Supplementary information for:

Effects of Ligands with Different Water Solubilities on Self-Assembly and Properties of Targeted Nanoparticles

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1. Gel Permeation Chromatography (GPC) on TL-conjugated and non-conjugated PLGA-PEG copolymers

Polymer	Mn	Mw	PID
PLGA	40,066	54,103	1.35
PEG	4,603	5,221	1.13
PLGA-PEG	47,751	57,703	1.21
PLGA-PEG-Folate	49,551	59,789	1.20
PLGA-PEG-RGD	50,005	61,002	1.22

2. MALDI-TOF to verify conjugation of PEG-RGD and PEG Folate.



Mass (m/z)



Note: No free folate or free RGD was observed.



3. UV-VIS to quantify amount of folate present on PLGA-PEG-Folate

Yellow/green colors correspond to calibration points and red corresponds to PLGA-PEG-Folate.

4. 1H NMR on PLGA-PEG-Folate



Among other factors, PLGA-PEG-Folate and PLGA-PEG-RGD conjugation efficiencies might affect the accuracy of the comparison of expected versus detected number of folate and RGD molecules on the nanoparticle surface. However, EDC/NHS reactions are known to high efficiencies up to 95% (Lee, S., Murthy,N., Biochem and Biophys Res Comm., 360 p275-9, 2007).