE	13.74
FALSE	FALSE	13.74
FALSE	FALSE	13.74
FALSE	FALSE	13.74
FALSE	FALSE	13.74
FALSE	FALSE	13.74
FALSE	FALSE	13.74
FALSE	FALSE	13.74
FALSE	FALSE	13.45
FALSE	FALSE	13.45
FALSE	FALSE	13.45
FALSE	FALSE	13.45
FALSE	FALSE	13.45
FALSE	FALSE	13.45
FALSE	FALSE	13.16
FALSE	FALSE	13.16
FALSE	FALSE	13.16
FALSE	FALSE	13.16
FALSE	FALSE	13.16
FALSE	FALSE	12.87
FALSE	FALSE	12.87
FALSE	FALSE	12.87
FALSE	FALSE	12.87
FALSE	FALSE	12.87
FALSE	FALSE	12.87
FALSE	FALSE	12.87
FALSE	FALSE	12.87
FALSE	FALSE	12.87
FALSE	FALSE	12.57
FALSE	FALSE	12.57
FALSE	FALSE	12.57
FALSE	FALSE	12.57
FALSE	FALSE	12.57
FALSE	FALSE	12.57
FALSE	FALSE	12.57
FALSE	FALSE	12.28
FALSE	FALSE	12.28
FALSE	FALSE	12.28
FALSE	FALSE	12.28
FALSE	FALSE	11.99
FALSE	FALSE	11.99
FALSE	FALSE	11.99
FALSE	FALSE	11.99
FALSE	FALSE	11.99
FALSE	FALSE	11.99
FALSE	FALSE	11.99
FALSE	FALSE	11.99
FALSE	FALSE	11.99
FALSE	FALSE	11.99

FALSE	FALSE	11.7
FALSE	FALSE	11.7
FALSE	FALSE	11.7
FALSE	FALSE	11.7
FALSE	FALSE	11.7
FALSE	FALSE	11.7
FALSE	FALSE	11.7
FALSE	FALSE	11.4
FALSE	FALSE	11.4
FALSE	TRUE	11.4
FALSE	FALSE	11.4
FALSE	FALSE	11.4
FALSE	FALSE	11.4
FALSE	FALSE	11.4
FALSE	FALSE	11.4
FALSE	FALSE	11.4
FALSE	FALSE	11.4
FALSE	FALSE	11.11
FALSE	FALSE	11.11
FALSE	FALSE	11.11
FALSE	FALSE	11.11
FALSE	FALSE	11.11
FALSE	FALSE	11.11
FALSE	FALSE	11.11
FALSE	FALSE	11.11
FALSE	FALSE	10.82
FALSE	FALSE	10.82
FALSE	FALSE	10.82
FALSE	FALSE	10.82
FALSE	FALSE	10.82
FALSE	FALSE	10.82
FALSE	FALSE	10.82
FALSE	TRUE	10.53
FALSE	FALSE	10.53
FALSE	FALSE	10.53
FALSE	FALSE	10.53
FALSE	FALSE	10.53
FALSE	FALSE	10.53
FALSE	FALSE	10.53
FALSE	FALSE	10.53
FALSE	FALSE	10.53
FALSE	FALSE	10.23
FALSE	FALSE	10.23
FALSE	FALSE	10.23
FALSE	FALSE	10.23
FALSE	FALSE	9.94
FALSE	FALSE	9.94
FALSE	FALSE	9.94
FALSE	FALSE	9.94
FALSE	FALSE	9.94

