

Supporting Information

A facile method for alkaline phosphatase activity detection based on the turn-on fluorescence of resorufin

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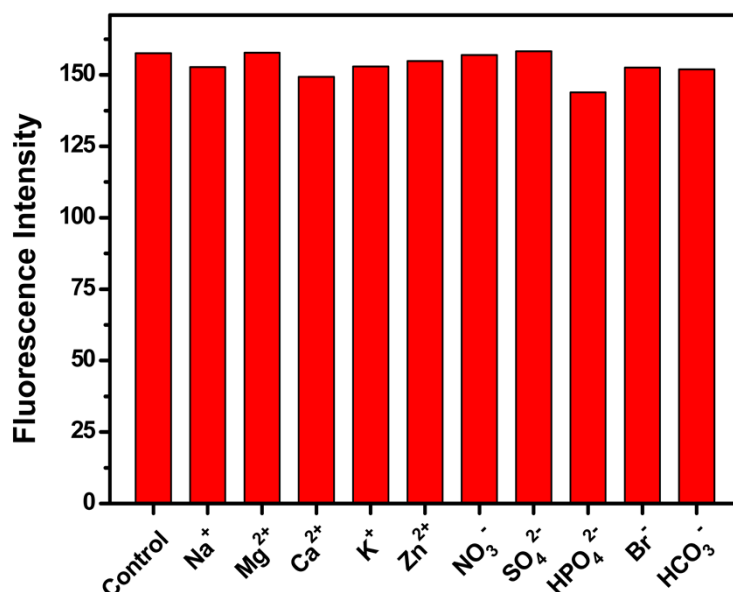


Fig. S1 Selectivity study. Samples were incubated at 37 °C for 5 hours and the emission intensity of resorufin at 583 nm was recorded. Assay solutions contained 20 μM resazurin, 500 μM AAP, 120 mU/mL ALP, and the metal ions and anions were all at 1 mM concentration. Control: without the additional metal ions or anions.

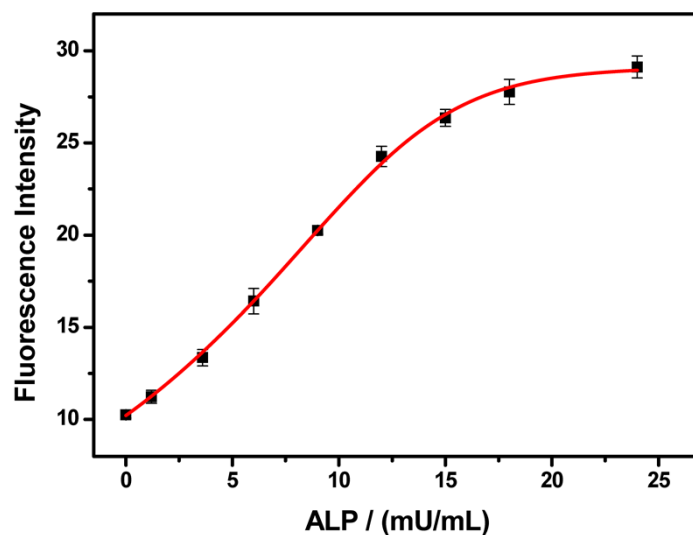


Fig. S2 Changes in emission intensity at 583 nm against ALP concentration. All samples contained 0.2% fetal bovine serum, 20 μM resazurin, 500 μM AAP, 20 mM Tris-HCl (pH 7.5), and different concentrations of ALP (1.2, 3.6, 6, 9, 12, 15, 18, and 24 mU/mL, respectively). The experiments were repeated three times and the average intensity values were given.

Table S1 ALP recovery in 0.2% fetal bovine serum samples.

Samples	Added (mU/mL)	Found (mU/mL)	Recovery (%)	RSD ^a (%, n=3)
1	1.20	1.19 ± 0.05	99.2	4.2
2	2.40	2.36 ± 0.07	98.3	2.9
3	6.00	5.87 ± 0.14	97.8	2.3
4	12.00	12.19 ± 0.23	101.6	1.9

^aRSD, relative standard deviation.