

Supporting Information

Guanidine-Rich Helical Polypeptides Bearing Hydrophobic Amino Acid

Pendants for Efficient Gene Delivery

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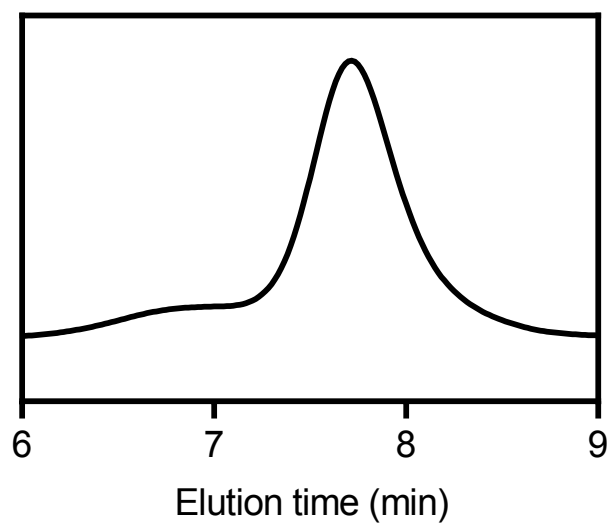


Figure S1. GPC curve of PAPLG ($M_n = 26500$, $DP = 125$, $M_w/M_n = 1.09$).

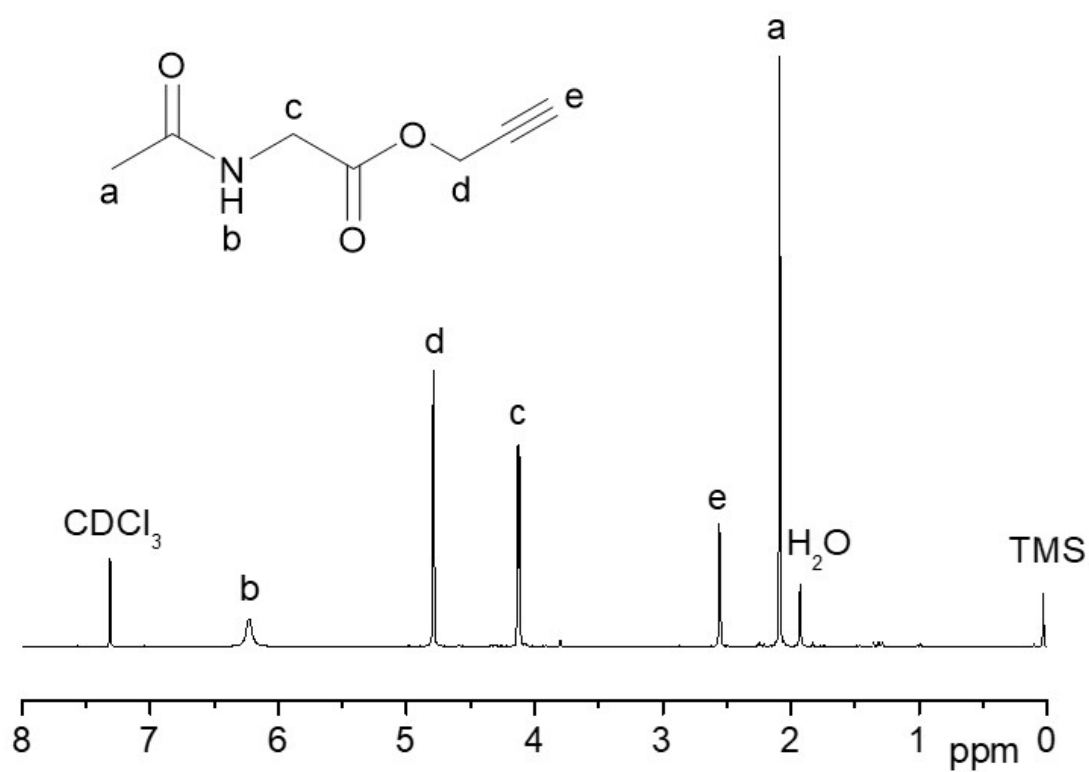


Figure S2. ^1H NMR spectrum of PAG in CDCl_3 .