FALSE	FALSE	9.94
FALSE	FALSE	9.94
FALSE	FALSE	9.94
FALSE	TRUE	9.65
FALSE	TRUE	9.65
FALSE	TRUE	9.65
FALSE	TRUE	9.65
FALSE	TRUE	9.65
FALSE	TRUE	9.65
FALSE	TRUE	9.65
FALSE	TRUE	9.65
FALSE	TRUE	9.36
FALSE	TRUE	9.36
FALSE	TRUE	9.36
FALSE	TRUE	9.36
FALSE	TRUE	9.36
FALSE	TRUE	9.36
FALSE	TRUE	9.36
FALSE	TRUE	9.36
FALSE	TRUE	9.36
FALSE	TRUE	9.36
FALSE	TRUE	9.06
FALSE	TRUE	9.06
FALSE	TRUE	9.06
FALSE	TRUE	9.06
FALSE	TRUE	9.06
FALSE	TRUE	9.06
FALSE	TRUE	9.06
FALSE	TRUE	9.06
FALSE	TRUE	9.06
FALSE	TRUE	9.06
FALSE	TRUE	9.06
FALSE	TRUE	9.06
FALSE	TRUE	9.06
FALSE	TRUE	9.06
FALSE	TRUE	9.06
FALSE	TRUE	9.06
FALSE	TRUE	9.06
FALSE	TRUE	8.77
FALSE	TRUE	8.77
FALSE	TRUE	8.77
FALSE	TRUE	8.77
FALSE	TRUE	8.77
FALSE	TRUE	8.77
FALSE	TRUE	8.77
FALSE	TRUE	8.77
FALSE	TRUE	8.77
FALSE	TRUE	8.77
FALSE	TRUE	8.77
FALSE	TRUE	8.77

FALSE	TRUE	8.77
FALSE	TRUE	8.48
FALSE	TRUE	8.48
FALSE	TRUE	8.48
FALSE	TRUE	8.48
FALSE	TRUE	8.48
FALSE	TRUE	8.48
FALSE	TRUE	8.48
FALSE	TRUE	8.48
FALSE	TRUE	8.48
FALSE	TRUE	8.48
FALSE	TRUE	8.19
FALSE	TRUE	8.19
FALSE	TRUE	8.19
FALSE	TRUE	8.19
FALSE	TRUE	8.19
FALSE	TRUE	8.19
FALSE	TRUE	8.19
FALSE	TRUE	8.19
FALSE	TRUE	8.19
FALSE	TRUE	8.19
FALSE	TRUE	8.19
FALSE	TRUE	8.19
FALSE	TRUE	8.19
FALSE	TRUE	8.19
FALSE	TRUE	8.19
FALSE	TRUE	7.89
FALSE	TRUE	7.89
FALSE	TRUE	7.89
FALSE	TRUE	7.89
FALSE	TRUE	7.89
FALSE	TRUE	7.89
FALSE	TRUE	7.89
FALSE	TRUE	7.6
FALSE	TRUE	7.6
FALSE	TRUE	7.6
FALSE	TRUE	7.6
FALSE	TRUE	7.31
FALSE	TRUE	7.31
FALSE	TRUE	7.31
FALSE	TRUE	7.31
FALSE	TRUE	7.31
FALSE	TRUE	7.31
FALSE	TRUE	7.31
FALSE	TRUE	7.31
FALSE	TRUE	7.31
FALSE	TRUE	7.31
FALSE	TRUE	7.31
FALSE	TRUE	7.31
FALSE	TRUE	7.31

FALSE	TRUE	7.31
FALSE	TRUE	7.31
FALSE	TRUE	7.31
FALSE	TRUE	7.31
FALSE	TRUE	7.02
FALSE	TRUE	7.02
FALSE	TRUE	7.02
FALSE	TRUE	7.02
FALSE	TRUE	6.73
FALSE	TRUE	6.73
FALSE	TRUE	6.73
FALSE	TRUE	6.73
FALSE	TRUE	6.73
FALSE	TRUE	6.73
FALSE	TRUE	6.73
FALSE	TRUE	6.73
FALSE	TRUE	6.73
FALSE	TRUE	6.73
FALSE	TRUE	6.73
FALSE	TRUE	6.73
FALSE	TRUE	6.73
FALSE	TRUE	6.73
FALSE	TRUE	6.43
FALSE	TRUE	6.43
FALSE	TRUE	6.43
FALSE	TRUE	6.43
FALSE	TRUE	6.43
FALSE	TRUE	6.43
FALSE	TRUE	6.43
FALSE	TRUE	6.43
FALSE	TRUE	6.43
FALSE	TRUE	6.43
FALSE	TRUE	6.43
FALSE	TRUE	6.43
FALSE	TRUE	6.43
FALSE	TRUE	6.43
FALSE	TRUE	6.43
FALSE	TRUE	6.43
FALSE	TRUE	6.43
FALSE	TRUE	6.14
FALSE	TRUE	6.14
FALSE	TRUE	6.14
FALSE	TRUE	6.14
FALSE	TRUE	6.14
FALSE	TRUE	6.14
FALSE	TRUE	6.14
FALSE	TRUE	6.14
FALSE	TRUE	6.14
FALSE	TRUE	6.14
FALSE	TRUE	6.14

