Electronic Supplementary Information

Ratiometric sensing of Zn^{2+} with a new benzothiazole-based fluorescent sensor and living cell imaging

Qi Wu [a], LiHen Feng [a], Jian Bin Chao [b], Yu Wang [a*], Shaomin Shuang [a*]

[a] *School of Chemistry and Chemical Engineering, Shanxi University, Taiyuan 030006, PR China*

[b] *Scientific Instrument Center, Shanxi University, Taiyuan 030006, PR China*

* Corresponding authors. Tel.: +86 351 7010588; fax: +86 351 7011688.

E-mail: wangyu1168@sxu.edu.cn (Y. Wang), smshuang@sxu.edu.cn(S.M.Shuang).

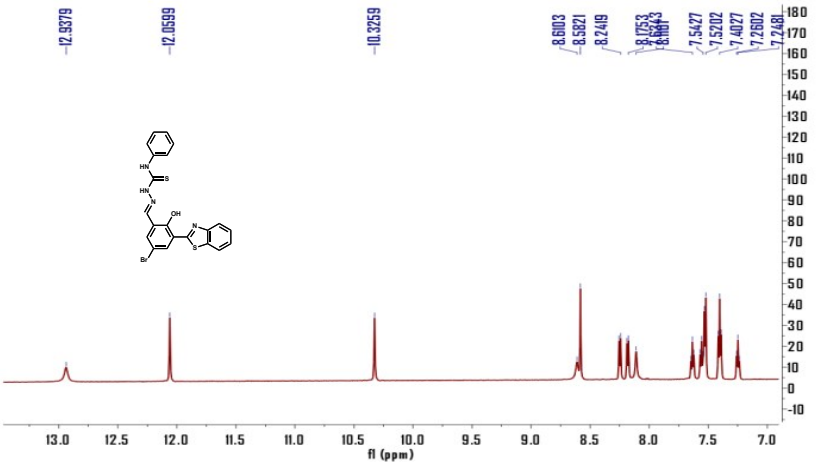

Fig. S1 ^{1}H NMR spectrum of probe BTT.

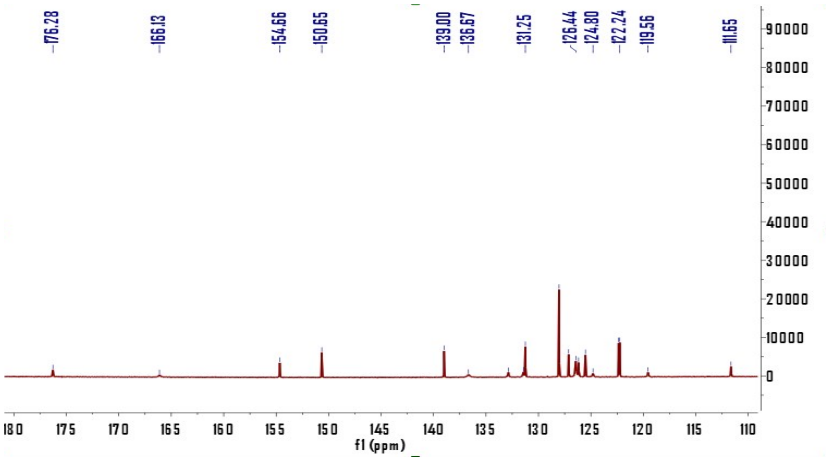

Fig. S2 ^{13}C NMR of probe BTT.

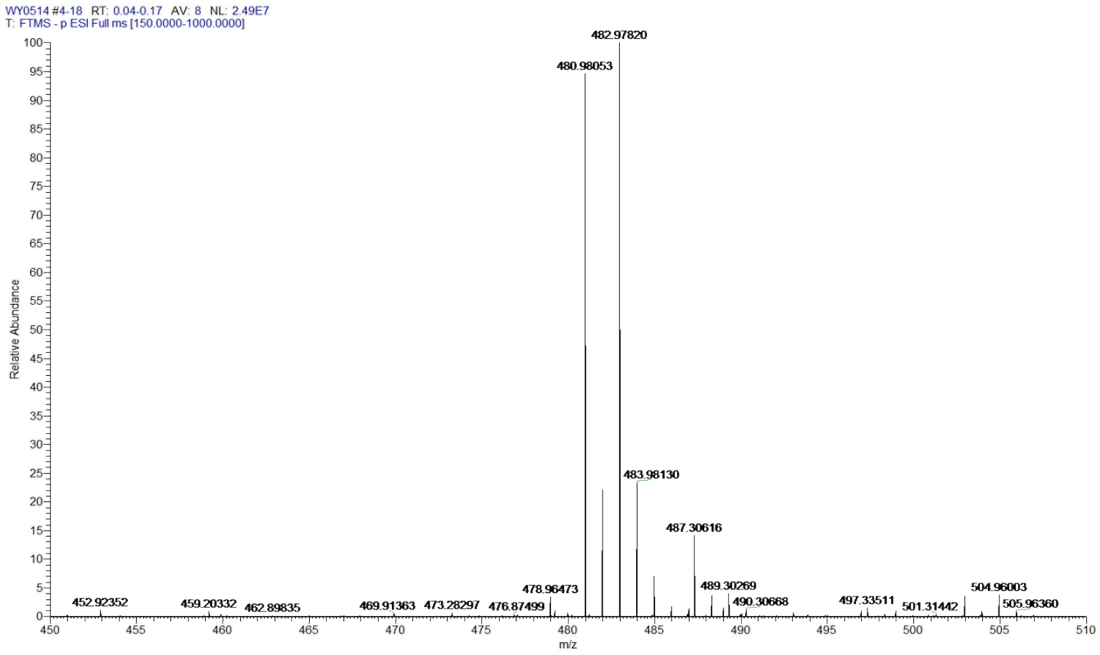

Fig. S3 Mass spectrum in negative-ion mode of probe BTT.

