Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B

Lipid layer engineering of Poly(lactide-co-glycolide) Nanoparticles to control their uptake and intracellular co-localization.

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Supporting Information

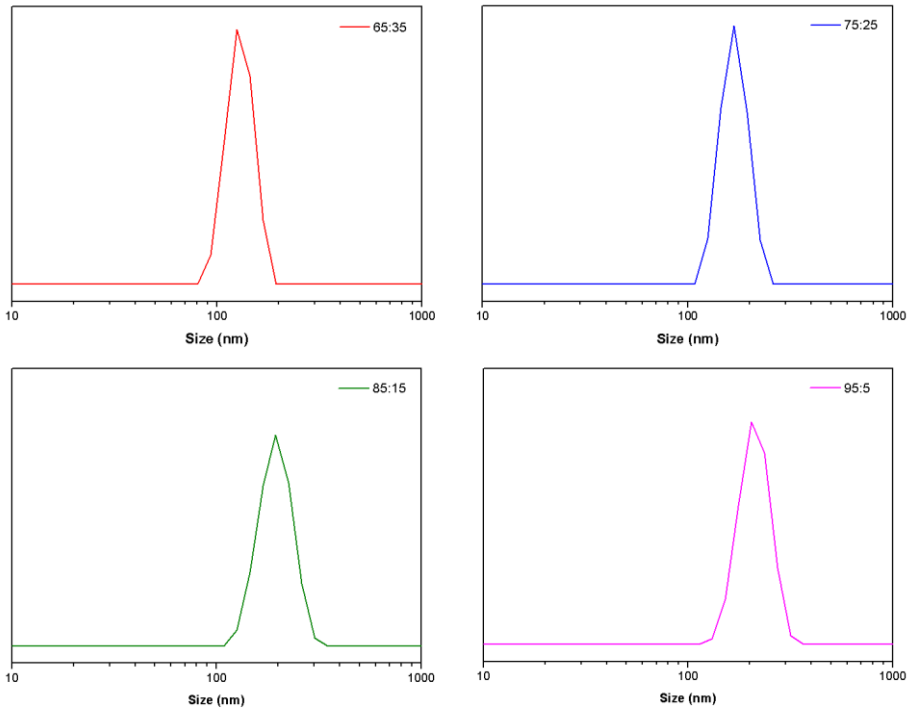

Figure S1. Dynamic Light Scattering (DLS) size distribution of prepared DOPC/DOPS lipid vesicles at different molar compositions: 65:35 (red), 75:25 (blue), 85:15 (green) and 95:5 (pink).

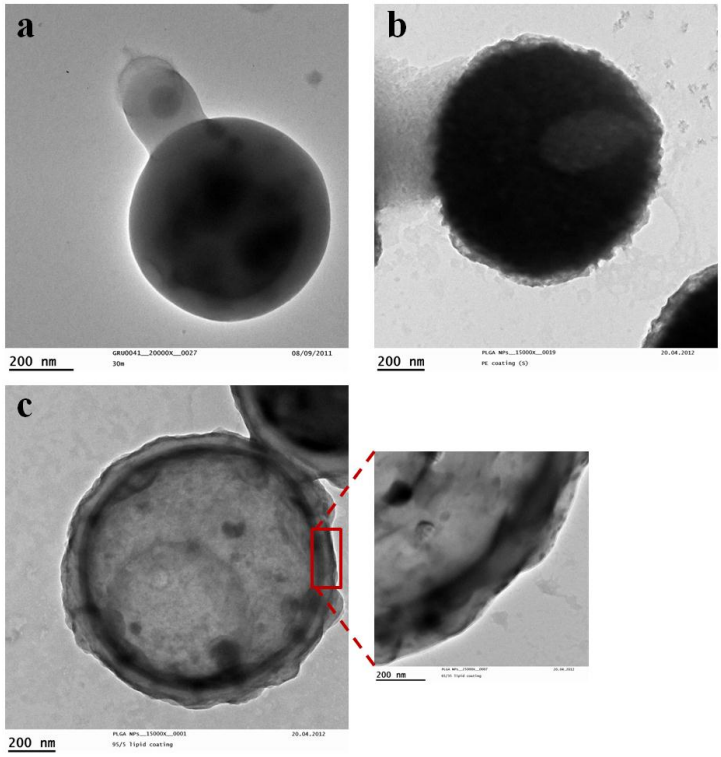

Figure S2. TEM images of PLGA NPs: (a) PEI stabilized; (b) PEMs coated and (c) 65:35 lipid coated stained with sodium tungstate.

