Supporting Information

Simple and Stable Dual-Emission Fluorescent System Based on R6G/Eu-MOF for the Rapid and Sensitive Determination of Orientin

Huifeng Xu[a*#], Weihua Huang[a#], Rui Pan[a#], Ronglin Chen[a], Lili Wang[a*], Yun Yu[a], Xihai Li[a] and Xi Zhu[b*]

a. Academy of Integrative Medicine, College of Integrative Medicine, Fujian University of Traditional Chinese Medicine, Fuzhou, Fujian, P. R. China. E-mail: xuhf@fjtcm.edu.cn, 2011015@fjtcm.edu.cn

b. College of Life Sciences, Fujian Agriculture and Forestry University, Fuzhou, 350002, Fujian, P.R. China. E-mail: zhuxi@fafu.edu.cn

# These authors contributed equally to this work.

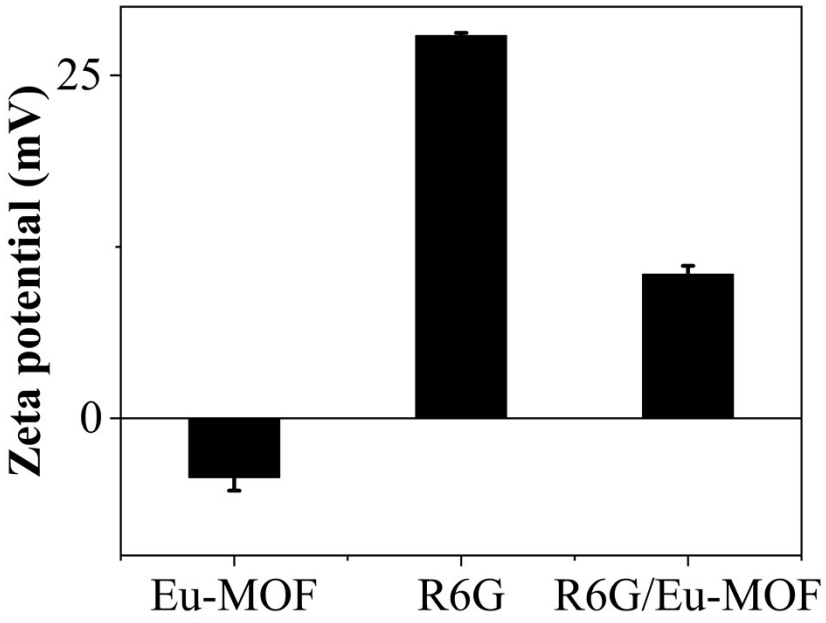

Fig.S1 Comparison of zeta potential.

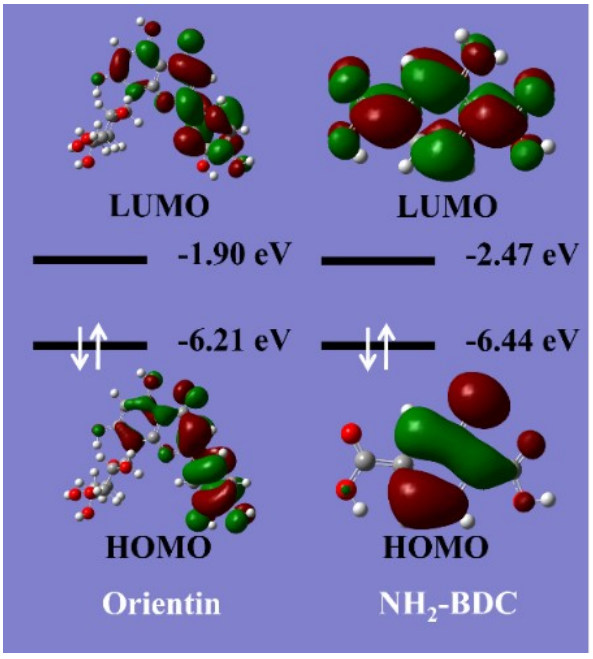

Fig.S2 LUMO and HOMO energy le vels of orientin and 2-amino terephthalic acid.