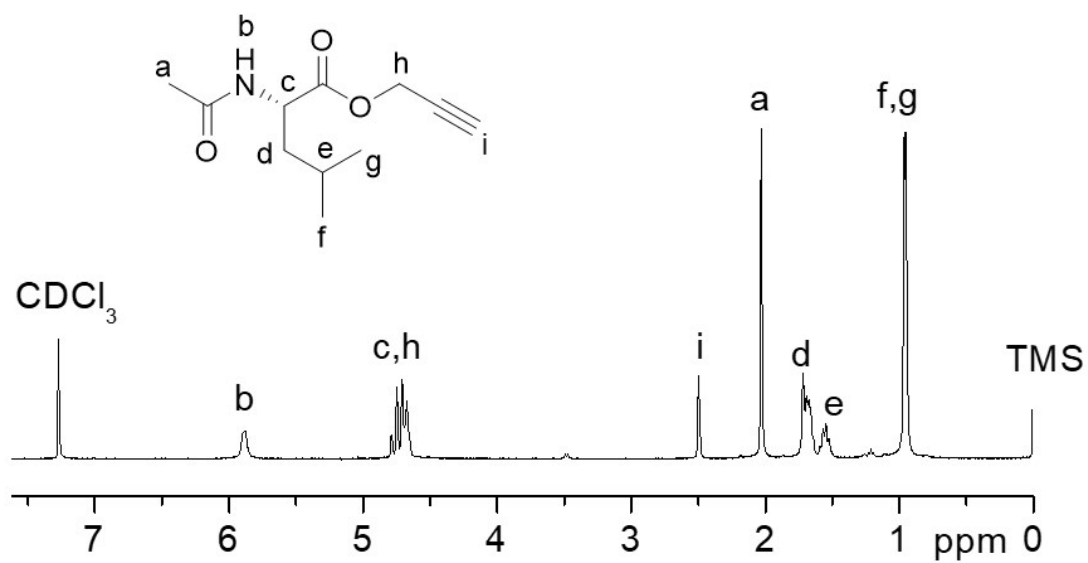


Figure S3. ¹H NMR spectrum of PAL in CDCl₃.

