Electronic Supplementary Information to:

Recent advances in Gd–chelate based bimodal optical/MRI contrast agents

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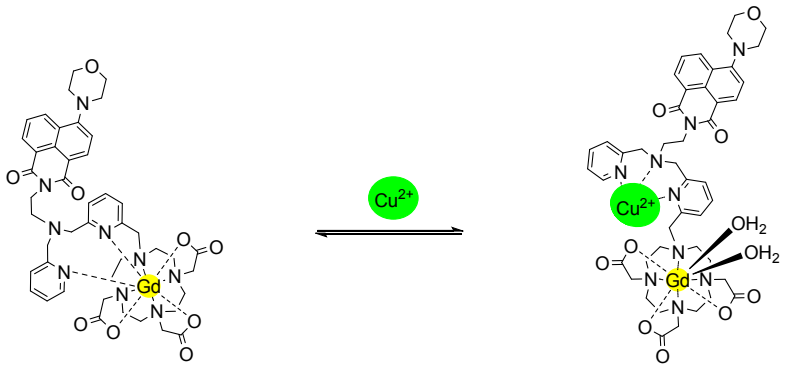


Fig. S1 Contrast agent **10** exhibits *q*-modulation and quenched fluorescence upon binding Cu^{2+}. Ref. 14.

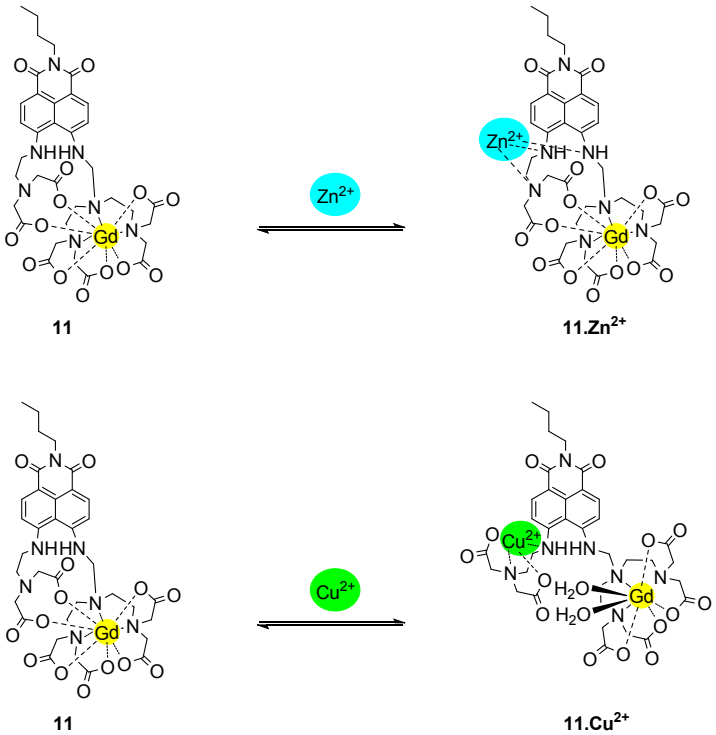


Fig. S2 Proposed binding models of **11** with Zn^{2+} and Cu^{2+}. Ref. 15.

