

Supporting Information

Fluorinated Dendrimer for TRAIL Gene Therapy in Cancer Treatment

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Key words: fluorinated dendrimer, tumor necrosis factor-related apoptosis-inducing ligand, gene
therapy, cancer treatment

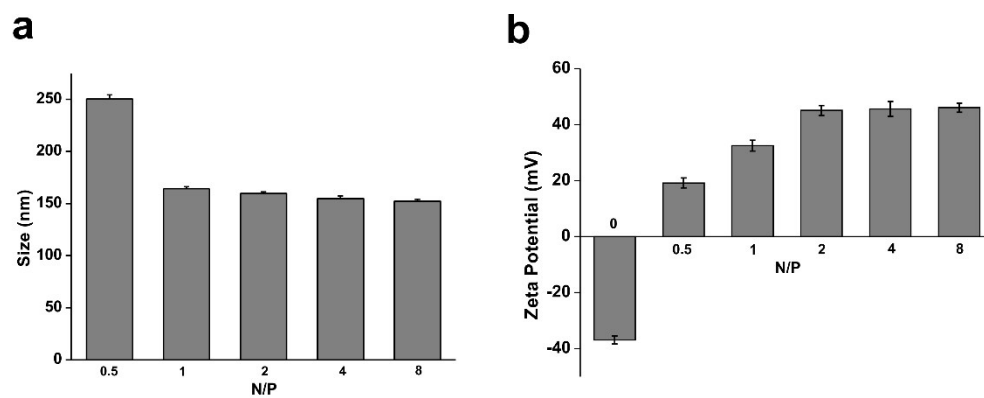


Fig.S1 (a) hydrodynamic diameter sizes and (b) zeta potential of G4 PAMAM/pTRAIL prepared at different N/P ratios. Error bars represent the s.e. (n=3).

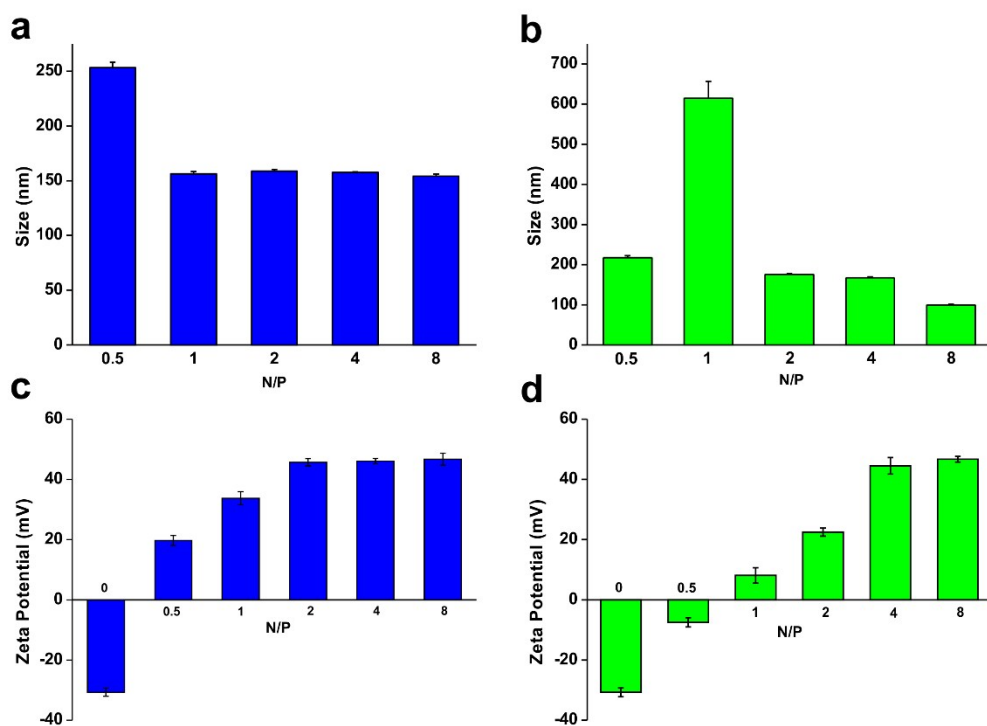


Fig.S2 (a and b) hydrodynamic diameter sizes of G4 PAMAM/pEGFP (a) and G4-F7₃₅/pEGFP (b) complexes prepared at different N/P ratios. (c and d) Zeta potential of G4 PAMAM/pEGFP (c) and G4-F7₃₅/pEGFP (d) prepared at different N/P ratios. Error bars represent the s.e. (n=3).

