Supplementary Material (ESI) for Molecular BioSystems

In vivo siRNA delivery with dendritic poly(L-lysine) for the treatment of hypercholesterolemia

Supplemental Information

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Table S1 Effects of C/A ratio on the complex size and its ζ-potential. Ten μg/ml double-stranded DNA (dsDNA) and KG6 at various C/A ratios were mixed in 700 μl of sterile solution containing 5% dextrose and 0.5 mM sodium chloride. The sizes and ζ-potentials of each complex were measured with a Zetasizer Nano ZS (Malvern Instruments Ltd., Worcestershire, United Kingdom). The dsDNA had the following sequences: 5'-GTCATCACACTGAATACCAAT-3', 5'-ATTGGTATTCAGTGTGATGACAC-3', which was the same to si-ApoBI sequence with emplacements of Us with Ts).

	C/A ratio of dsDNA/KG6 complex						
	0	0.5	1.0	2.0	4.0	8.0	16.0
Size (nm)	n.d.	151.7 ± 0.4	176.5 ± 7.9	185.2 ± 6.7	145.8 ± 2.8	168.4 ± 9.9	159.8 ± 6.1
ζ-potential (mV)	n.d.	-23.0 ± 0.3	16.6 ± 0.4	29.6 ±0.9	27.8 ± 1.0	30.4 ± 0.9	25.2 ± 0.9

Data are means ± S.E.

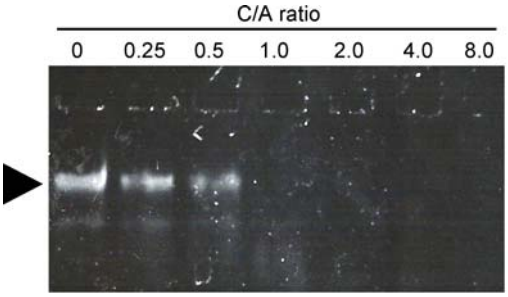

Fig. S1 Effects of C/A ratio on binding ability of KG6 with siRNA. si-ApoBI (200 ng) and KG6 at various C/A ratios were mixed in 10 μl of sterile water, and then the complexes were applied to 20% (w/v) native polyacrylamide gel in TBE (45 mM Tris-Borate and 1 mM EDTA, pH 8.0) buffer. After 60 min electrophoresis at 100 V, the gel was stained with SYBR Gold. The arrowhead on the left of the gel indicated position of the naked siRNA.