Supporting Information

The effect of side-chain functionality and hydrophobicity on the gene delivery capabilities of cationic helical polypeptides

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Fig. S1. GPC trace of poly(γ-(4-propargyloxybenzyl)-L-glutamate) (PPOBLG).
Fig. S2. $^1$H NMR spectrum of POB-L-Glu-NCA in CDCl$_3$. 

$\delta$ (ppm)
Fig. S3. $^1$H NMR spectrum of PPOBLG in CDCl$_3$. 
Fig. S4. $^1$H NMR spectrum of polypeptide G3 in TFA-$d$.
Fig. S5. $^1$H NMR spectrum of polypeptide G6 in TFA-$d$. 
Fig. S6. $^1$H NMR spectrum of polypeptide G8 in TFA-$d$. 
Fig. S7. $^1$H NMR spectrum of polypeptide P3 in TFA-$d$. 

\[ \delta \text{ (ppm)} \]
Fig. S8. $^1$H NMR spectrum of polypeptide P5 in TFA-$d$. 
Fig. S9. $^1$H NMR spectrum of polypeptide P8 in TFA-$d$. 
Fig. S10. $^1$H NMR spectrum of polypeptide T3 in TFA-$d$. 
Fig. S11. CD spectrum of PLR in water (0.1 mg/mL) at pH 7.
Fig. S12. *In vitro* transfection efficiencies of polyplexes at various N/P ratios in HeLa cells.
Fig. S13. Cellular uptake levels of polypeptide/YOYO-1-DNA polyplexes in HeLa (A) and COS-7 (B) cells at various N/P ratios.
Fig. S14. Cytotoxicity of polypeptide/DNA polyplexes towards HeLa (A, C) and COS-7 (B, D) cells as determined by the MTT assay. The N/P ratio was maintained constant at 10 (A and B) while the DNA amount was maintained constant at 0.1 µg/well (C and D).