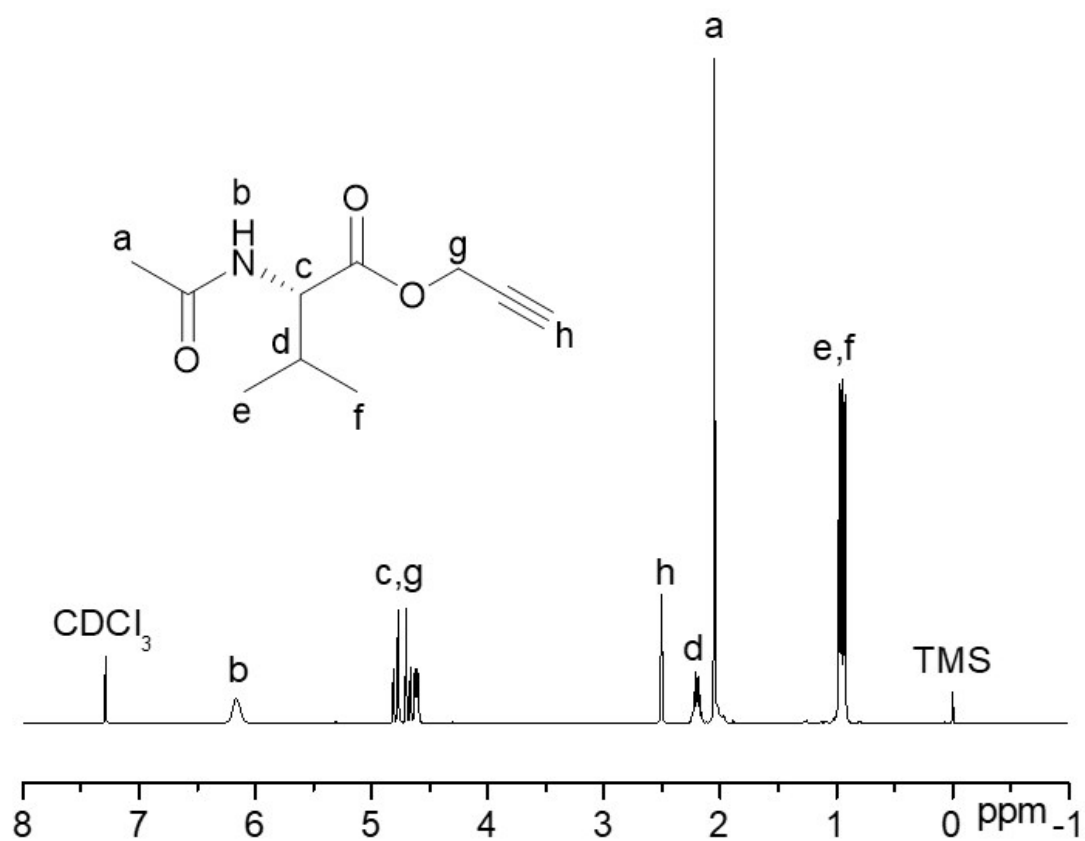


Figure S4. ¹H NMR spectrum of PAV in CDCl₃.

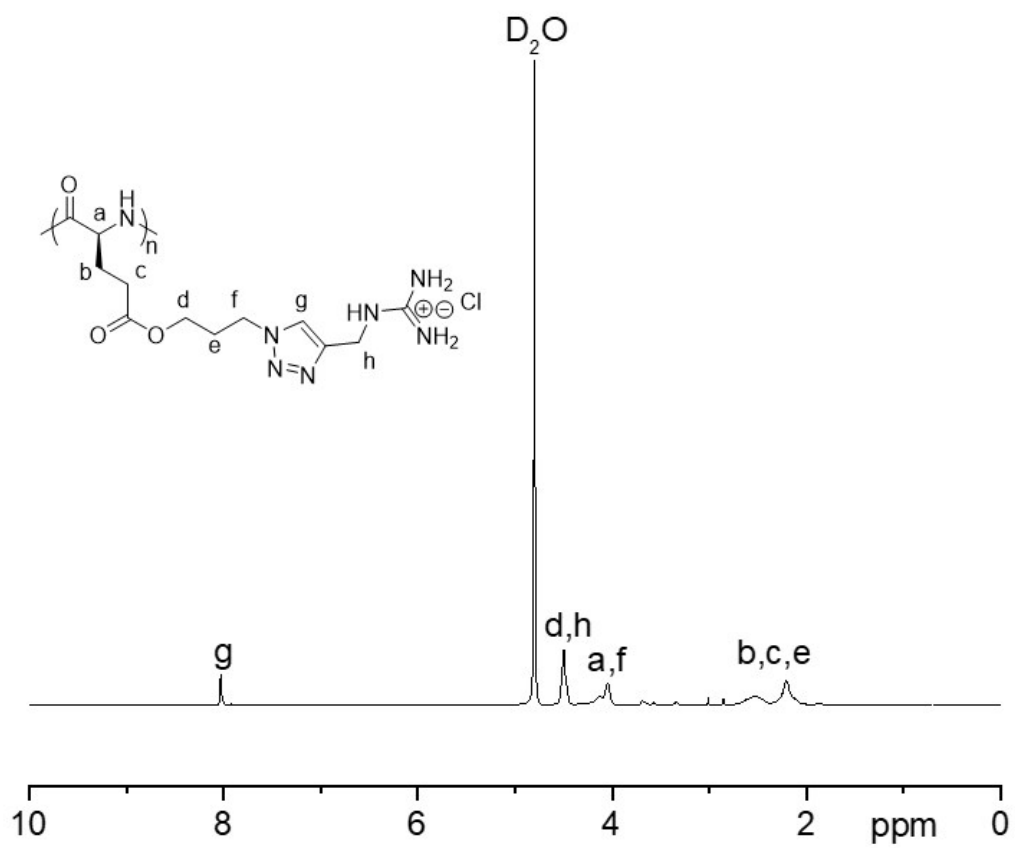


Figure S5. ^1H NMR spectrum of P1 in D_2O .

