

## **Supplemental Material for**

The Mechanism of Polyplexes Internalization into Cells: Testing the  
GM1/Caveolin-1-Mediated Lipid Raft Mediated Endocytosis Pathway

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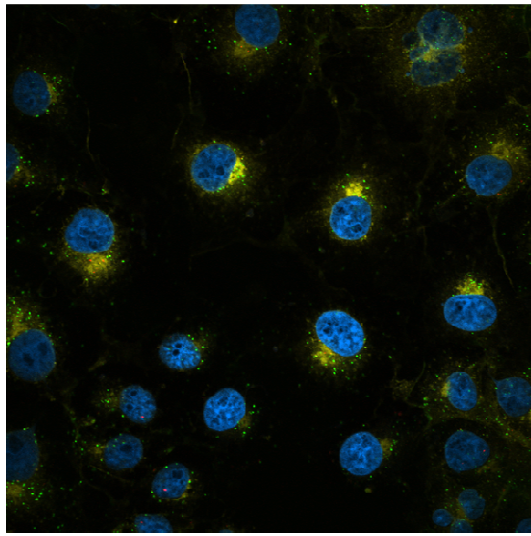
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**Fig. S1** CTB colocalization with polyplexes in Cos-7 cells. CTB was labeled by AF-555 (yellow), G5 and G7 were labeled by AF-488 (green), and plasmid luciferase (Luc.) was labeled by Cy5 (red). Cos-7 cells were first transfected by G5 or G7 polyplexes (N/P ratio at 10) for 3 h. The cells were rinsed and then incubated with 1 µg/mL CTB for 1h. Cell nuclei were stained by DAPI resulting in blue fluorescence in the images.

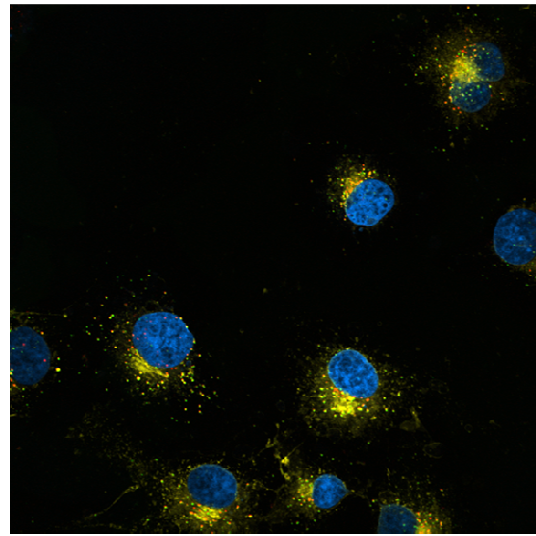
**Fig. S2** Images of GFP expression 48h after transfection by G7 dendrimers at an N/P ratio of 10 on Cos-7, 293A, C6, HeLa, KB and HepG2 cells. Left: bright field images; Right: Fluorescent images.

**Table S1** The percentage of the positive uptake cell populations for CTB, G5 polyplexes and G7 polyplexes in the six different cell lines before and after the treatment of cells with GM1.  
(The six cell lines: C6, HepG2, HeLa, KB, Cos-7 and 293A)