FALSE	TRUE	6.14
FALSE	TRUE	6.14
FALSE	TRUE	6.14
FALSE	TRUE	6.14
FALSE	TRUE	6.14
FALSE	TRUE	6.14
FALSE	TRUE	6.14
FALSE	TRUE	6.14
FALSE	TRUE	6.14
FALSE	TRUE	5.85
FALSE	TRUE	5.85
FALSE	TRUE	5.85
FALSE	TRUE	5.85
FALSE	TRUE	5.85
FALSE	TRUE	5.85
FALSE	TRUE	5.85
FALSE	TRUE	5.85
FALSE	TRUE	5.85
FALSE	TRUE	5.85
FALSE	TRUE	5.85
FALSE	TRUE	5.85
FALSE	TRUE	5.85
FALSE	TRUE	5.85
FALSE	TRUE	5.85
FALSE	TRUE	5.56
FALSE	TRUE	5.56
FALSE	TRUE	5.56
FALSE	TRUE	5.56
FALSE	TRUE	5.56
FALSE	TRUE	5.56
FALSE	TRUE	5.56
FALSE	TRUE	5.56
FALSE	TRUE	5.56
FALSE	TRUE	5.56
FALSE	TRUE	5.56
FALSE	TRUE	5.56
FALSE	TRUE	5.56
FALSE	TRUE	5.26
FALSE	TRUE	5.26
FALSE	TRUE	5.26
FALSE	TRUE	5.26
FALSE	TRUE	5.26
FALSE	TRUE	5.26
FALSE	TRUE	5.26
FALSE	TRUE	5.26
FALSE	TRUE	5.26
FALSE	TRUE	5.26
FALSE	TRUE	5.26
FALSE	TRUE	5.26
FALSE	TRUE	5.26

FALSE	TRUE	5.26
FALSE	TRUE	5.26
FALSE	TRUE	5.26
FALSE	TRUE	5.26
FALSE	TRUE	5.26
FALSE	TRUE	5.26
FALSE	TRUE	4.97
FALSE	TRUE	4.97
FALSE	TRUE	4.97
FALSE	TRUE	4.97
FALSE	TRUE	4.97
FALSE	TRUE	4.97
FALSE	TRUE	4.97
FALSE	TRUE	4.97
FALSE	TRUE	4.97
FALSE	TRUE	4.97
FALSE	TRUE	4.97
FALSE	TRUE	4.97
FALSE	TRUE	4.97
FALSE	TRUE	4.97
FALSE	TRUE	4.97
FALSE	TRUE	4.97
FALSE	TRUE	4.97
FALSE	TRUE	4.97
FALSE	TRUE	4.97
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.68
FALSE	TRUE	4.39
FALSE	TRUE	4.39
FALSE	TRUE	4.39
FALSE	TRUE	4.39

FALSE	TRUE	4.39
FALSE	TRUE	4.39
FALSE	TRUE	4.39
FALSE	TRUE	4.39
FALSE	TRUE	4.39
FALSE	TRUE	4.39
FALSE	TRUE	4.39
FALSE	TRUE	4.39
FALSE	TRUE	4.39
FALSE	TRUE	4.39
FALSE	TRUE	4.39
FALSE	TRUE	4.39
FALSE	TRUE	4.39
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	4.09
FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.8

FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.8
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.51
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22

FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	3.22
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92
FALSE	TRUE	2.92

FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.63
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34

FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.34
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05

FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	2.05
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75

FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75

FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.75
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46

FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.46
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17

FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17

FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	1.17
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88

FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88

FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88

FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.88
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58

FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58

FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58

FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58

FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.58
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29

FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29

FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29

FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29

FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29

FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29

FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29

FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29

FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
FALSE	TRUE	0.29
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0

TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0

TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0

TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0

TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0

TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0

TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0

TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0

TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0

TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0

TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0

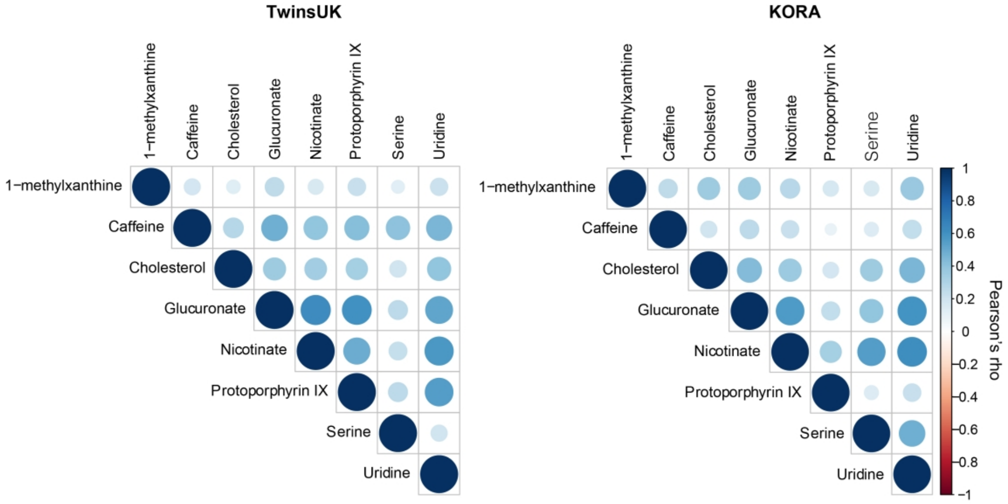
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0

TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0

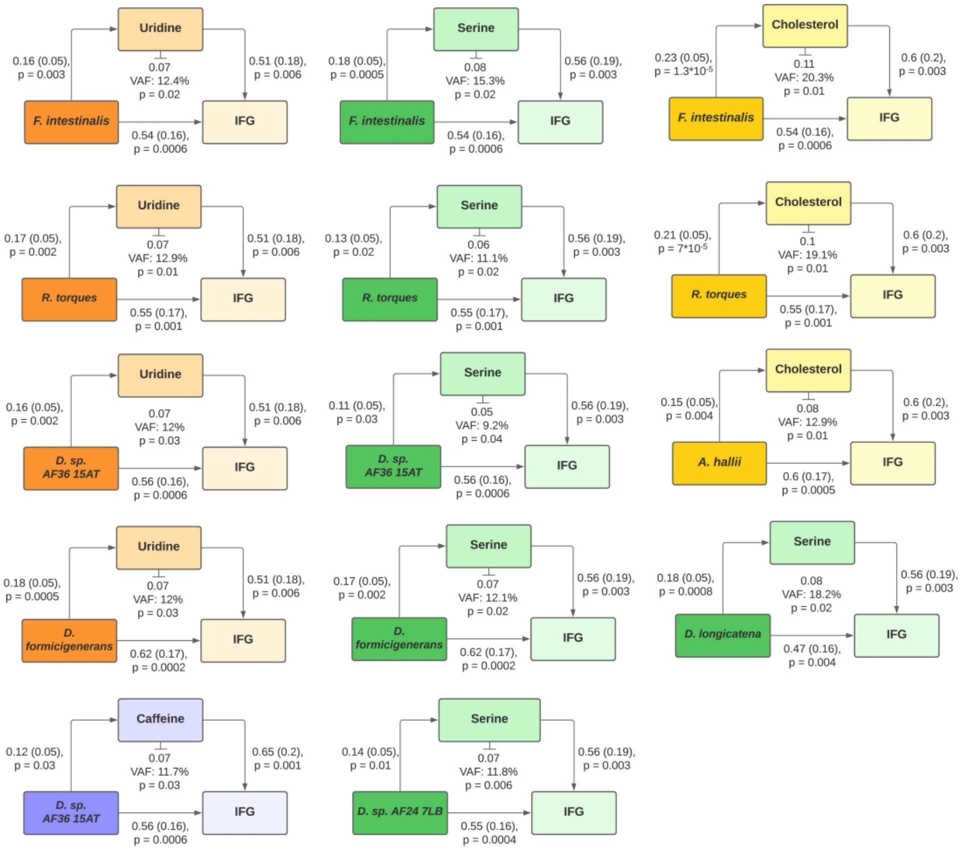
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0

TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0

TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0
TRUE	TRUE	0



710x357mm (118 x 118 DPI)



956x807mm (118 x 118 DPI)