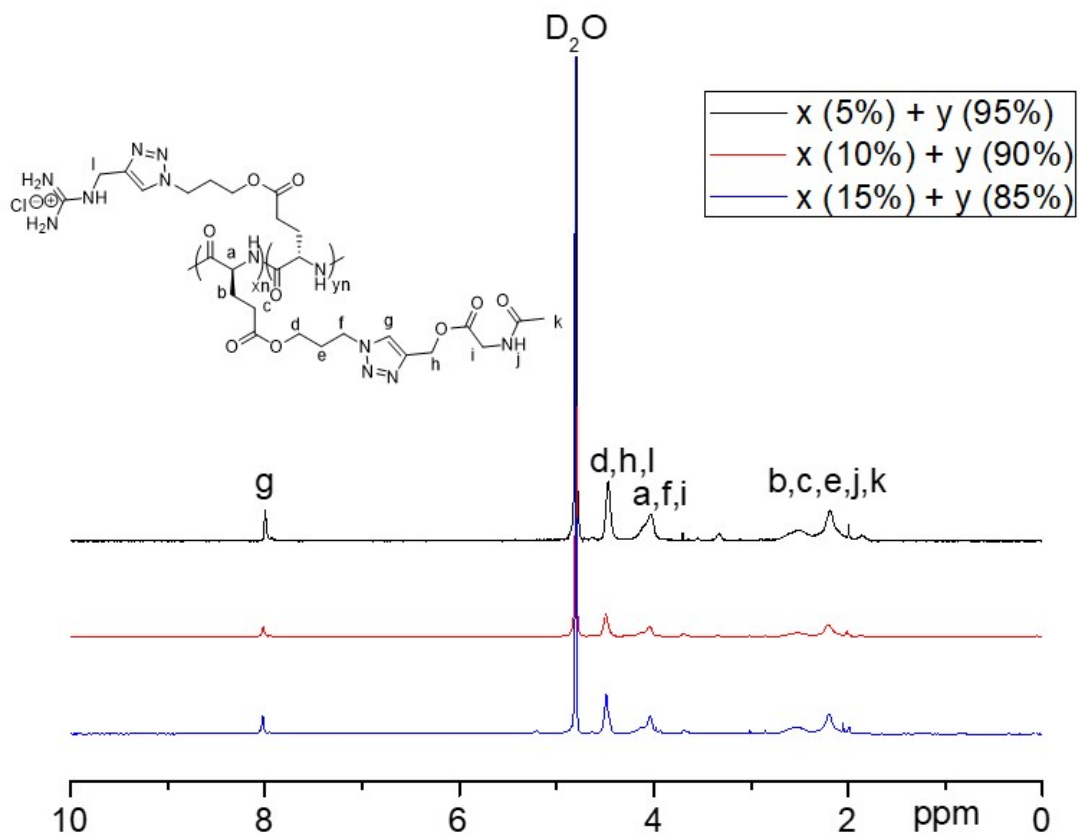


Figure S6. ^1H NMR spectra of P2-P4 in D_2O .

