Supporting Information

Mn(II)-MOF Nanoparticle Conjugated with EOB-PEG as High-Performance Hepatobiliary-Specific MRI Contrast Agent

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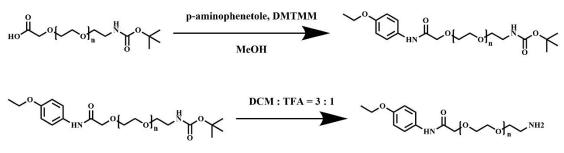


Figure S1. A complete synthetic route to the ligand NH₂-PEG-EOB.

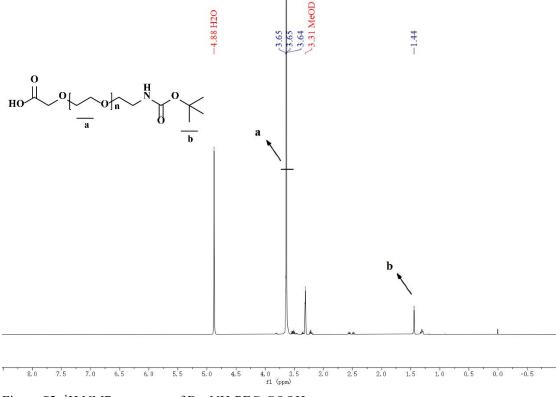


Figure S2. ¹H NMR spectrum of BocNH-PEG-COOH.

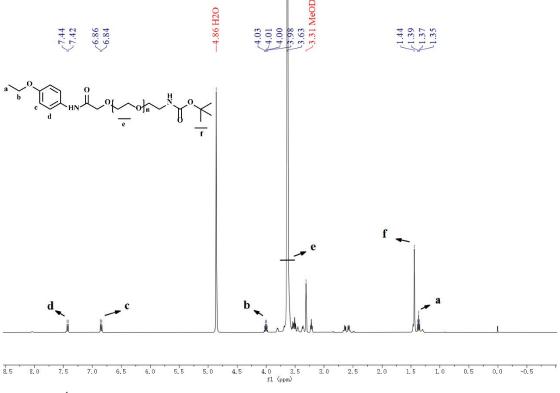


Figure S3. ¹H NMR spectrum of BocNH-PEG-EOB.

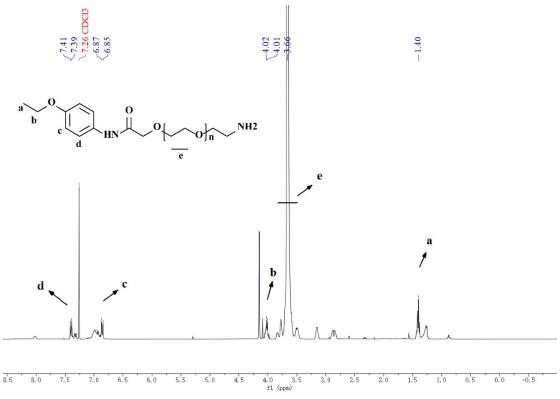


Figure S4. ¹H NMR spectrum of NH₂-PEG-EOB.

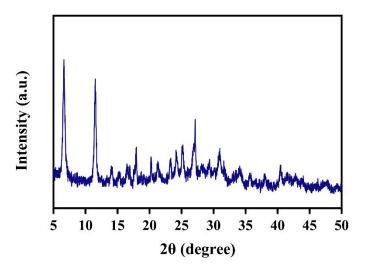


Figure S5. PXRD patterns for Mn-MOF-74.

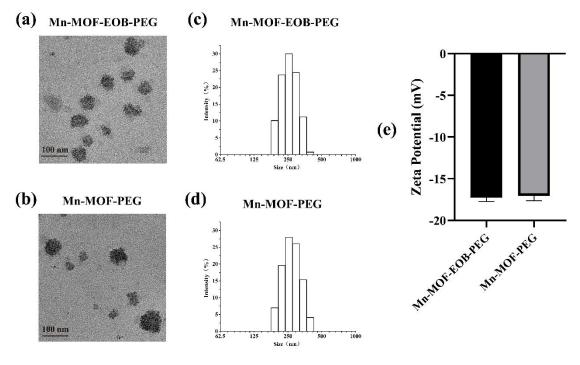


Figure S6. (a) and (b) TEM images of Mn-MOF-EOB-PEG and Mn-MOF-PEG. (c) and (d) Hydrodynamic diameter of Mn-MOF-EOB-PEG and Mn-MOF-PEG nanoparticles. (e) Zeta potential of Mn-MOF-EOB-PEG and Mn-MOF-PEG.

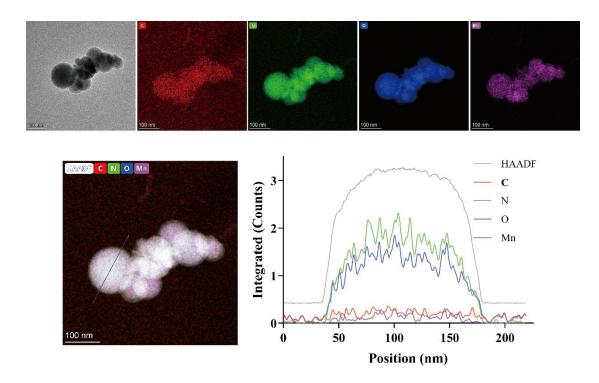


Figure S7. EDS spectra of Mn-MOF-EOB-PEG (scale bar = 100 nm).

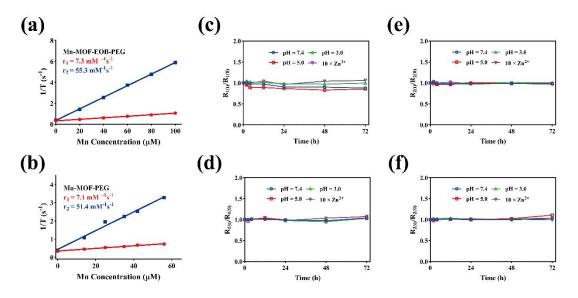


Figure S8. (a) and (b) Relaxivity of Mn-MOF-EOB-PEG and Mn-MOF-PEG in H₂O. (c and d) $R_{1(t)}/R_{1(0)}$ ratio and (e and f) $R_{2(t)}/R_{2(0)}$ ratio of Mn-MOF-EOB-PEG and Mn-MOF-PEG nanoparticles before and after incubated in different media (PBS with different pH : 7.4, 5.0 and 3.0, and $10 \times Zn^{2+}$) at 37°C, respectively.