High-Yield Synthesis of Monomeric LMWP(CPP)-siRNA Covalent Conjugate for Effective Cytosolic Delivery of siRNA

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Supplementary Files

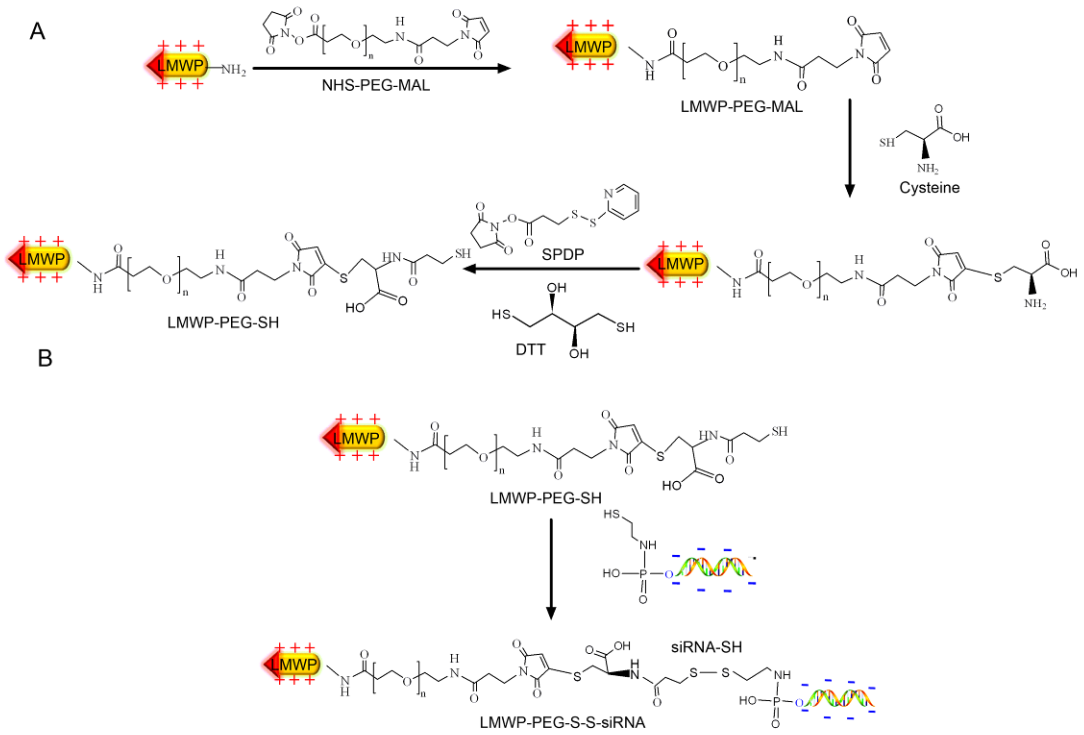

Figure S1. The synthetic routes for the LMWP-PEG-S-S-siRNA conjugate. A) The PEGylation for the LMWP with NHS-PEG-Mal （Mw=3500 Da）to make LMWP-PEG-SH; B) Synthesis of the LMWP-PEG-S-S-siRNA conjugate via cleavable linkage.

