ELECTRONIC SUPPLEMENTARY INFORMATION

Bioreducible polyethylenimine nanoparticles for efficient delivery of nucleic acids

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Table S1 : Size and zeta potential measurements of DP/siRNA complexes

Samples	Size (nm) <u>+</u>	Zeta	
	S.D.	potential	
		(mV) <u>+</u> S.D.	
DP-1/siRNA	548.4±8.45	53.1±0.513	
DP-2/siRNA	450.8±12.98	37.4±0.566	
DP-3/siRNA	505.1±20.01	40.5±0.919	

Table S2: Size and zeta potential of DP nanoparticles in water and FBS

Sample ID	Average particle size in nm ± S.D.	Average particle size in nm ± S.D. (10% serum)	Average particle size in nm ± S.D. (50% serum)	Zeta potential of particles in $mV \pm S.D.$ (50% serum)
DP-1	262.5±15.64	3164± 264.3	126.7±2.902	-10.3±0.328
DP-2	160.4±4.387	2720±15.56	63.98±1.476	-9.99±0.425
DP-3	157.6±2.394	992.4±58.88	65.03±2.043	-9.71±0.76
FBS (10%)	45.56±0.719			-7.88±0.02

Table S3 : Conversion of w/w ratios into corresponding N/P ratios

w/w ratios 🔶	0.66	1.33	2.33	3.33	5	6.66
Samples						
DP-1 (N/P)	4.9	9.9	17.4	24.9	37.4	49.8
DP-2 (N/P)	4.8	9.7	16.9	24.2	36.3	48.4
DP-3 (N/P)	4.7	9.4	16.5	23.6	35.4	46.8
bPEI25kD (N/P)	5.1	10.2	17.9	25.6	38.3	51



Figure S1. Correlation curves of DP nanoparticles



0.2 0.1 0.0 0.1 10 1000 1000000 Time (µs)

Figure S2. Correlation curves of DP/pDNA complexes





Figure S3. Correlation curves of DP/pDNA complexes in 10% FBS.