

## Supporting Information

### Ornithine-derived oligomers and dendrimers for in vitro delivery of DNA and ex vivo transfection of skin cells via saRNA

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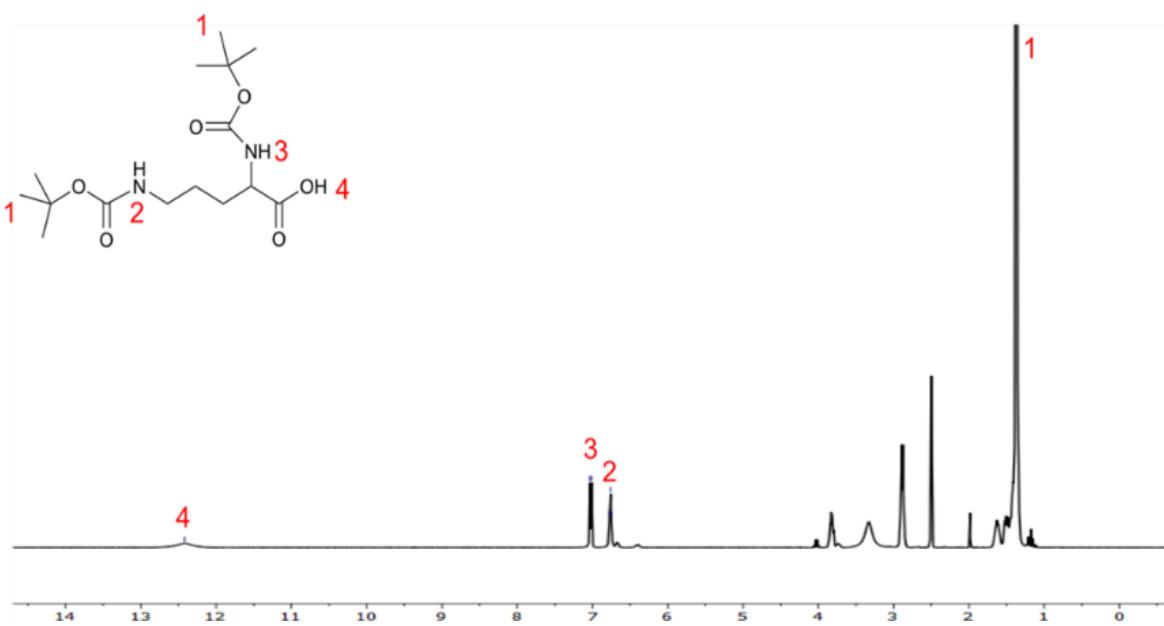


