MnO_2-Mineralized Milk Exosomes as a Novel Nanoplatform for Glutathione Detection

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Table S1 Curcumin encapaulating efficiency

mEV (particles)	Curcumin (μg)	Encapsulating Efficiency	Curcumin molecules/mEVs
3.0×10^{11}	25	93.0%	7.59×10^{5}
3.0×10^{11}	62.5	82.2%	1.68×10^{6}
3.0×10^{11}	125	30.8%	1.26×10^{6}
3.0×10^{11}	250	18.1%	1.47×10^{6}

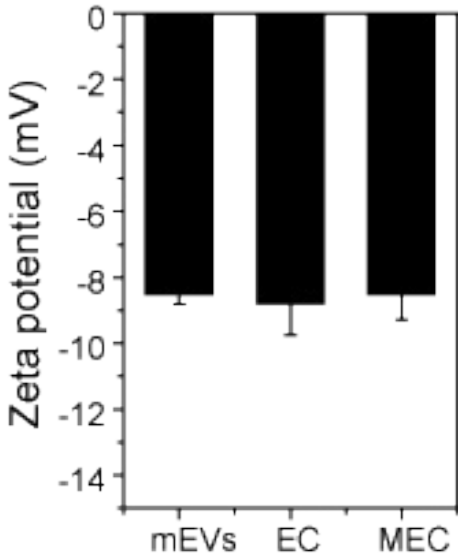

Figure S1. Zeta potential of mEV, EC and MEC.

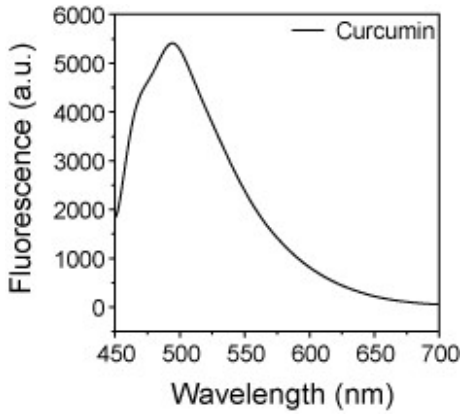

Figure S2. Fluorescence emission spectra of curcumin in water.

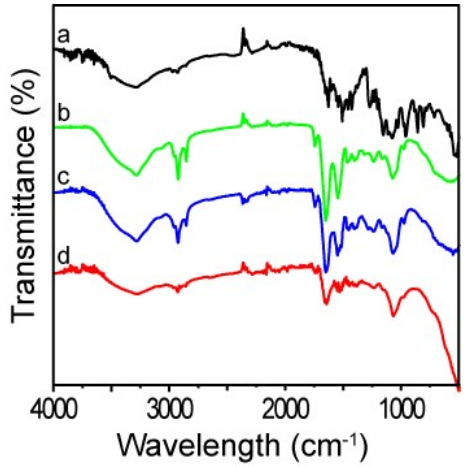

Figure S3. FT-IR spectra of curcumin (curve a), mEV (curve b), mEV-curcumin (curvec) and MnO_2@mEV-curcumin (curve d).

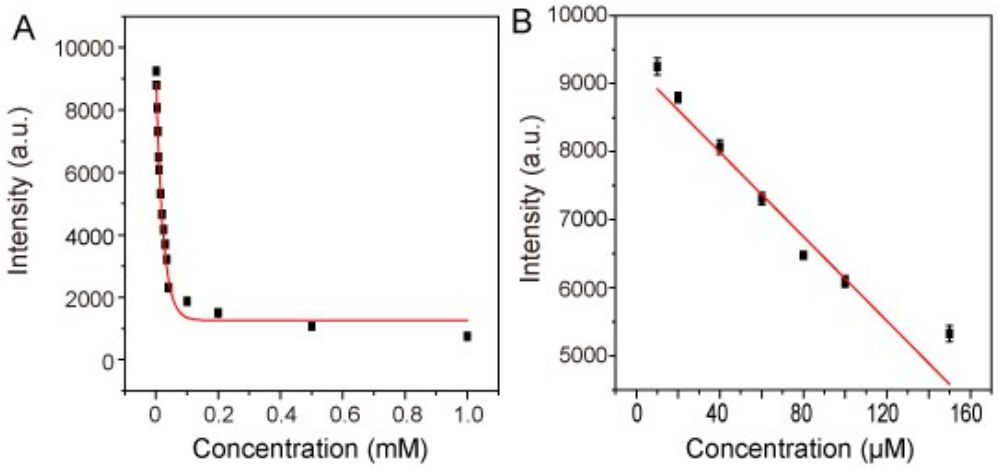

Figure S4. (A) Relationship between fluorescence decrease and $KMnO_4$ concentration. (B) Calibration curves between relative fluorescence intensity of mEV-curcumin and $KMnO_4$ concentration.