**Fig. S1**

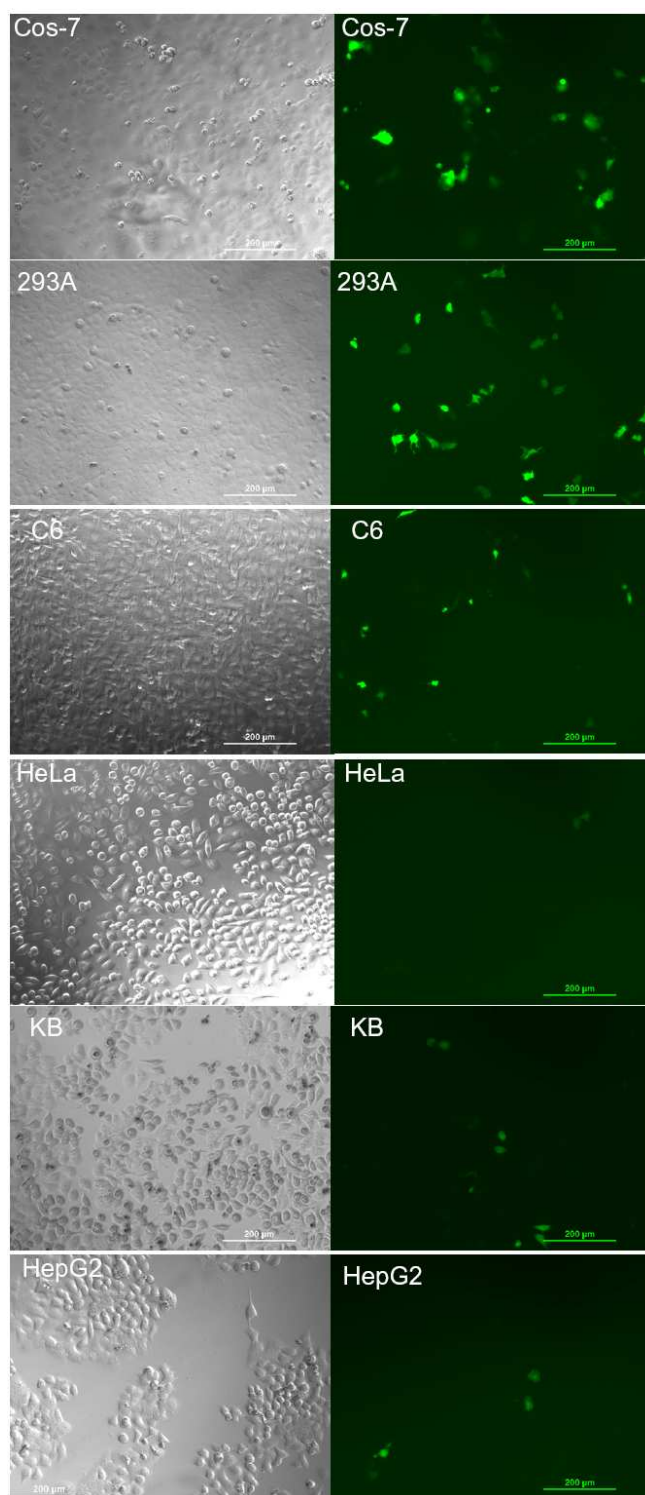


**G5 pp-CTB colocalization**



**G7 pp-CTB colocalization**

**Fig. S2**



**Table S1**

	<b>CTB</b>	<b>GM1 + CTB</b>	<b>G5pp</b>	<b>GM1 + G5pp</b>	<b>G7pp</b>	<b>GM1 + G7pp</b>
<b>C6</b>	<b>8%</b> <b>±1%</b>	<b>100%</b> <b>±1%</b>	<b>100%</b> <b>±1%</b>	<b>100%</b> <b>±1%</b>	<b>100%</b> <b>±1%</b>	<b>100%</b> <b>±1%</b>
<b>HepG2</b>	<b>12%</b> <b>±3%</b>	<b>87%</b> <b>±6%</b>	<b>55%</b> <b>±1%</b>	<b>59%</b> <b>±1%</b>	<b>60%</b> <b>±1%</b>	<b>65%</b> <b>±1%</b>
<b>HeLa</b>	<b>74%</b> <b>±2%</b>	<b>98%</b> <b>±3%</b>	<b>99%</b> <b>±1%</b>	<b>94%</b> <b>±2%</b>	<b>99%</b> <b>±1%</b>	<b>96%</b> <b>±2%</b>
<b>KB</b>	<b>37%</b> <b>±7%</b>	<b>96%</b> <b>±1%</b>	<b>69%</b> <b>±3%</b>	<b>72%</b> <b>±2%</b>	<b>72%</b> <b>±2%</b>	<b>72%</b> <b>±1%</b>
<b>Cos-7</b>	<b>100%</b> <b>±1%</b>	<b>99%</b> <b>±1%</b>	<b>98%</b> <b>±1%</b>	<b>98%</b> <b>±1%</b>	<b>91%</b> <b>±3%</b>	<b>87%</b> <b>±2%</b>
<b>293A</b>	<b>100%</b> <b>±1%</b>	<b>99%</b> <b>±1%</b>	<b>94%</b> <b>±1%</b>	<b>98%</b> <b>±1%</b>	<b>93%</b> <b>±1%</b>	<b>99%</b> <b>±1%</b>