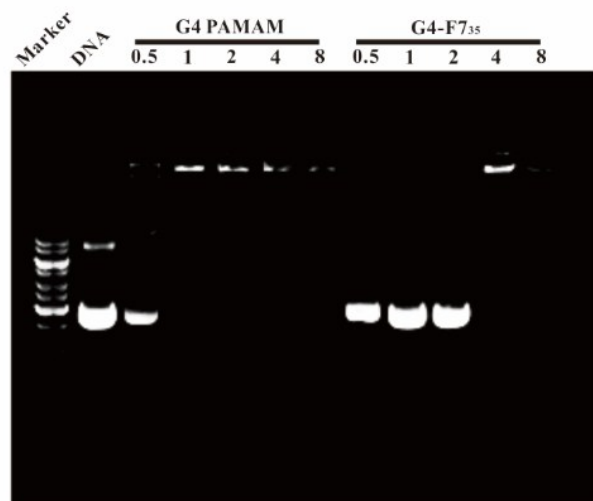


Fig.S3 Gel retardation assay to determine pEGFP binding capacity of G4 PAMAM dendrimer and G4-F7₃₅ at different N/P.

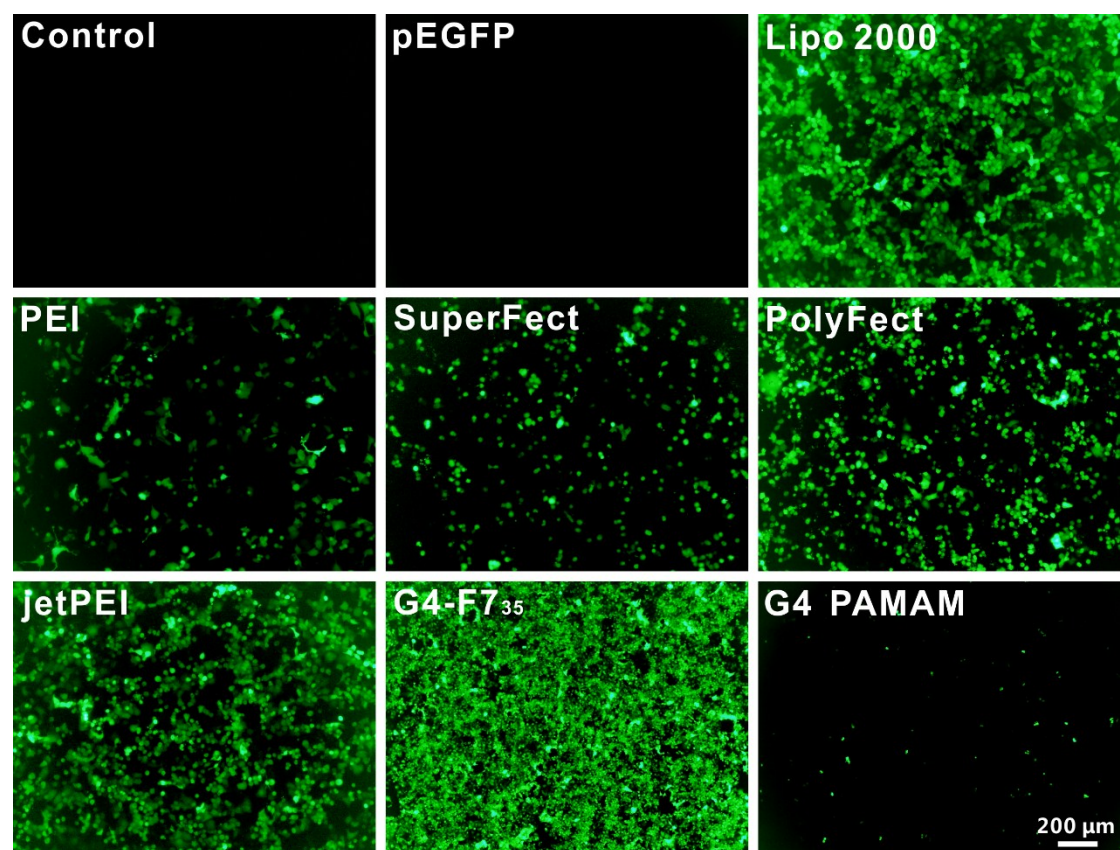


Fig.S4 EGFP expressions in HeLa cells transfected by G4-F7₃₅. Fresh medium, naked pEGFP, G4 PAMAM, PEI, Lipo 2000, SuperFect, PolyFect and jetPEI were used as controls.

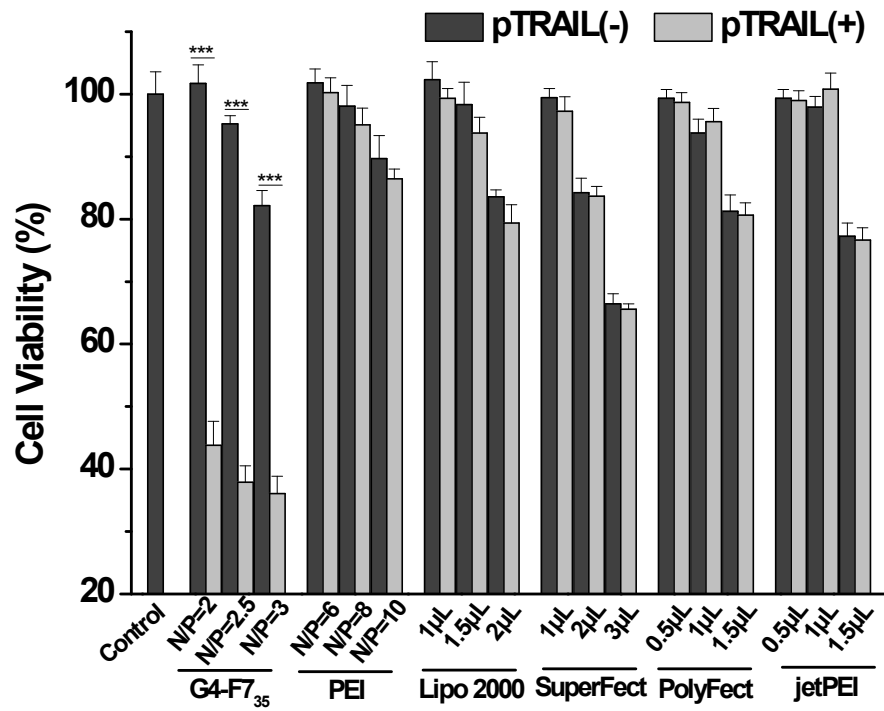


Fig.S5 Screening of the optimal transfection conditions for G4-F7₃₅/pTRAIL, PEI/pTRAIL, Lipo 2000/pTRAIL, SuperFect/pTRAIL, PolyFect/pTRAIL and jetPEI/pTRAIL complexes on MDA-MB-231 cells in a 96-well plate. 0.2 μg pTRAIL was used for each well. G4-F7₃₅ and PEI were added at different N/P ratios. Lipo 2000, SuperFect, PolyFect and jetPEI were added with different volumes. The optimal transfection conditions for G4-F7₃₅ and PEI were at N/P = 2 and 8, respectively, and that for Lipo 2000, SuperFect, PolyFect and jetPEI were 0.3, 0.2, 0.2, and 0.2 μL, respectively.