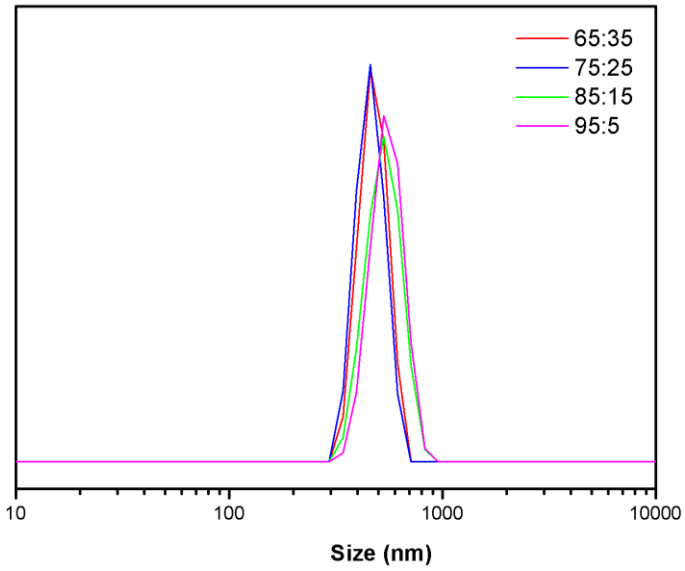

Figure S3. Dynamic Light Scattering (DLS) size distribution of DOPC/DOPS coated PLGA NPs with the fourlipid molar compositions employed: 65:35 (red), 75:25 (blue), 85:15 (green) and 95:5 (pink).

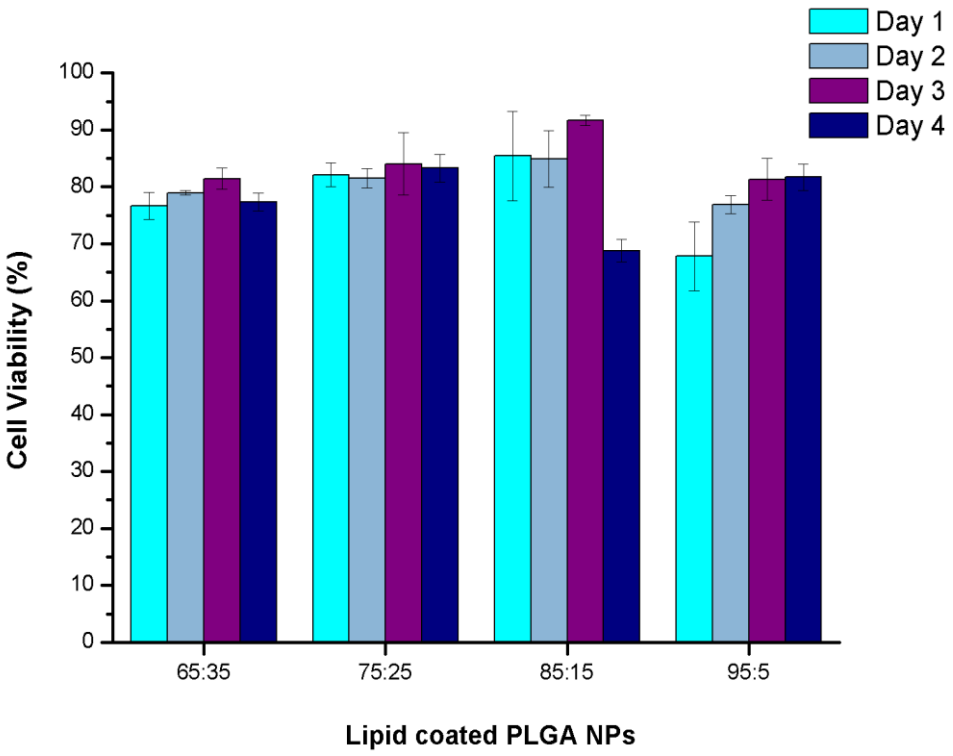

Figure S4. Proliferation of HepG2 cells incubated with DOPC/DOPS coated PLGA NPs with different lipid molar ratios (65:35, 75:25, 85:15 and 95:5).

Cell proliferation of HepG2 was studied by MTT assay. Firstly, around 5000 HepG2 cells were planted into each well of 96-well plates, after 24 hours lipid coated PLGA NPs were added into culture media. During 4 days of co-incubation 20 ml of MTT solution (5 mg ml^{-1} in 10 mM PBS) was added into each well of the plates. After 3 hours the absorbance was measured by means of a plate reader at 550 nm. The results displayed are for NPs final concentration in cells of 100 mg mL^{-1} after 1, 2, 3 and 4 days of exposure.