

Supporting Information for

A digital microfluidic droplet generator produces self-assembled supramolecular nanoparticles for targeted cell imaging

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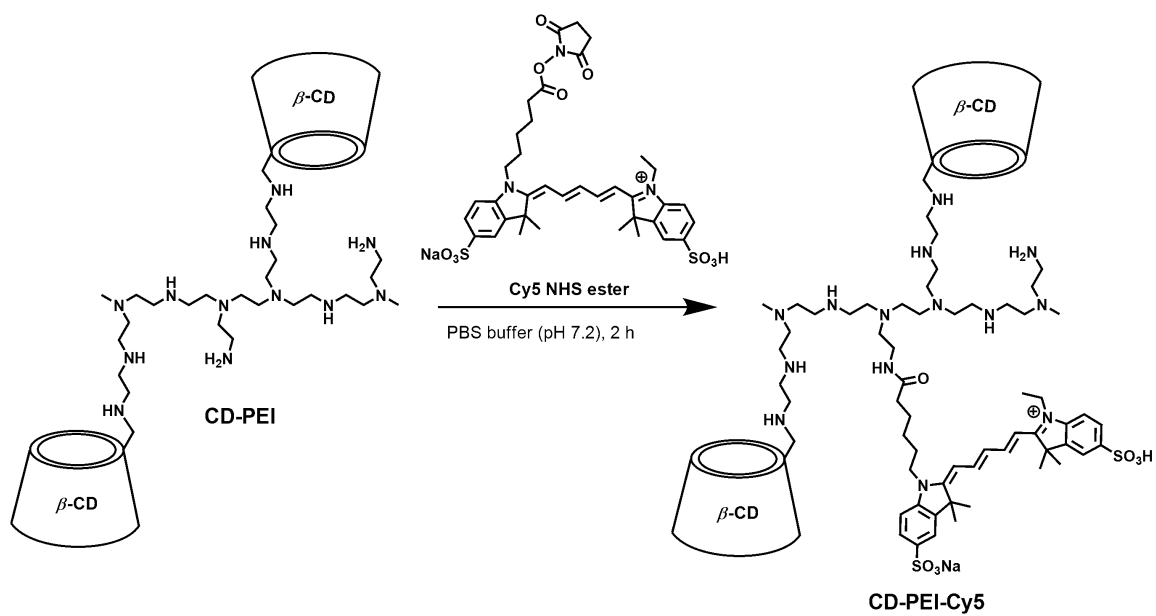


Figure S1 Synthesis of CD-PEI-Cy5 4 in PBS buffer (pH 7.2) at room temperature.

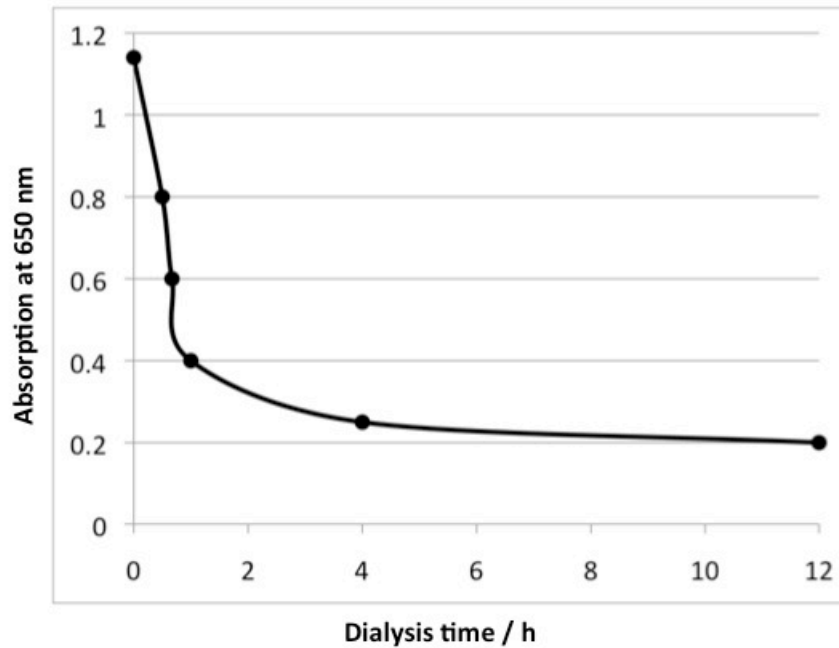


Figure S2 The UV/vis absorption of CD-PEI-Cy5 4 solution (at 650 nm) in the dialysis cassette (from 0 to 12h).

The SNPs synthesized by digital microfluidic droplet generator (DMDG) and conventional mixing with micropipettes manually are characterized by TEM and DLS. The TEM images showed the spherical morphology of SNPs in both cases. The size distribution data of SNPs synthesized by DMDG and conventional manual mixing are summarized in the **Table S1** for comparison.

Table S1 TEM and DLS Analyses of SNP size distribution.

	DMDG		Manual Mixing ^a	
Ad-PAMAM/CD-PEI ratios (mol/mol)	TEM (nm)	DLS (nm)	TEM (nm)	DLS (nm)
0.5	36.7 ± 5.7	36.0 ± 4.9	32 ± 7	38 ± 9
1.5	110 ± 9.2	121 ± 11.9	104 ± 16	115 ± 15
2.5	148 ± 9.5	182 ± 16.2	N/A	N/A
4	344 ± 15.3	443.0 ± 21.3	340 ± 46	378 ± 27

^a Wang H, Wang S T, Su H, Chen K J, Armijo A L, Lin W Y, Wang Y J, Sun J, Kamei K, Czernin J, Radu C G, and Tseng H R 2009 *Angew. Chem. Int. Ed.* **48** 4344–48.