Figure S1: <sup>1</sup>H-NMR spectrum of L-BOC-ornithine

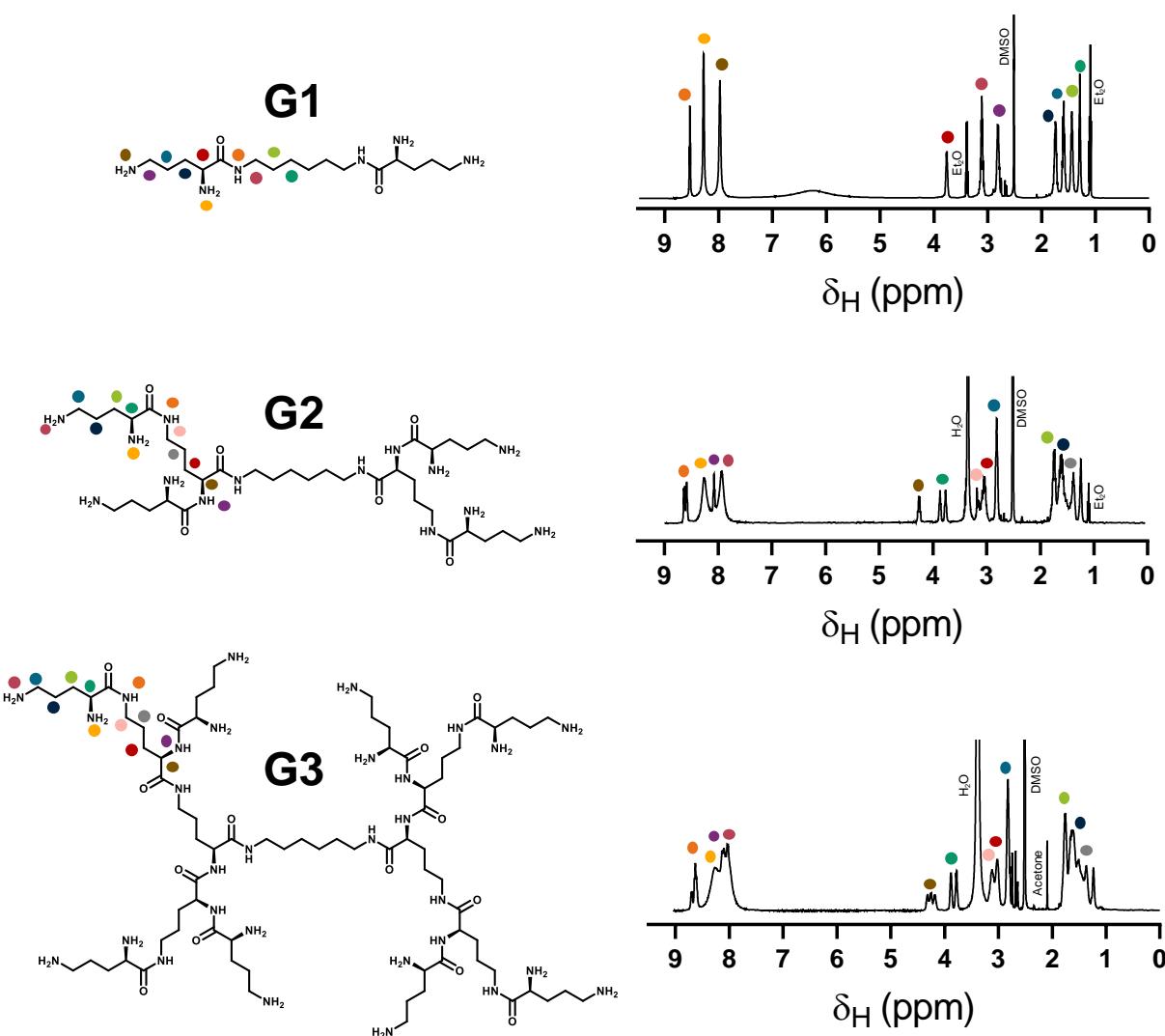


Figure S2:  $^1\text{H}$  NMR spectra and proton assignments of dendrimers G1, G2 and G3.

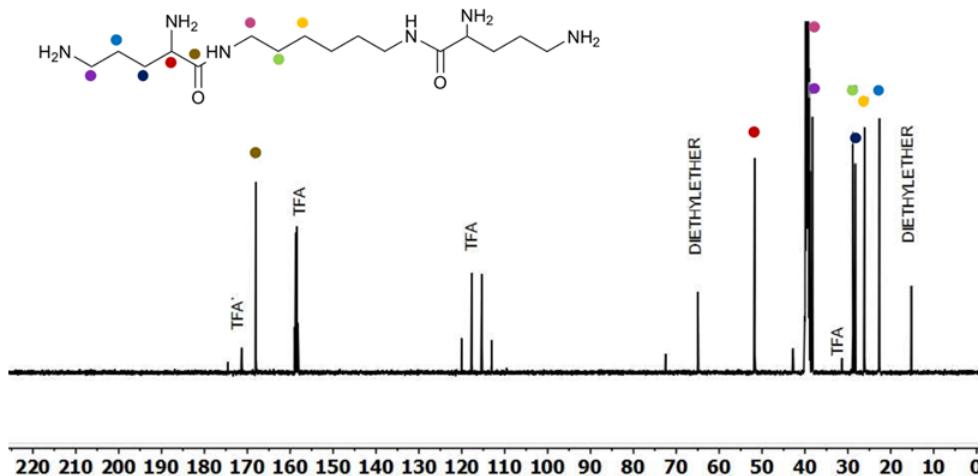
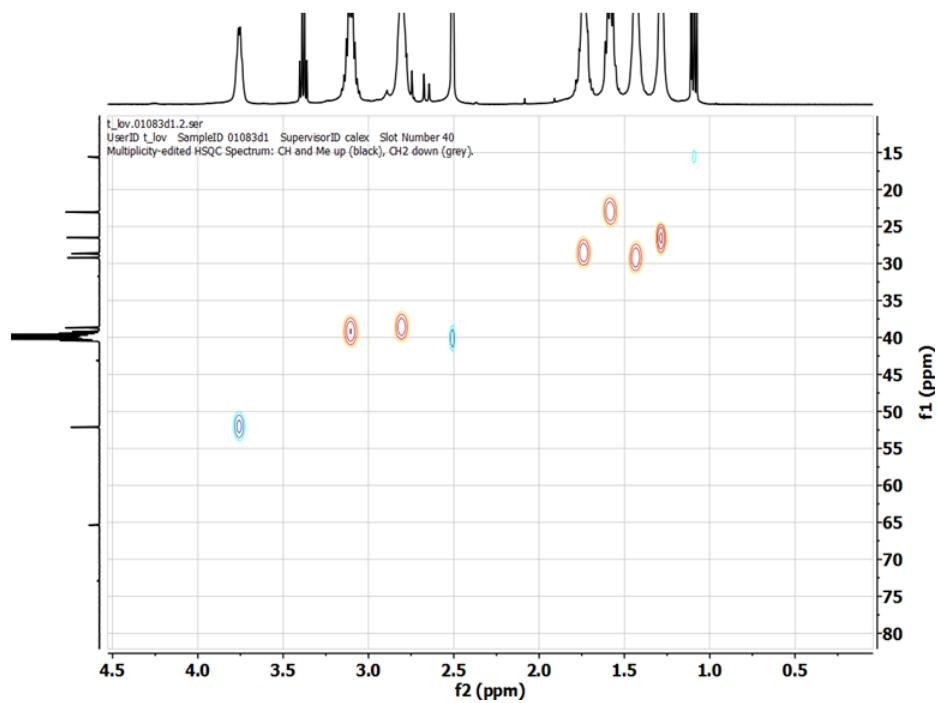
**A****B**

