Supporting Information for

A Ternary Complex Consisting of DNA, Polycation, and a Natural Polysaccharide of Schizophyllan to Induce Cellular Uptake by APCs

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Figure S1.

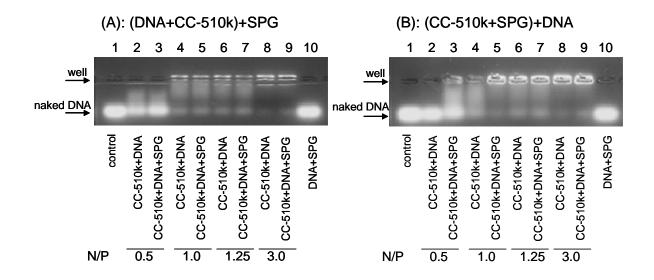


Figure S1. Changes of the gel electrophoresis patterns when N/P ratio was decreased, comparing the polycation/DNA systems and the ternary polycation/DNA+SPG mixtures. (A) DNA and CC-510k were first mixed and then SPG was added. (B) SPG and CC-510k were first mixed and then DNA was added.

Figure S1 shows the gel electrophoresis pattern when DNA and CC-510k were first mixed (A) and when SPG and CC-510k were first mixed (B). The well positions and the naked-DNA bands are indicated by arrows. When compared the lane 5 (N/P = 1.0) between (A) and (B), it seems that most DNA is present at the well when SPG and CC-510k were first mixed, on the other hand, there is a broad band observed when DNA and CC-510k were first mixed. These data indicate the necessity that SPG exist in the system before formation of the polyion complex of DNA and CC-510k, because large aggregation of the polyion complex would be formed when DNA and CC-510k were first mixed. Therefore, we selected the third method.

Figure S2.

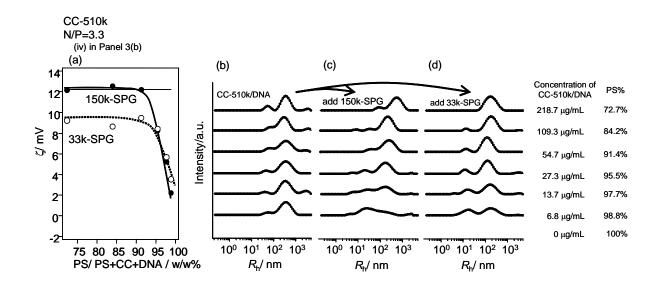


Figure S2. The polysaccharide composition (PS%) dependence of ζ for the ternary mixtures and changes of the particle size distribution upon mixing with 150k-SPG or 33k-SPG for the CC-510k/DNA systems at N/P = 3.3. Each curve lining up sideways at the same height has the same CC-510k/DNA concentration as presented at the right side.

Figure S3.

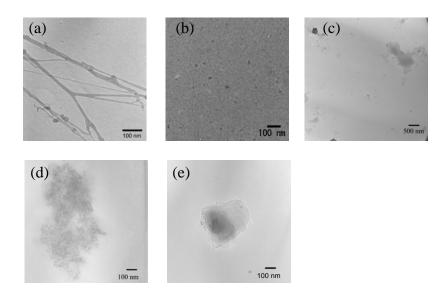


Figure S3. TEM images of SPG (a), DNA (b), CC-510k (c), CC-510k/DNA complex (d), and DNA/CC-510k/SPG (e).