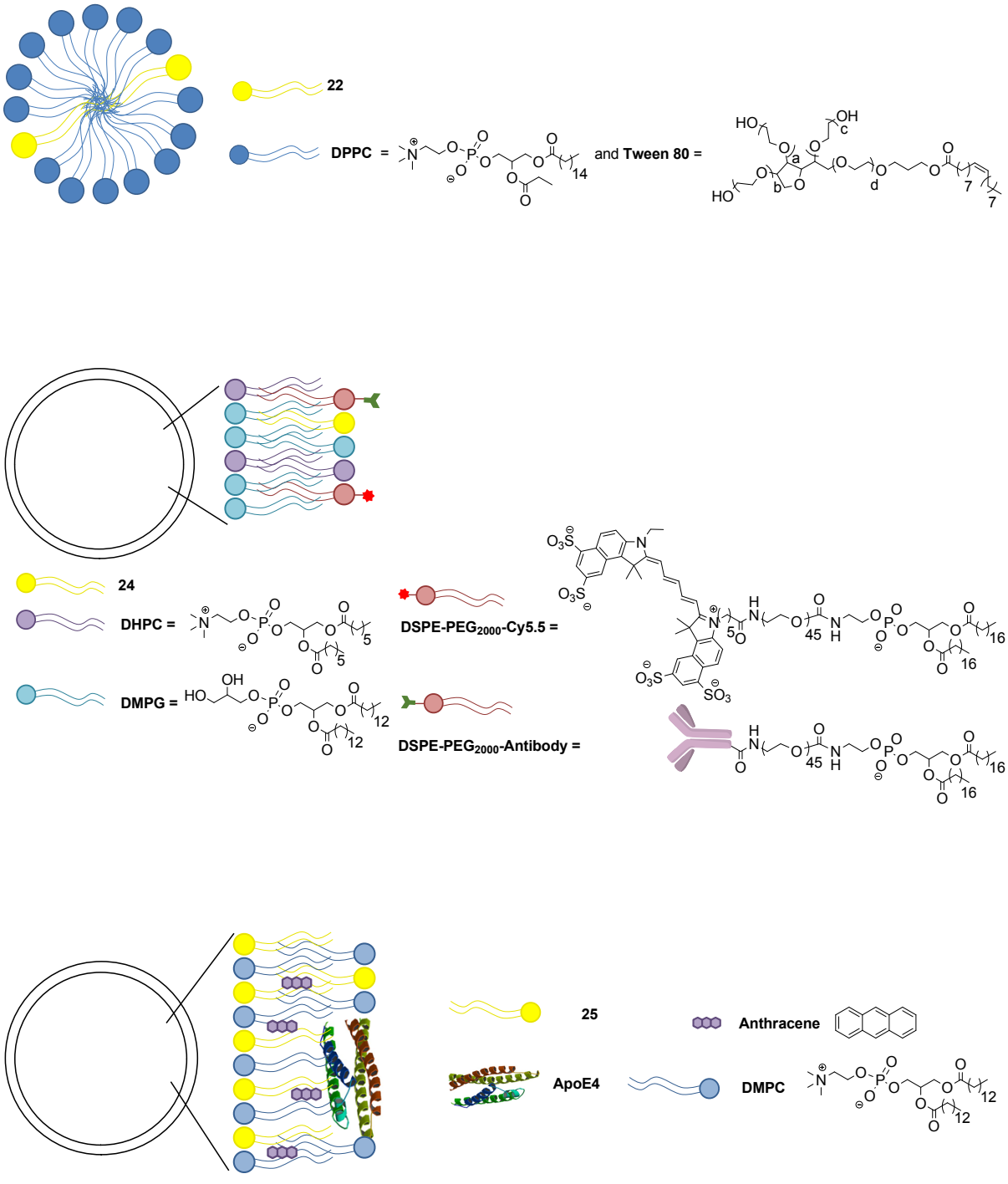
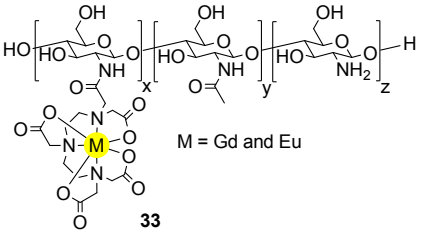
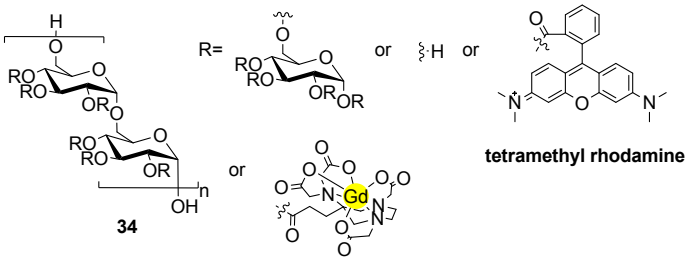


Fig. S3 Structures of the **22** containing liposome (Ref. 27) and the **24** (Ref. 29) and **25** (Ref. 30) containing micelles.



