

# Supporting Information

for

## Calcium fluoride based multifunctional nanoparticles for multimodal imaging

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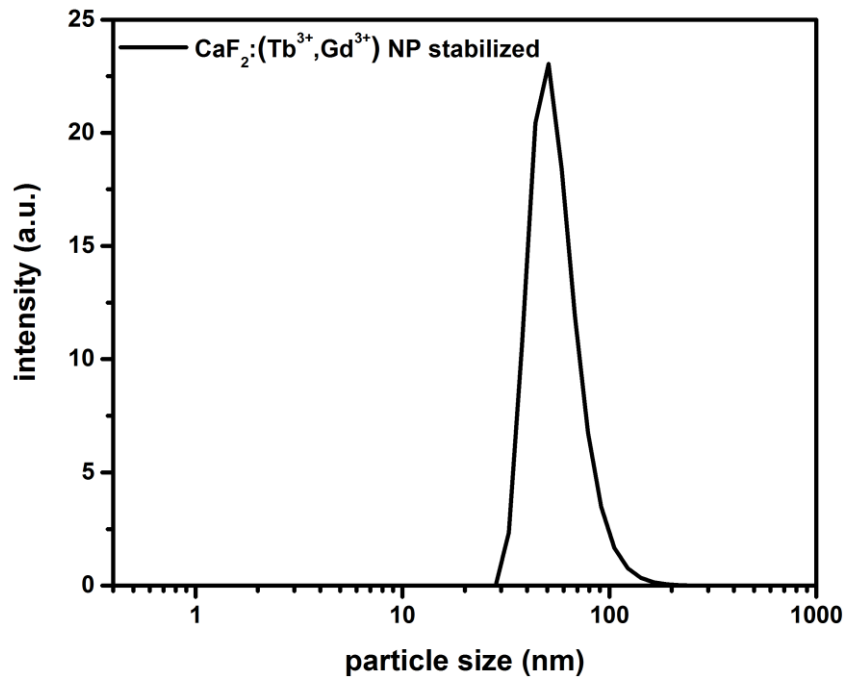
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## Additional figures and data



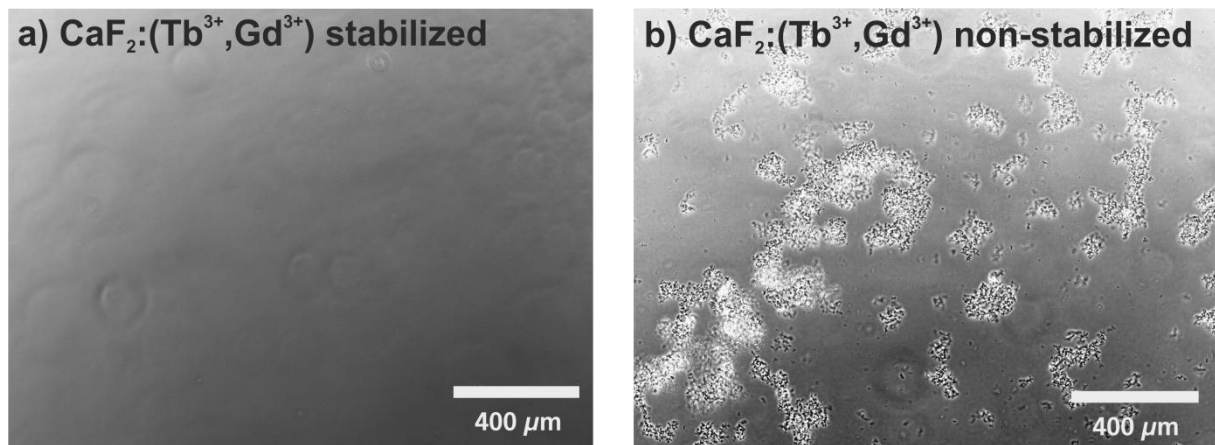
**Figure S1:** DLS measurement of the CaF<sub>2</sub>:(Tb<sup>3+</sup>,Gd<sup>3+</sup>) NPs stabilized with Melpers<sup>®</sup>2450 (number-weighted).

$$r_1 = \frac{4.59 \cdot 10^3 \cdot \text{mL} \cdot \text{mol}}{10^{-3} \cdot \text{mol} \cdot \text{s} \cdot 938 \cdot 10^3 \cdot \text{mg}}$$

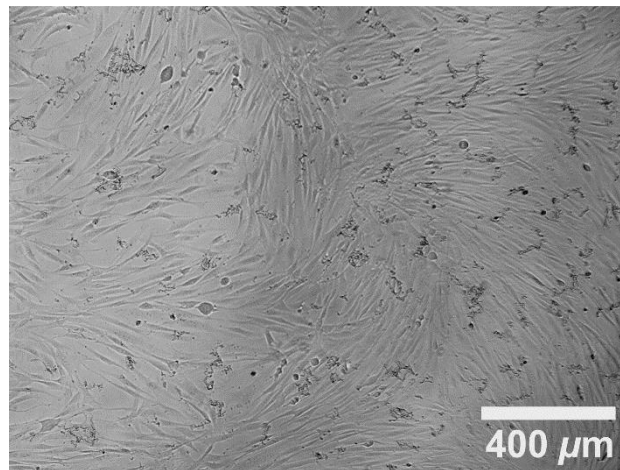
Relaxivity Magnevist: 4.59 L·mmol<sup>-1</sup>·s<sup>-1</sup> from literature [38]

Molar Mass Magnevist: 938 g·mol<sup>-1</sup>

**Figure S2:** Calculating method for converting the unit of the relaxivity.



**Figure S3:** Microscopic images of the  $\text{CaF}_2:(\text{Tb}^{3+}, \text{Gd}^{3+})$  NPs ( $c = 5 \text{ mg}\cdot\text{mL}^{-1}$ ):  
a) stabilized with Melpers<sup>®</sup> 2450 and b) non-stabilized.



**Figure S4:** Representative microscopic image of the untreated hdF in DMEM with 10% FCS.