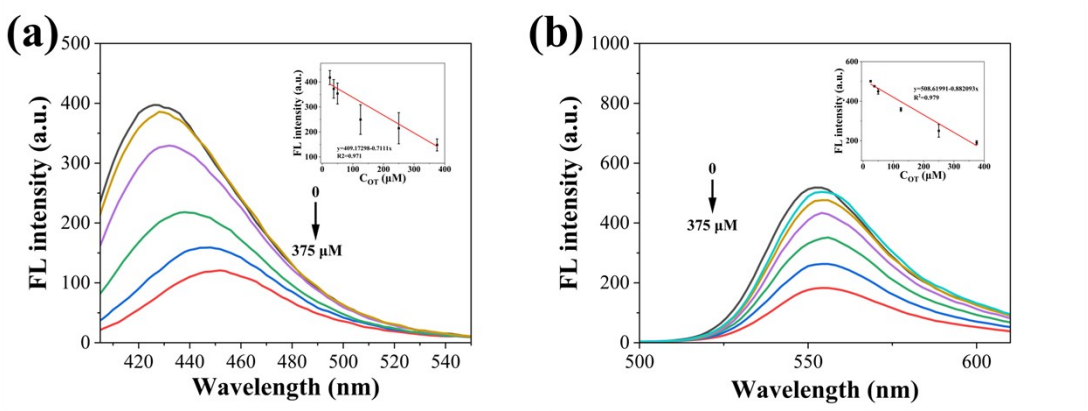

Fig. S3 (a) Fluorescence spectra of Eu-MOF at different OT concentrations. (b) Linear relationship between F_{430} and OT concentration. (c) Fluorescence spectra of R6G at different OT concentrations. (d) Linear relationship between F_{555} and OT concentrations.

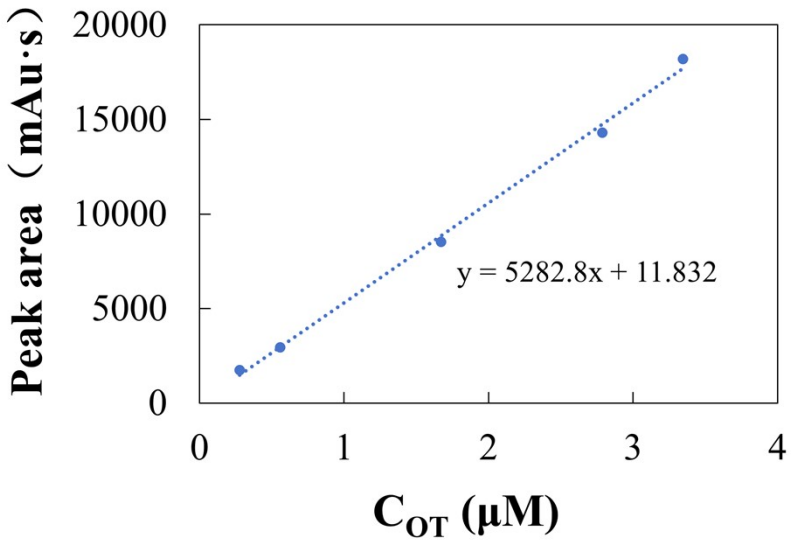

Fig. S4 Concentration standard curve of standard control orientin by HPLC analysis.

Table S1 Stability and reproducibility test results of orientin detected by R6G/Eu-MOF.

	Added (μM)	**Found (μM) (mean±SD, n=3)**	**RAD (%, n=3)**
Intra-day	55.8	59.3±1.4	2.4
	83.6	92.5±2.0	2.1
	111.5	113.7±1.5	1.3
	167.2	170.2±1.4	0.8
Inter-day	55.8	61.2±3.2	5.3
	83.6	92.0±1.9	2.1
	111.5	117.1±3.8	3.2
	167.2	170.9±9.2	0.5

Table S2 HPLC analysis of peak areas corresponding to different concentrations of OT in actual samples of serum

Concentration of orientin added（μM）	Peak Area (mAu·s)					
	1	2	3	4	5	6
0.279	161.313	149.439	159.636	155.366	151.460	158.048
0.558	278.471	309.792	283.200	317.719	316.024	306.592
1.115	611.102	550.376	612.890	648.279	641.571	630.260