Figure S3: A)  $^{13}\text{C}$  NMR and B)  $^1\text{H}$ - $^1\text{H}$  COSY spectra of dendrimer G1 in  $d_6$ -DMSO

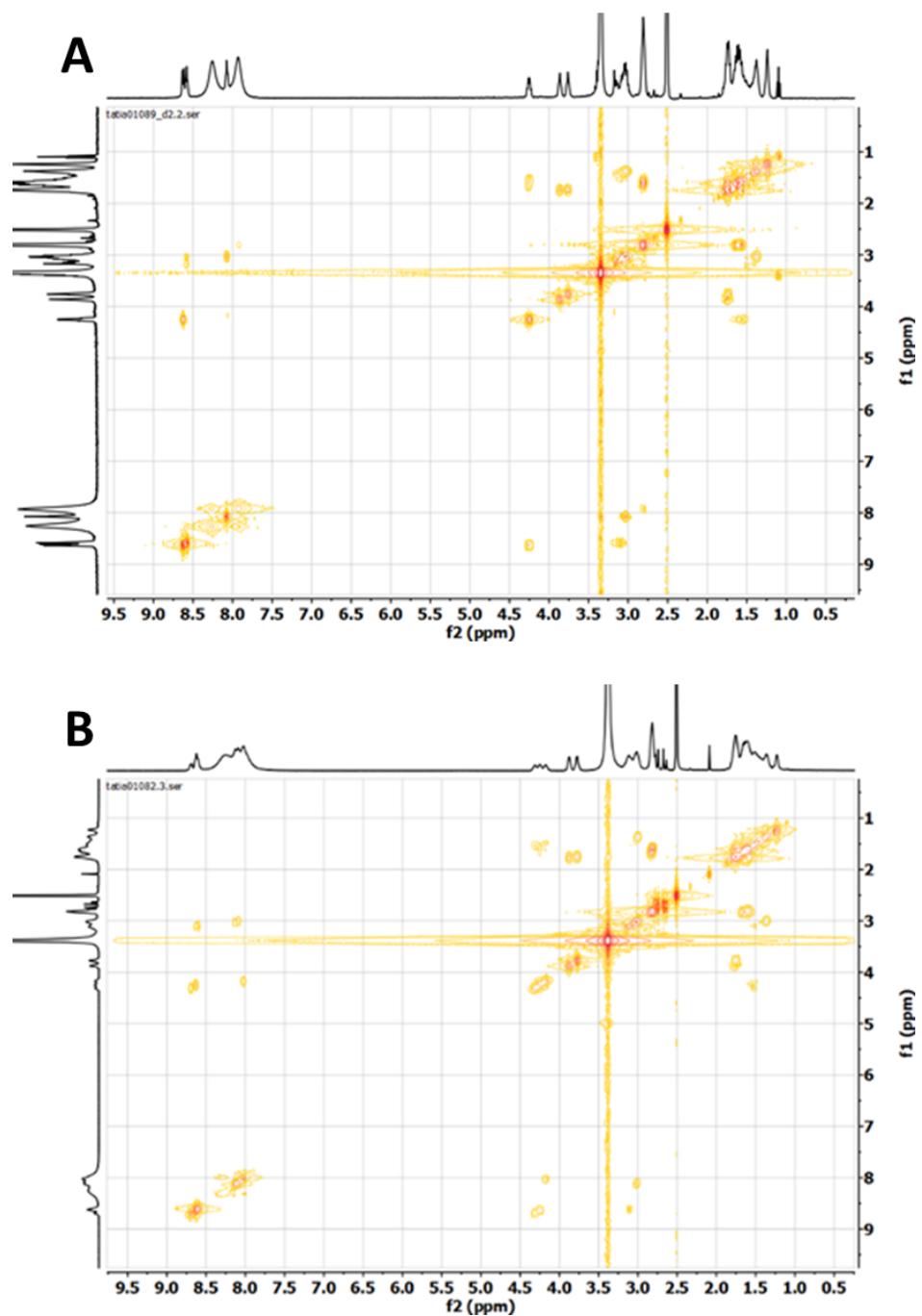


Figure S4:  $^1\text{H}$ - $^1\text{H}$  COSY spectra of dendrimer A) G2 and B) G3 in  $d_6$ -DMSO