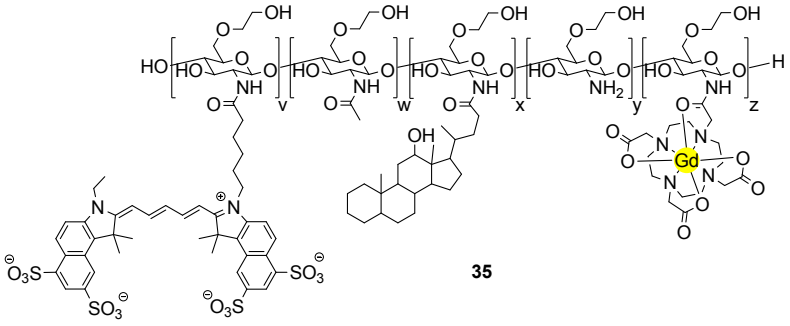
33



34

tetramethyl rhodamine

GdAAZTA



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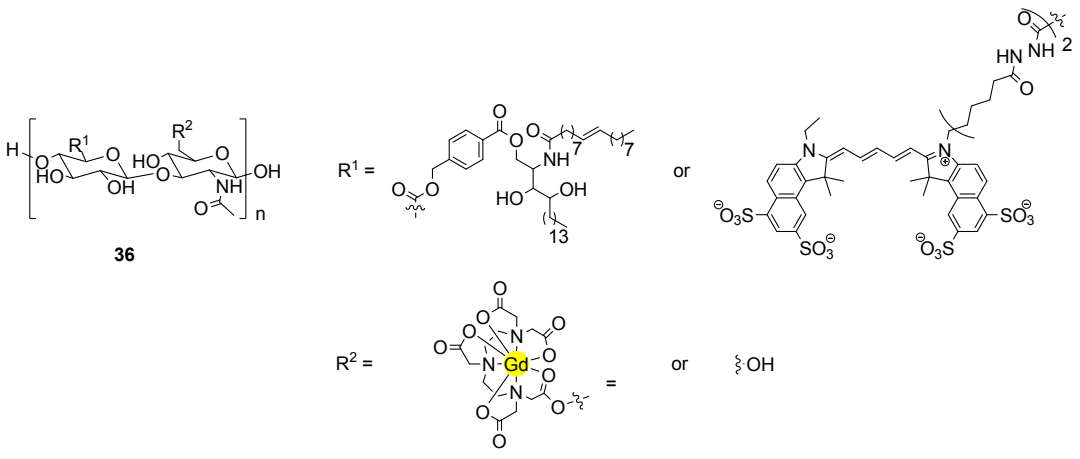


36

Fig. S4 Chemical structure of the polysaccharide based nano-objects **33** (Ref. 38), **34** (Ref. 39), **35** (Ref. 40) and **36** (Ref. 41).

