

Supplementary Information (ESI)

Dual Modal *in Vivo* Imaging Using Upconversion Luminescence and Enhanced Computed Tomography Properties

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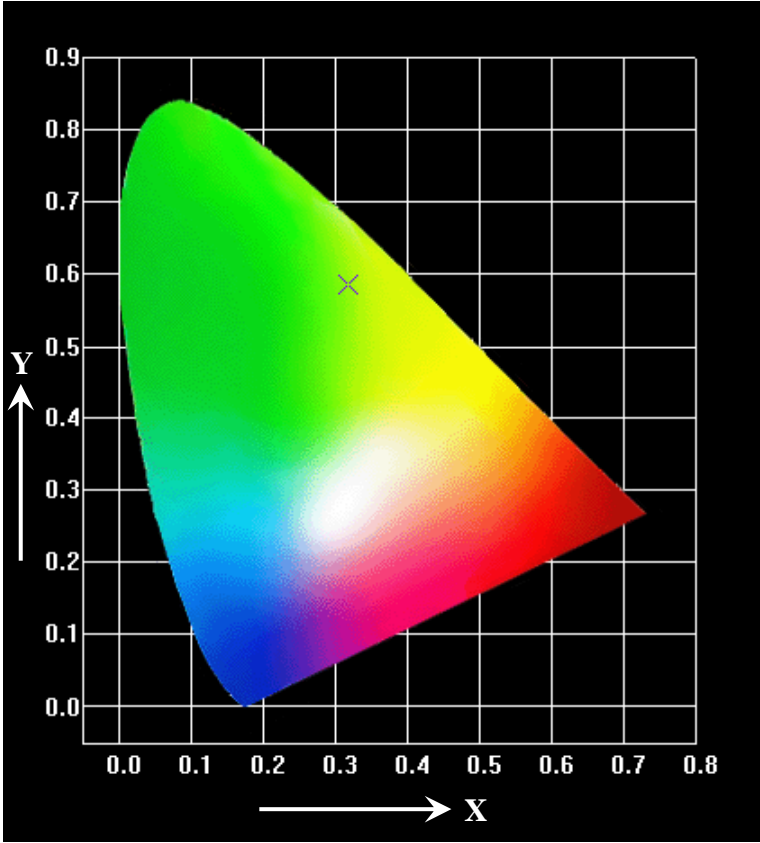


Figure S1. CIE chromaticity diagram showing the emission colors for $\text{Yb}^{3+}/\text{Er}^{3+}$ doped in $\beta\text{-NaYF}_4$ nanoparticles.

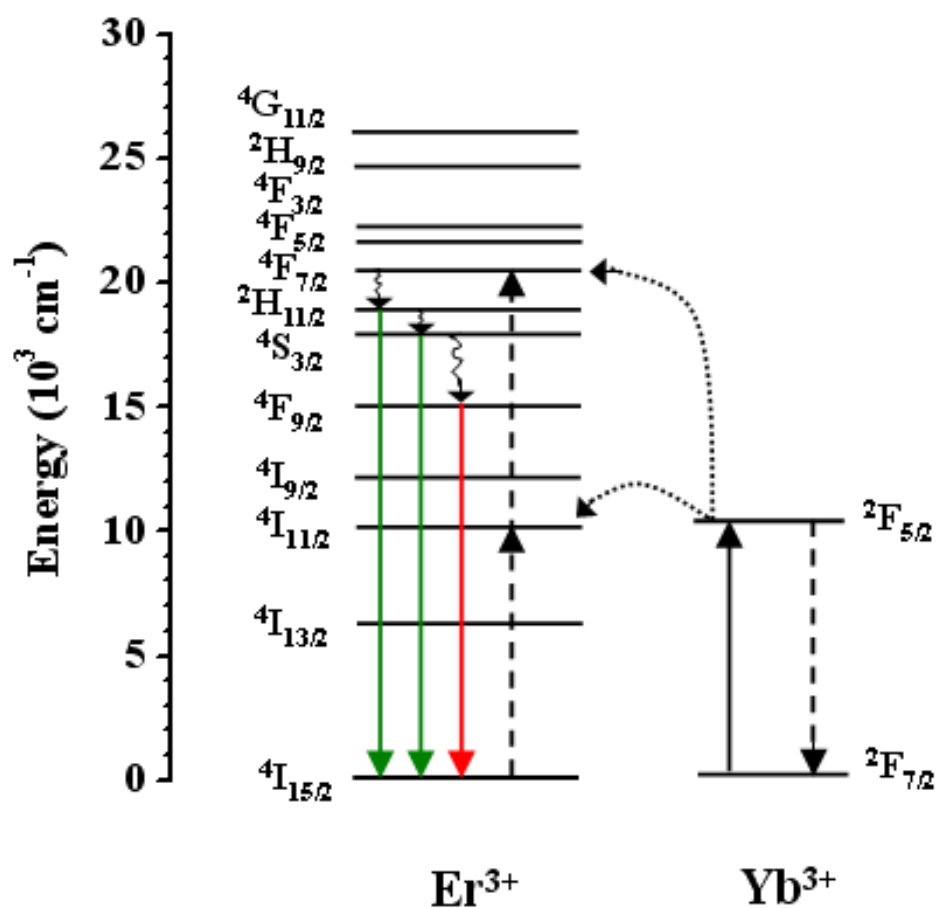


Figure S2. Schematic representation of the energy-level and upconversion luminescence process for $\text{Yb}^{3+}/\text{Er}^{3+}$ doped in $\beta\text{-NaYF}_4$ nanoparticles. The full, dotted, dashed, and curly arrows indicate emission, nonradiative energy transfer, cross-relaxation and multiphonon relaxation processes, respectively.

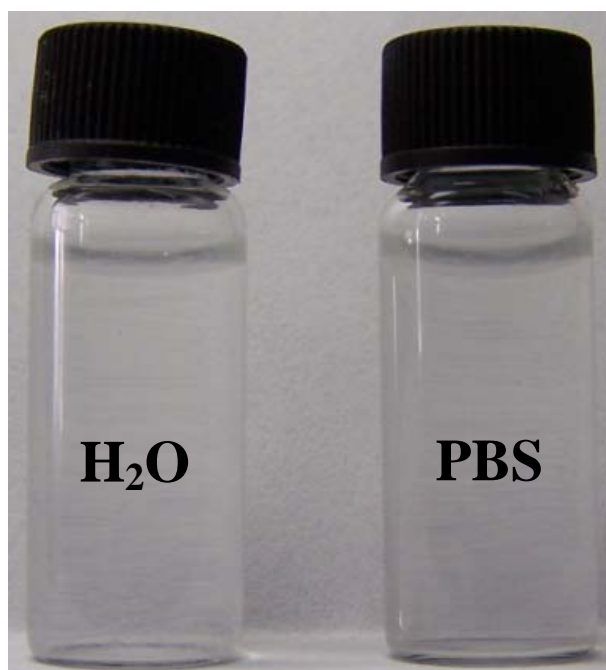


Figure S3. Photographs of UCNPs@SiO₂-NH₂/I-PEG nanoprobe solution dispersed in H₂O and PBS (0.01M, pH = 7.4), respectively.