A Prodrug-type, MMP-2-targeting Nanoprobe for Tumor Detection and Imaging

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Supplementary Materials

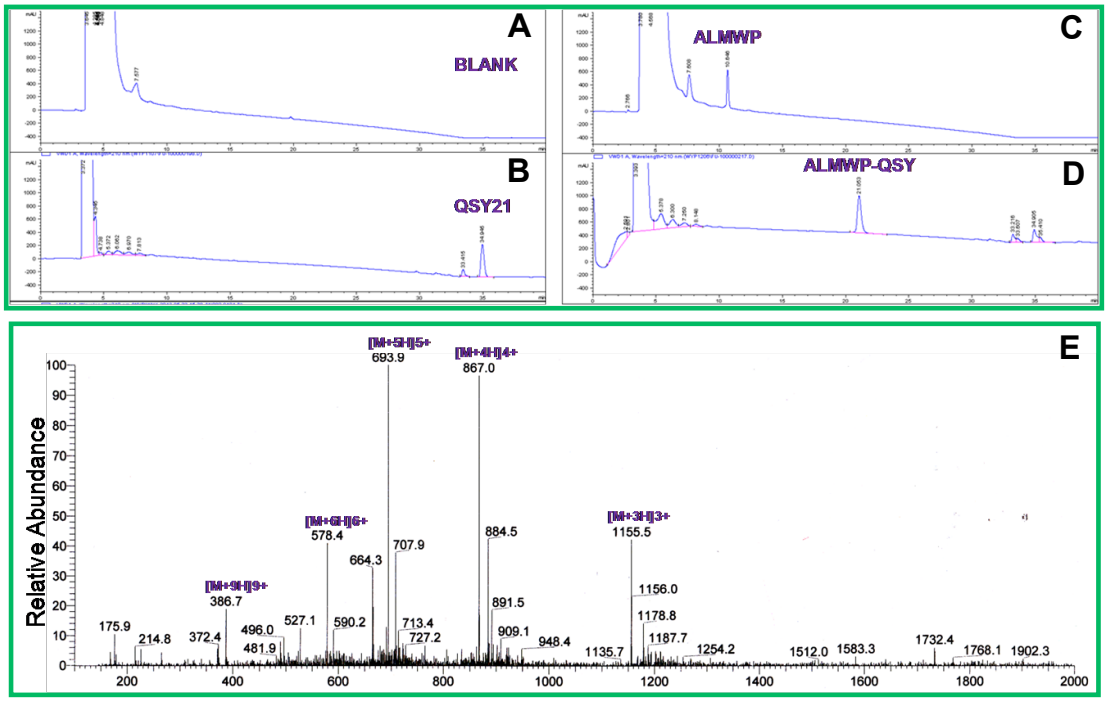

Figure S1. Characterization of the ALMWP-QSY (MW 3463) by HPLC (A-D) and mass spectroscopy (E).