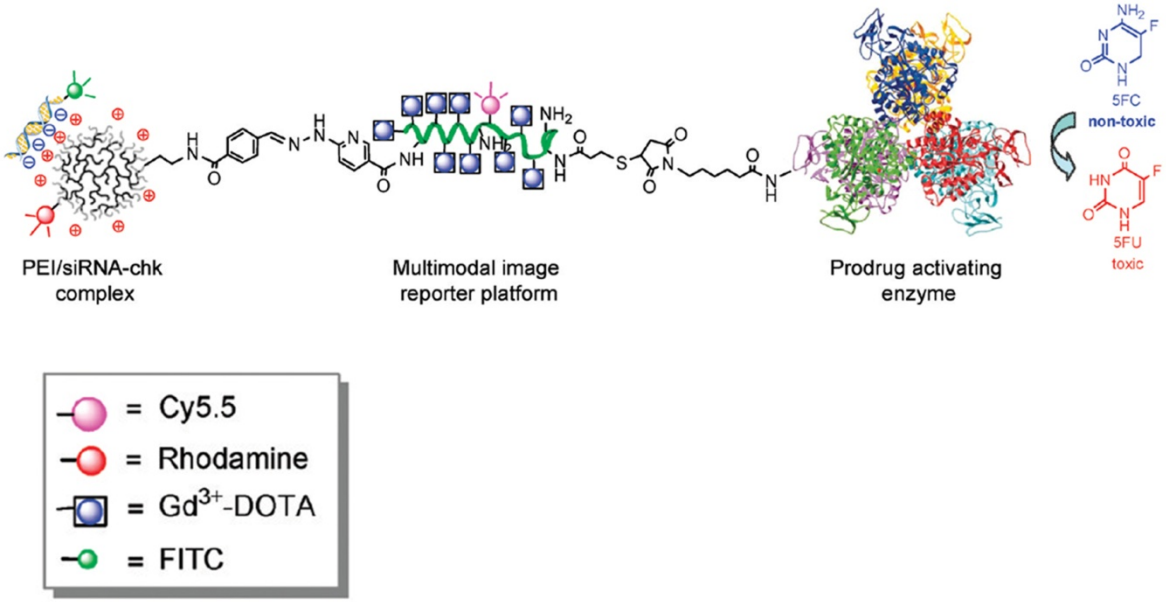
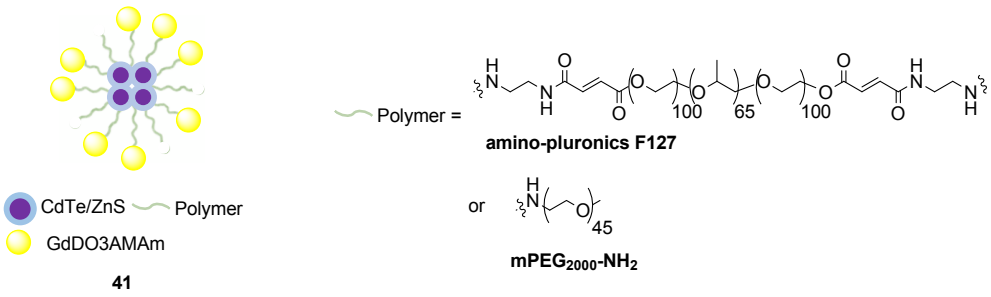
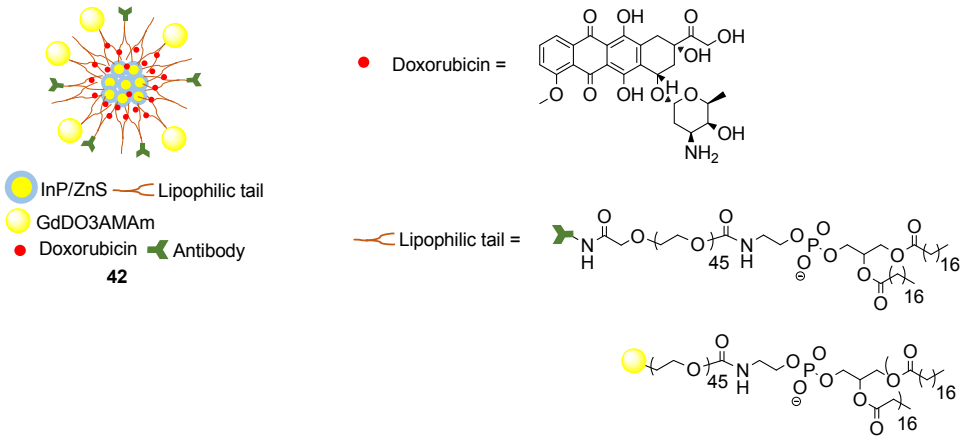


Fig. S5 Structure of theranostic nanoobject **37**. Adapted with permission from Ref. 42. Copyright 2010 American Chemical Society. (C. Li, M. F. Penet, F. Wildes, T. Takagi, Z. H. Chen, P. T. Winnard, D. Artemov and Z. M. Bhujwalla, *ACS Nano* 2010, **4**, 6707.)





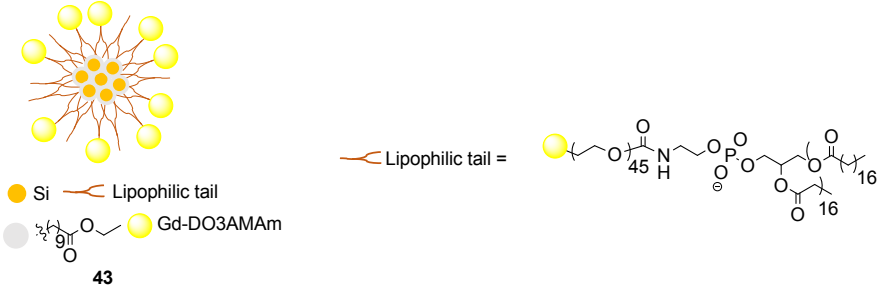


Fig. S6 Chemical structure of the polymeric/lipophilic chains of **41** (Ref. 47), **42** (Ref. 48) and **43** (Ref.49).