Supporting Information

Self-assembled magnetic luminescent hybrid micelles containing rare earth Eu for dual-modality MR and optical imaging

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2. Materials and methods

2.1. Materials.

2, 2, 3, 4, 4, 4-hexafluorobutyl methacrylate (HFMA) purchased from Xeogia Fluorine-Silicon Chemical Company (Harbin, China, Chemical Purity) was distilled at reduced pressure before use. Methoxy poly (ethylene glycol) monomethacrylate (PEGMA) (average Mn 950 g/mol) was obtained from Aldrich and used without further purification. Europium oxide (Eu_2O_3, 99.99 wt%) was purchased from Shanghai Yuelong Nonferrous Metals and used without further purification. 2, 2'-azobisisobutyronitrile (AIBN) was purified by recrystallization in ethanol. Oleic acid (OA), iron (III) chloride hexahydrate ($FeCl_3 \cdot 6H_2O$), iron (II) chloride tetrahydrate ($FeCl_2 \cdot 4H_2O$), ammonium hydroxide solution ($NH_3 \cdot H_2O$, 25-28%), ethanol, hexane, hydrochloric acid (HCl), 1,10-phenanthroline (Phen) and methanol were purchased from Sinopharm Chemical Reagent Co. Ltd., China All the reagents were AR and used without further purification. and 3-(4, 5-dimethyl thiazol-2-yl)-2, 5-diphenyl tetrazolium bromide (MTT) were purchased from Sigma-Aldrich.

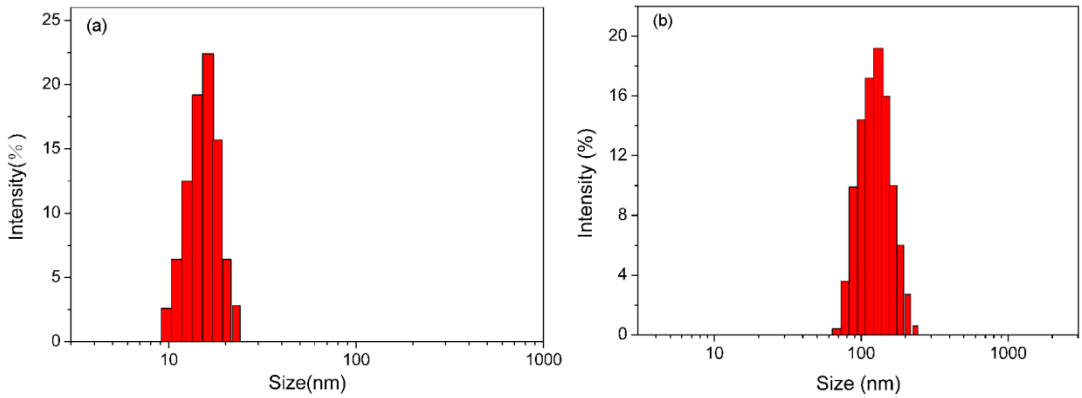

Fig.1

Fig. S1 Size distribution of (a) oleic acid modified Fe_3O_4 nanoparticles in hexane and (b) hybrid micelles in water.