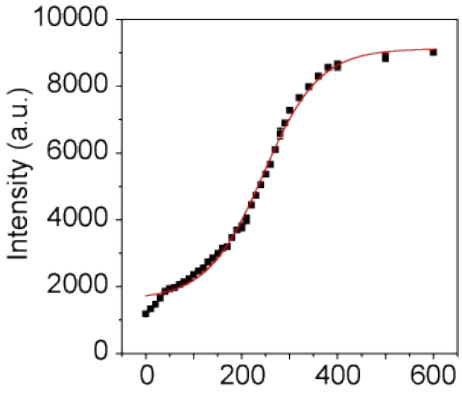

Figure S5. Relationship between fluorescence decrease and GSH concentration.

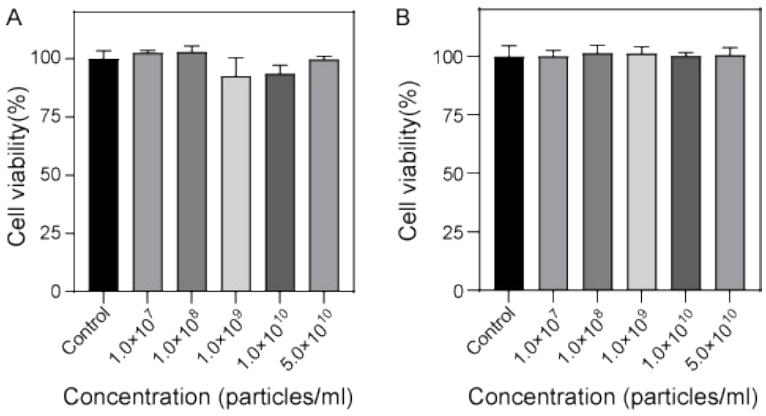

Figure S6. The cytotoxicity of MnO_2@mEV-curcumin was tested with Hela cells and NIH3T3 cells by CCK-8 assay. Hela cells and NIH3T3 cells were incubated with MnO_2@mEV-curcumin of different concentration (1.0×10^7, 1.0×10^8, 1.0×10^9, 1.0×10^{10}, 5.0×10^{10}) for 48h.

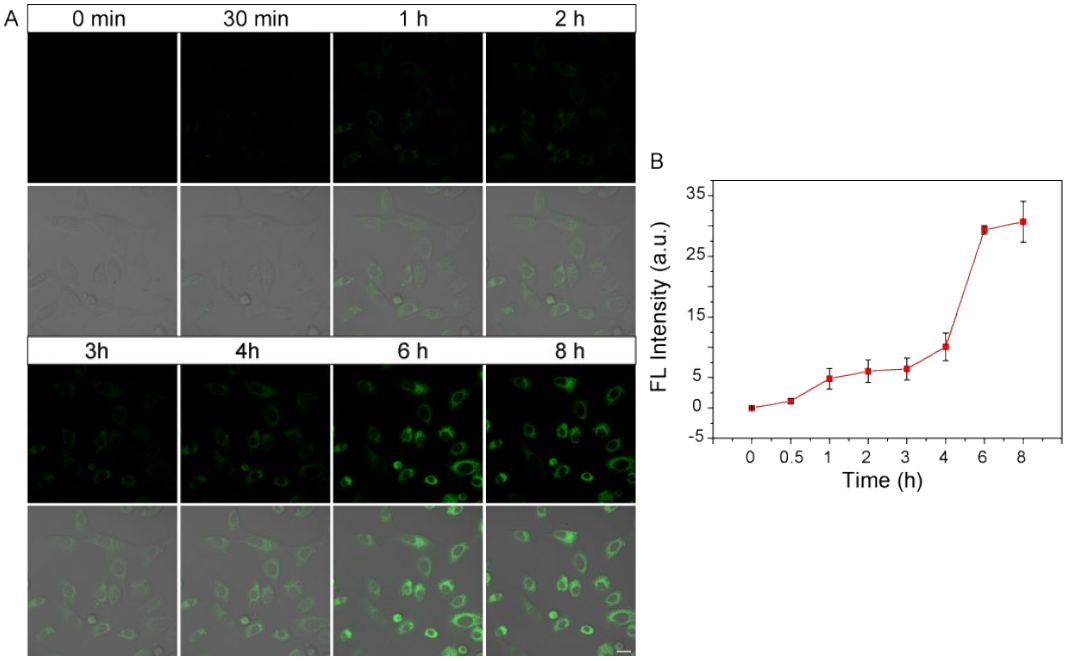

Figure S7. The CLSM imaging of Hela cells treated with MEC for 8h. Scale bar: 20 μm