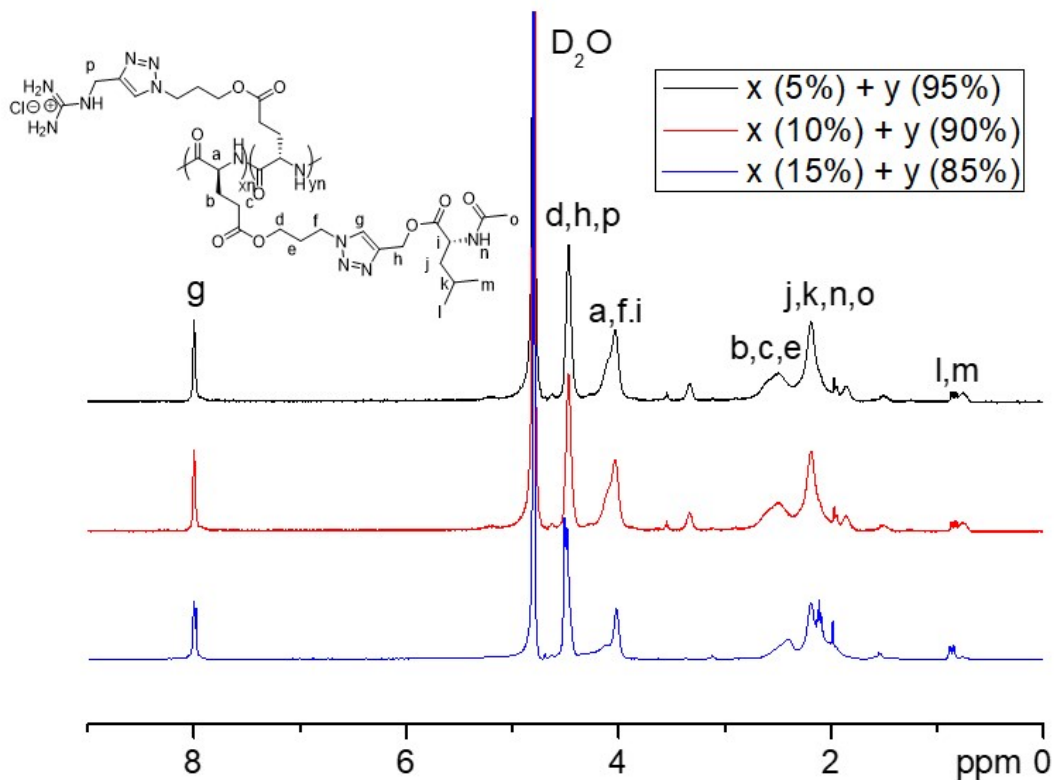


Figure S7. ^1H NMR spectra of P5-P7 in D_2O .