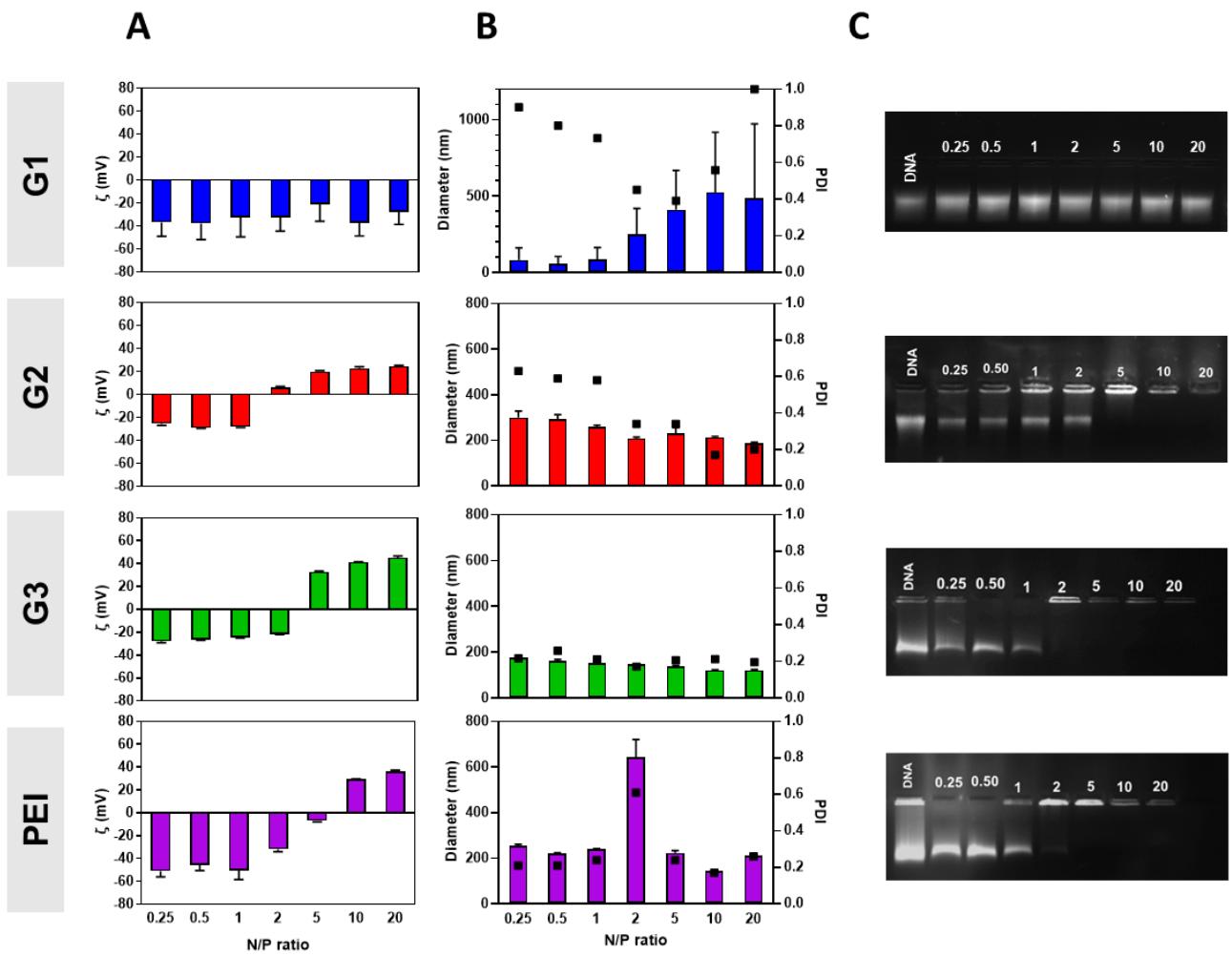


Figure S5. A) Zeta-potential and B) hydrodynamic diameters of calf thymus DNA polyplexes prepared at N/P ratios of 0.25, 0.5, 1, 2, 5, 10, 20 with dendrimers G1-G3 and PEI, measured with a Malvern Zetasizer in aqueous solutions at dendrimer/PEI concentrations of  $0.1 \text{ mg mL}^{-1}$ . C) DNA complexation efficiency for G1 (row 1), G2 (row 2), G3 (row 3) and PEI (row 4) polyplexes evaluated using gel electrophoresis with calf thymus DNA at N/P ratios 0.25, 0.5, 1, 2, 5, 10, 20.