**Supplemental Table S2. Characterization and physicochemical properties of PLA, PLA-PEG and PLA-(PEG-PPG-PEG) block copolymers and nanoparticles**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sample** | **GPC of Copolymersa** | **Hydrodynamic Diameterb, nm** | **Zeta Potential (ζ)** | **Peptide/****Polymer** **Ratioc** **(w/w)** | **EEd%** | **Particle Size After Peptide Loadingb, nm** | **Zeta Potential After Peptide Loading**e**, (ζ)** |
| **Mn** | **Mw** | **Mw/Mn** |
| **PLA** | 59745 | 72487 | 1.213 | 125 | -15.8 | 1:10 | 42 | 132 | -30 |
| **PLA-PEG4000** | 72479 | 78416 | 1.082 | 114 | -3.3 | 1:10 | 65 | 111 | -20 |
| **PLA-(PEG-PPG-PEG)12.5K**  | 80256 | 85678 | 1.066 | 120 | -3.1 | 1:10 | 64.5 | 118 | -22 |

aGel permeation chromatography (GPC) of PLA-PEG block copolymers at room temperature using Viscoteck GPC system with THF as mobile phase.

bMeasured by NTA (Nanoparticles Tracking Analysis, NS 500, Nanosight). Mean value obtained from determinations of 3 separate preparations. SD was <10% of the mean.

cConcentration of the polymer was taken as 20mg/ml.

dEncapsulation efficiency expressed as a percentage mean of 3 determinants of GO-203 recovered in NPs compared with theoretical load. SD was <10% of the mean.

eMean value obtained from determinations of 3 separate preparations. SD was <10% of the mean.