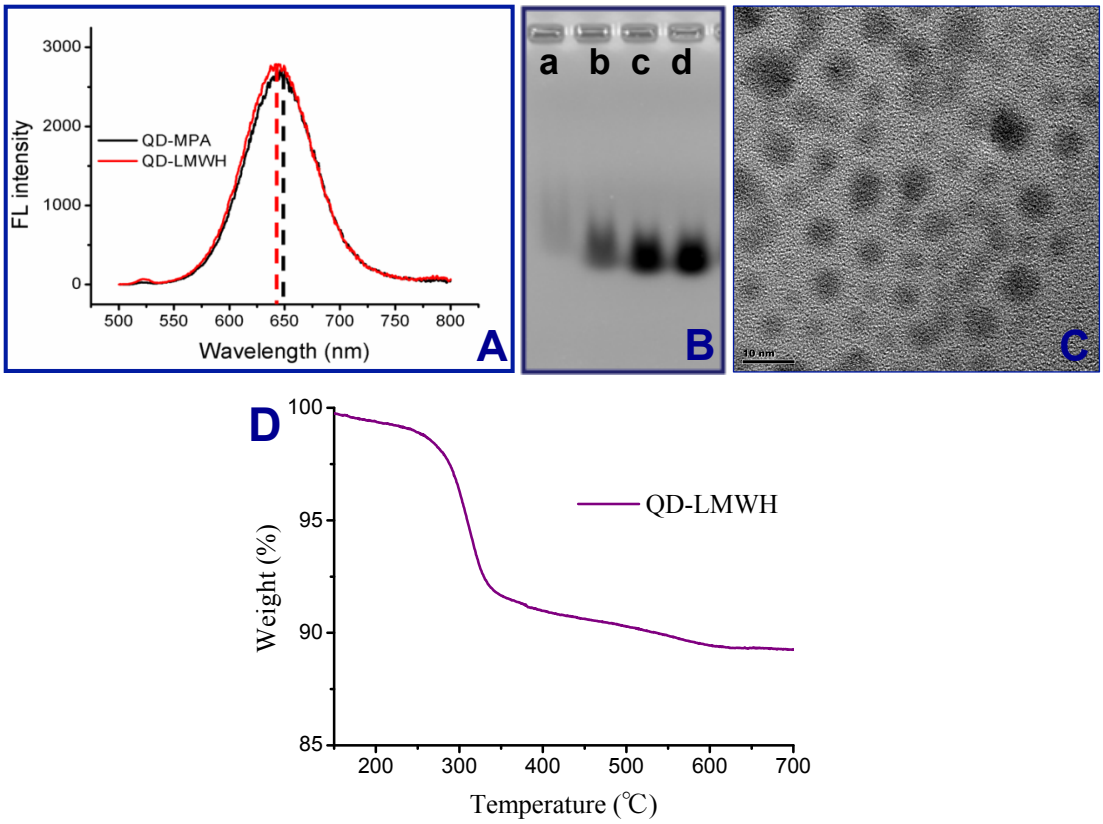

Figure S2. Characterization of the QD-LMWH. (A) Fluorescence spectrum of the QD and QD-LMWH. (B) Gel electrophoresis of (a) QD, (b-d) QD-LMWH with the increasing ratio of modified LMWH. (C) TEM of the QD-LMWH. (D) Thermal gravimetric analysis of QD-LMWH (total weight loss about 11%, indicating the LMWH modification ratio).

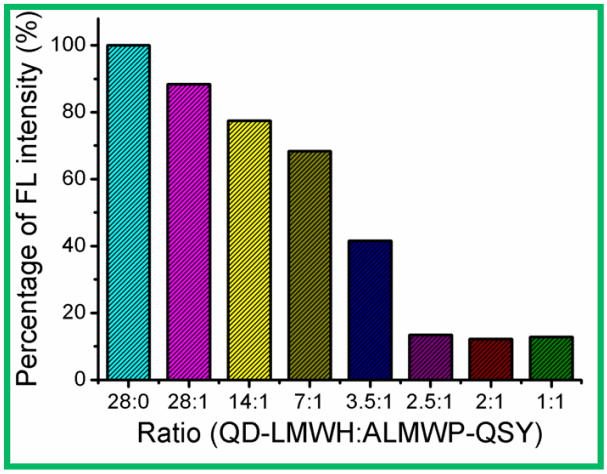

Figure S3. Fluorescence quench caused by the formation of nanoprobe (QD-LMWH/LMWP-QSY), and quench efficiency related to the increase of the QSY amount.

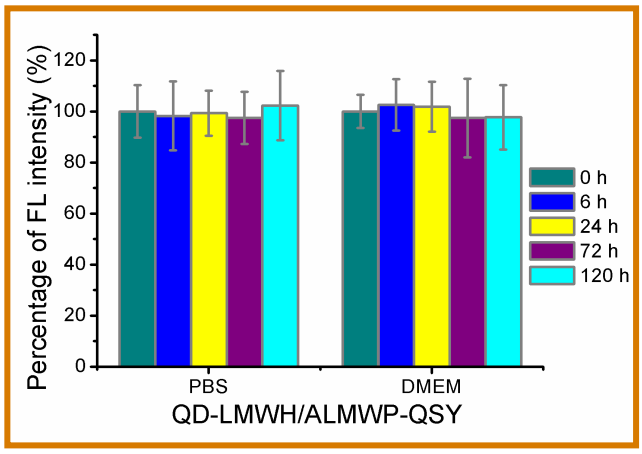

Figure S4. Stability of nanoprobe in PBS or complete DMEM (containing 10% FBS). Little fluorescence activation was found in the presence or absence of serum.

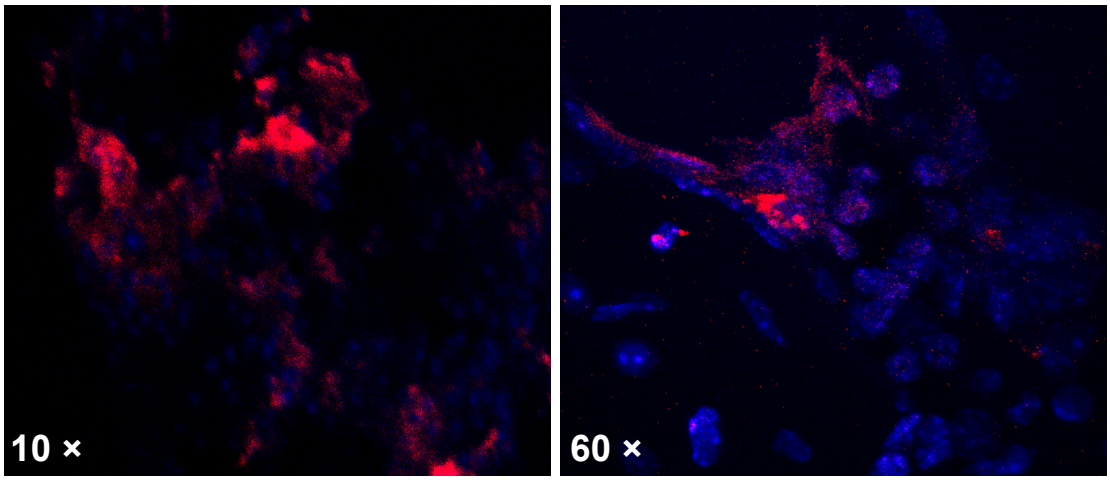

Figure S5. Fluorescence imaging of the brain tumor cryosection (red: activated nanoprobe; blue: DAPI staining) from the mouse model with orthotopic brain tumor after tail vein injection of the nanoprobe.