

Fig. S1. 2D AFM image and 3D AFM image of WS<sub>2</sub>-lipid.

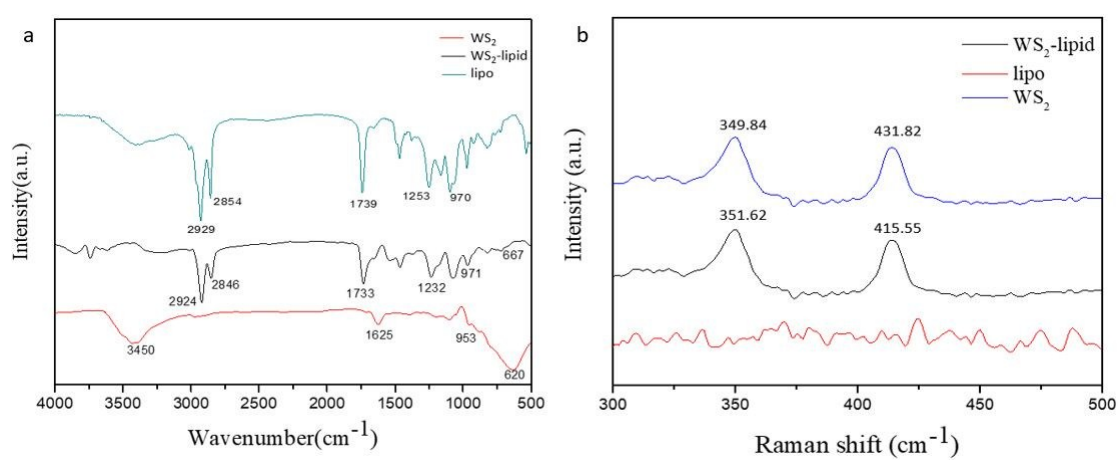


Fig S2. FTIR (a) and Raman (b) of WS<sub>2</sub>, liposome and WS<sub>2</sub>-lipid.

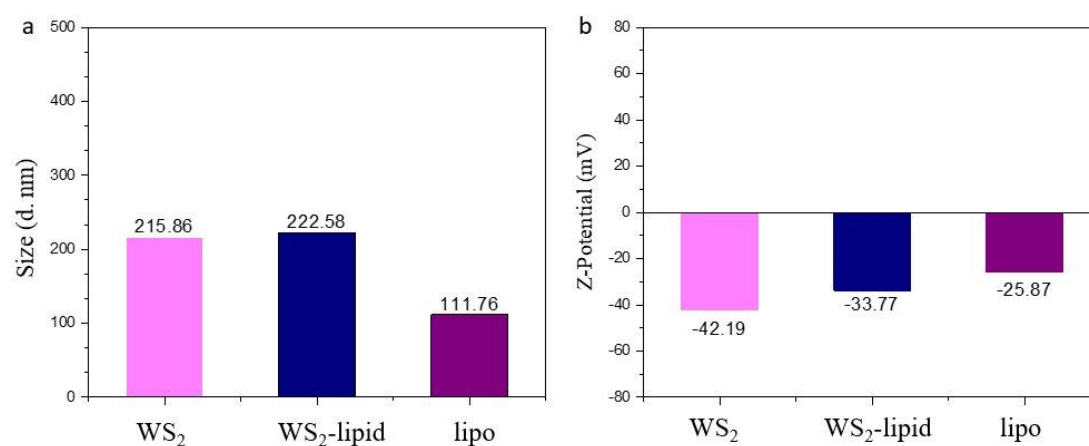


Fig S3. Particle size (a) and Zeta potential (b) of WS<sub>2</sub> and WS<sub>2</sub>-lipid

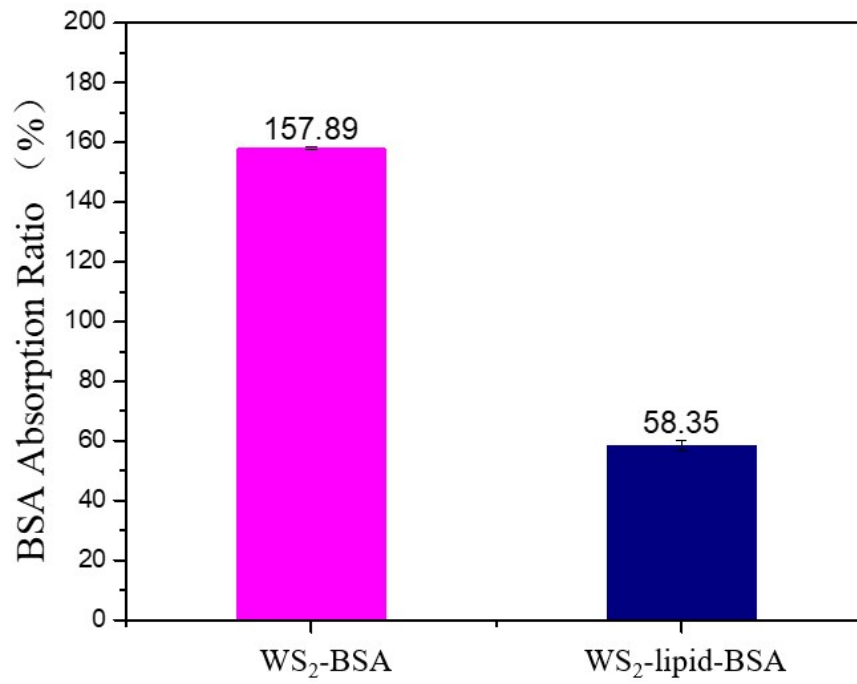


Fig S4. BSA absorption ratio of WS<sub>2</sub> and WS<sub>2</sub>-lipid

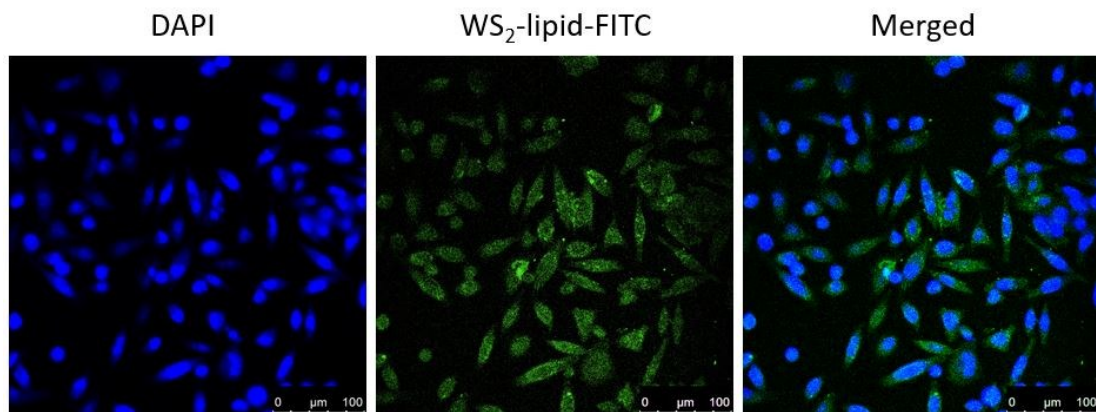


Fig.S5.Fluorescence image of WS<sub>2</sub>-lipid cell uptake by MDA-MB-231.