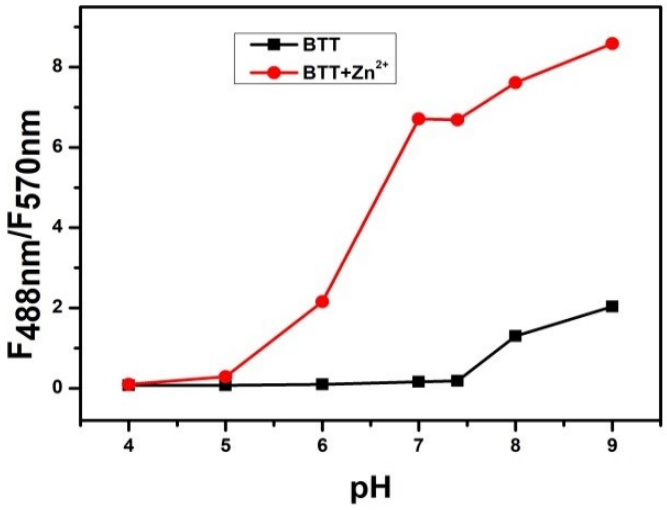

Fig. S4 Effect of pH on the fluorescence intensity of BTT and BTT-Zn^{2+}. [BTT]=4μM, [Zn^{2+}]=8μM.

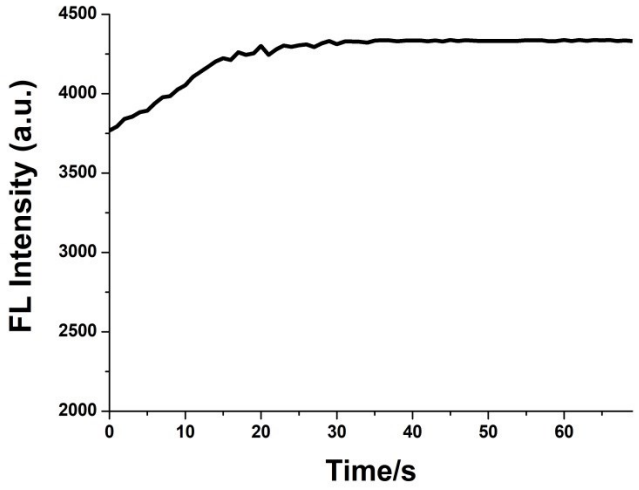

Fig. S5 Time dependent fluorescence intensity of BTT (4 μM) for Zn^{2+}. [BTT]=4μM, [Zn^{2+}]=8μM.

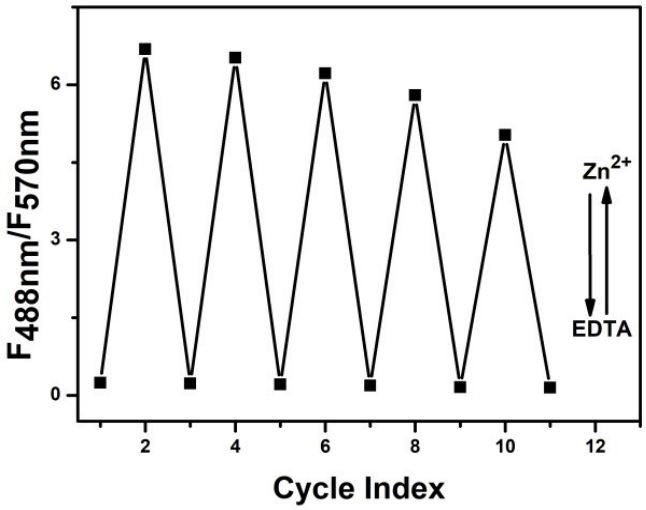

Fig. S6 Fluorescence intensity changes of BTT upon alternate addition of Zn^{2+} and EDTA. [BTT]= 4μM, [Zn^{2+}]= 4μM, [EDTA]=4μM.

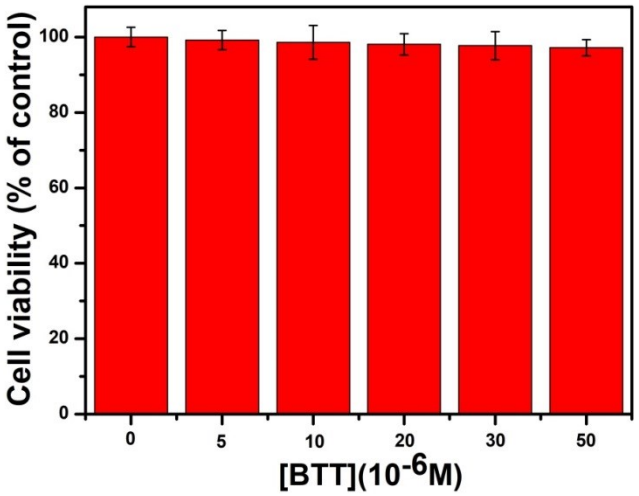

Fig. S7 Cell cytotoxic effect of BTT on HeLa cells. Values are the mean ± s.d. For n = 5.