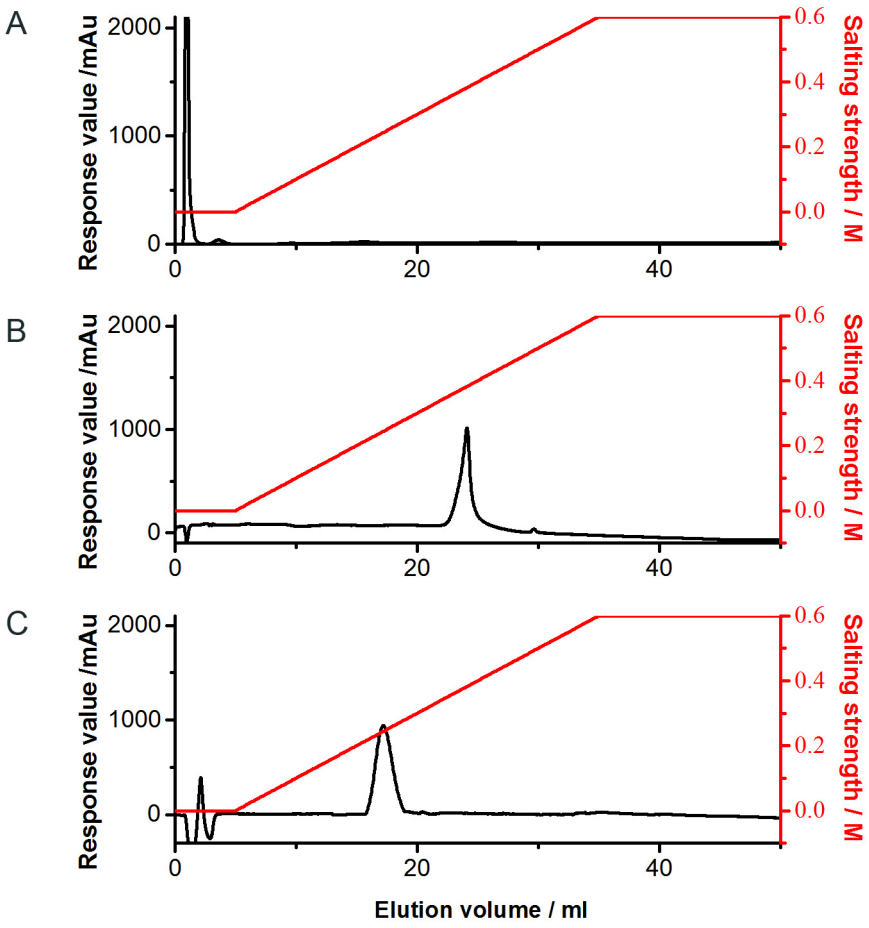

Figure S2. DEAE chromatograms for the A) LMWP, B) MOE and C) LMWP-PEG-S-S-MOE conjugate, respectively.

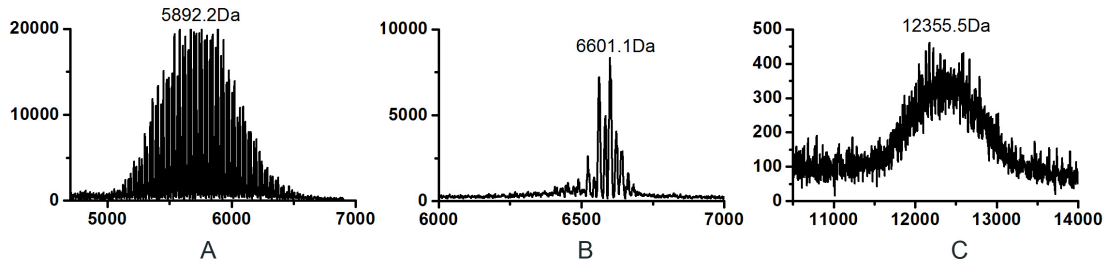

Figure S3. MALDI-TOF results for the A) LMWP-PEG-SH, B) MOE and C) LMWP-PEG-S-S-MOE.

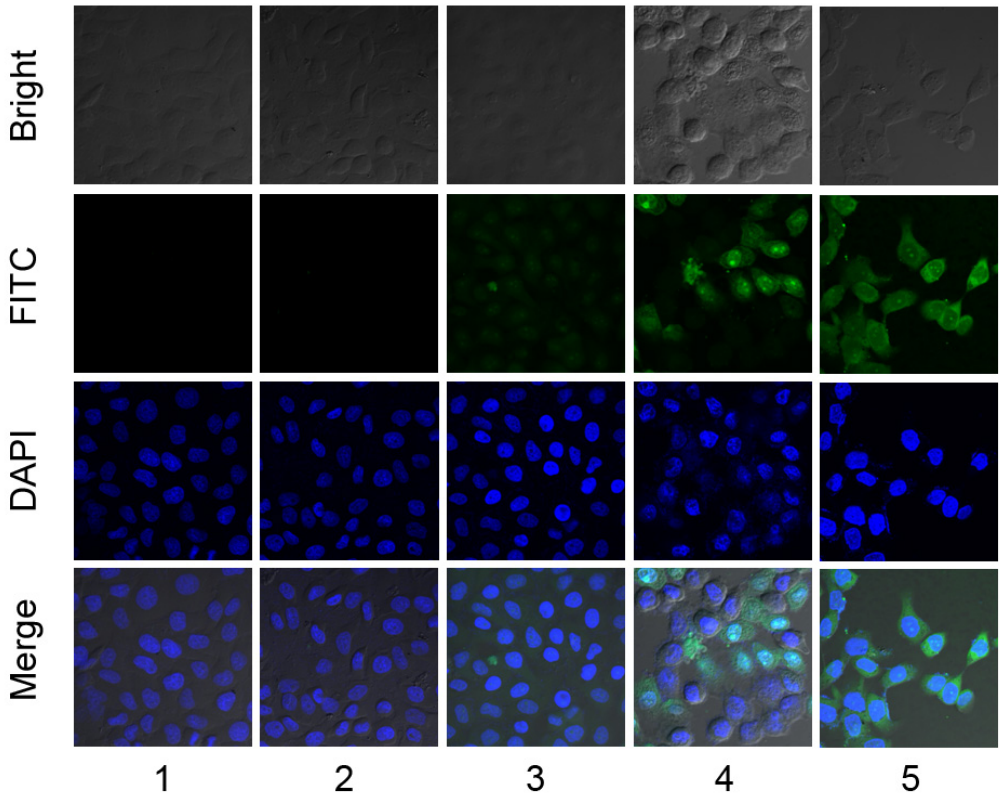

Figure S4 Cell uptake confocol microscopy studies performed on MDA-MB-231 cells using samples containing (1) PBS, (2) MOE alone, (3) MOE and Lipofecter complex, (4) physical mixture (molar ratio: 1:1) of MOE and LMWP, and (5) the LMWP-PEG-S-S-MOE conjugate. For comparison, LMWP concentration and molar ratio of LMWP vs. MOE employed in all of these studies were maintained identical.