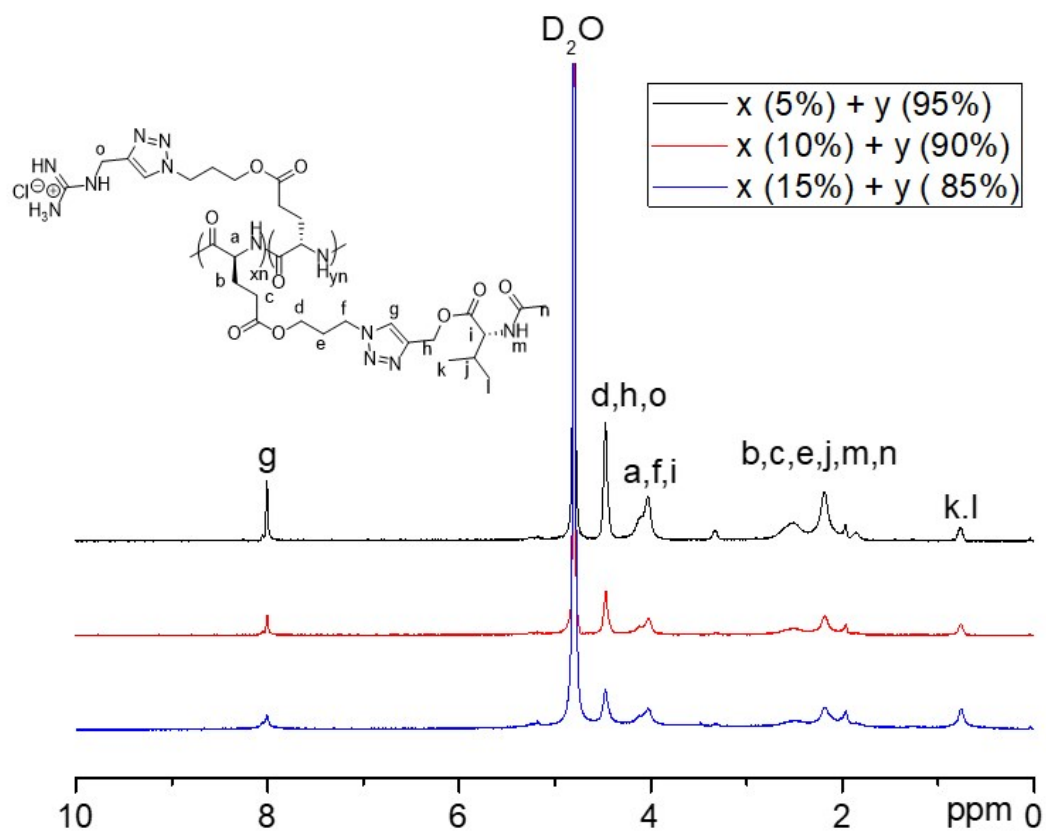


Figure S8. ¹H NMR spectra of P8-P10 in D₂O.

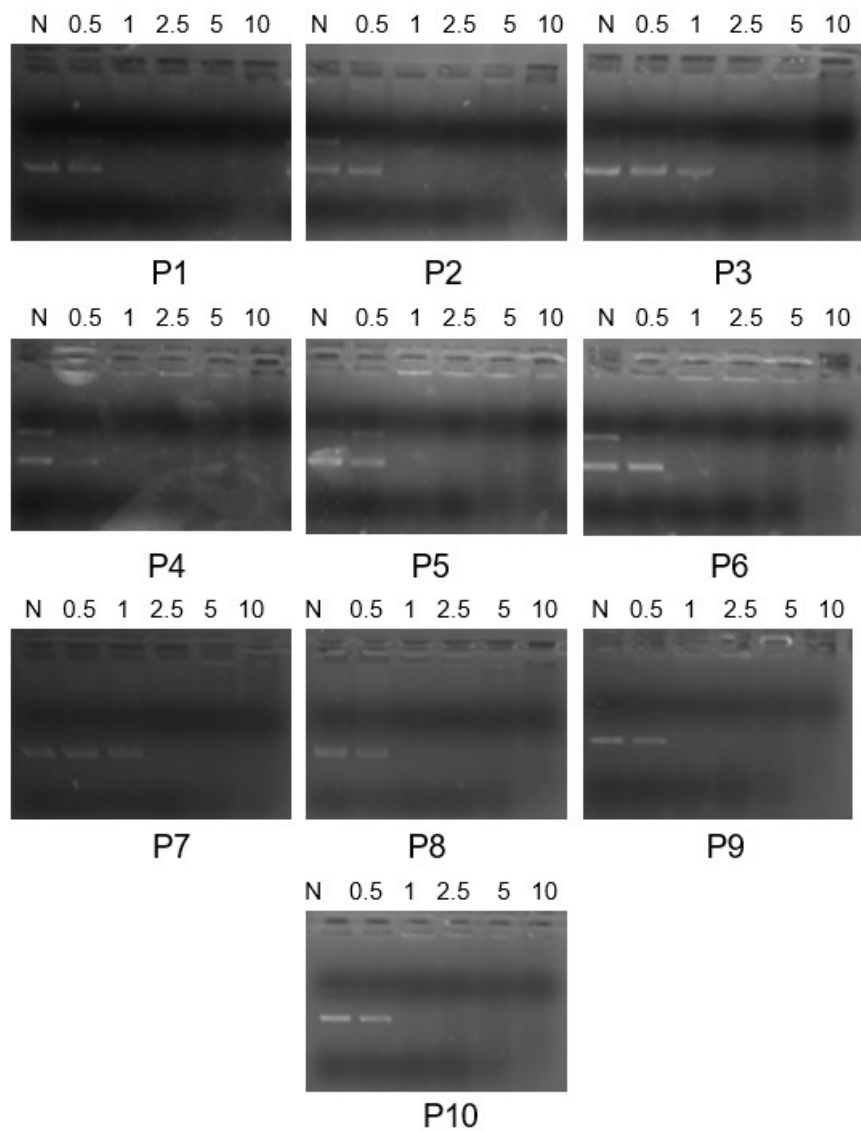


Figure S9. DNA condensation by P1-P10 at various polymer/DNA weight ratios as evaluated by the gel retardation assay (N represents naked DNA).

