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

Supplemental Information

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† This article is part of a Molecular BioSystems ‘Emerging Investigators’ issue highlighting the work of outstanding young scientists at the chemical- and systems-biology interfaces.
**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’-ATTGGTATTTCAGTGATGACAC-3’, which was the same to si-ApoB I sequence with emplacements of Us with Ts).

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

Data are means ± S.E.

**Fig. S1** Effects of C/A ratio on binding ability of KG6 with siRNA. si-ApoB I (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.