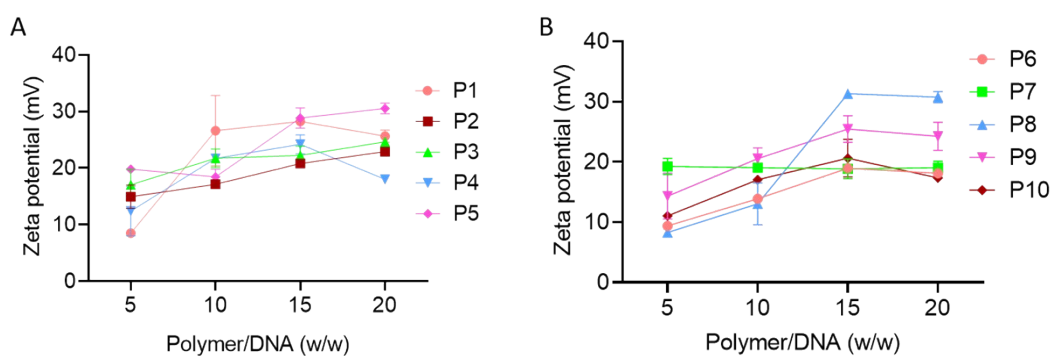


Figure S10. Zeta potential of polypeptide/DNA complexes ((A) P1-P5 (B) P6-P10) in DI water at various polymer/DNA weight ratios, as determined by the DLS measurement ($n = 3$).

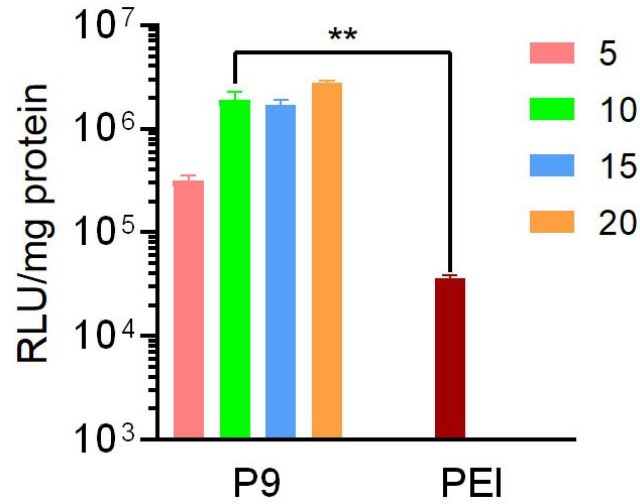


Figure S11. Transfection efficiency of P9 at various P9/DNA weight ratios or PEI in RAW 264.7 cells ($n = 3$).

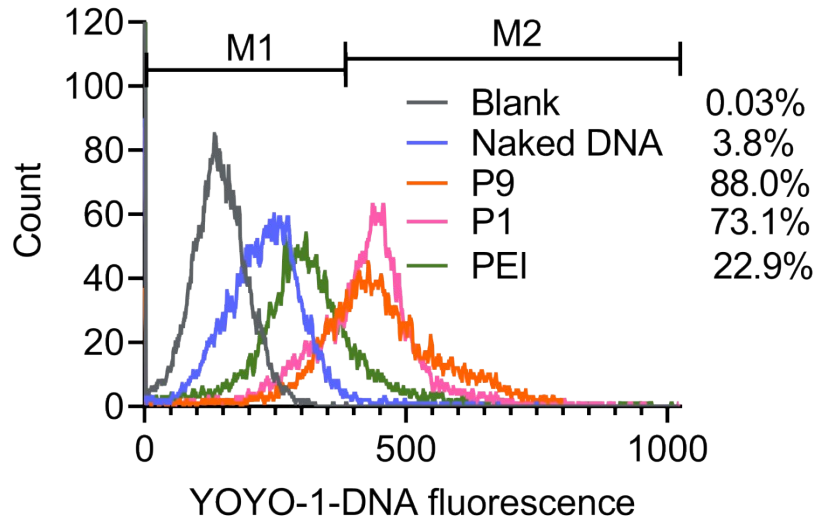


Figure S12. Cell uptake level of polypeptide/DNA complexes ($w/w = 10$) in HeLa cells as determined by flow cytometry. PEI/DNA complexes ($w/w = 1$) and naked YOYO-1-DNA were used as controls. M1 and M2 phases represent YOYO-1-DNA negative and positive cells, respectively. The percentages of M2 cells were listed.

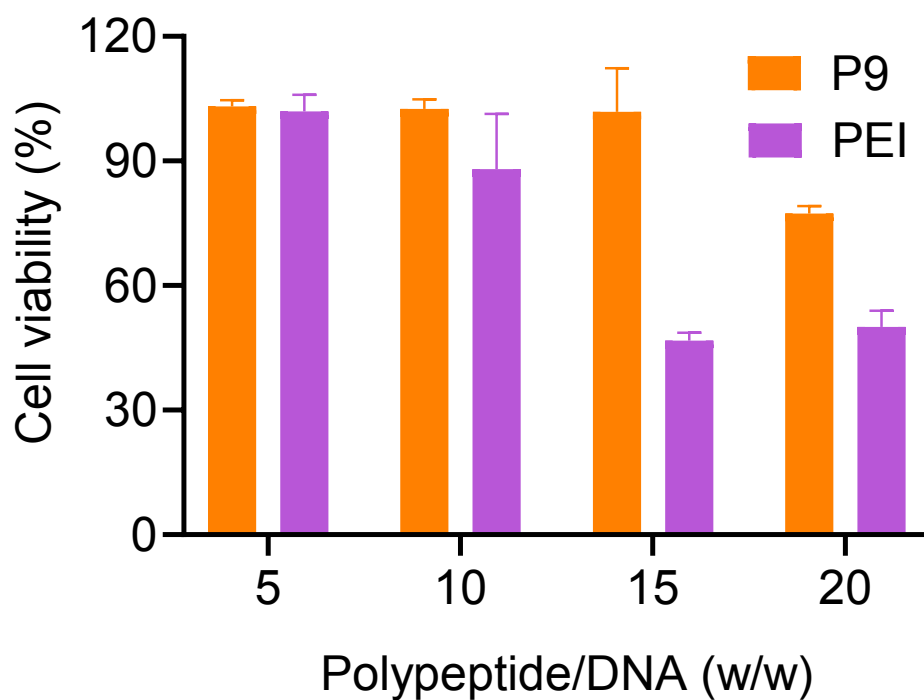


Figure S13. Cytotoxicity of P9/DNA or PEI/DNA complexes against RAW 264.7 cells ($n = 3$).

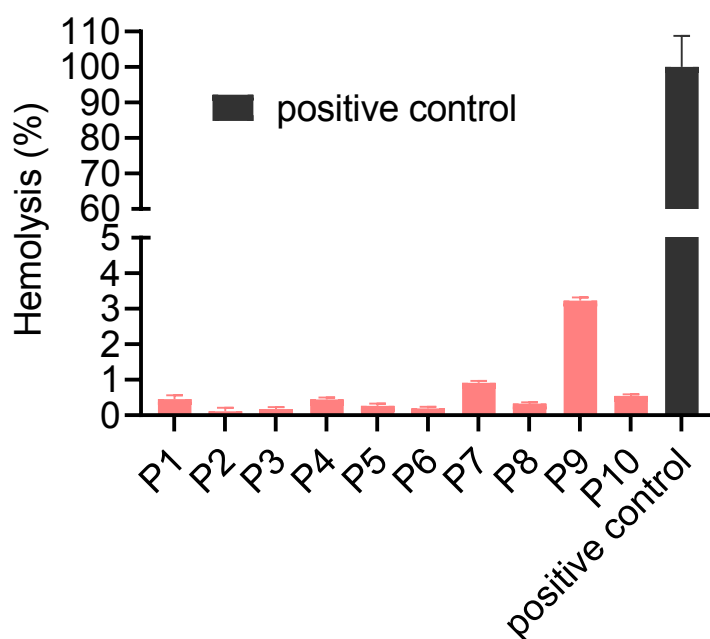


Figure S14. Hemolysis activity of polypeptides at best transfection concentration of 10 $\mu\text{g}/\text{mL}$ ($n=3$).