Supporting Information

Fluorogenic probe based on chelation-hydrolysis-enhancement mechanism for visualizing Zn^{2+} in Parkinson's disease models

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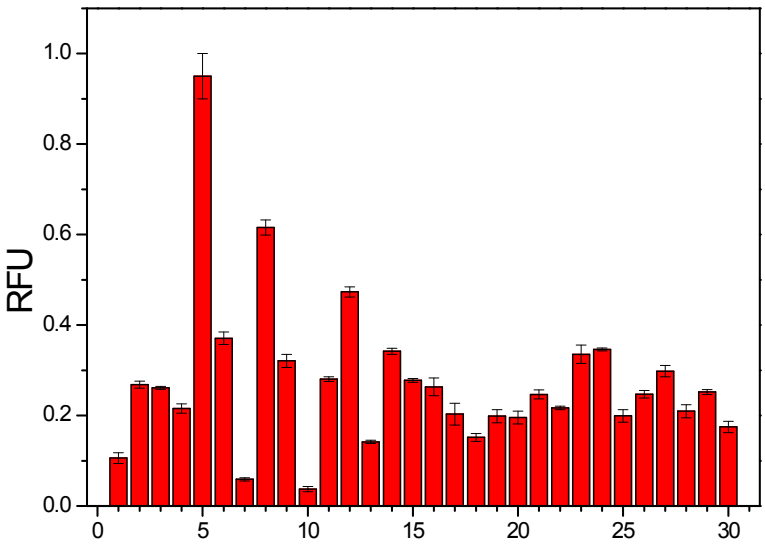

Fig. S1. Fluorescence response of compound **2** to various ions. Na^{+}, Co^{2+}, Ba^{2+}, Ca^{2+}, Al^{3+}, K^{+}, Cr^{3+}, Zn^{2+}, Ni^{2+}, Fe^{3+}, Mn^{2+}, Cd^{2+}, Cu^{2+}, Mg^{2+}, Pd^{2+}, Ag^{+}, Fe^{2+}, F^{-}, Cl^{-}, Br^{-}, I^{-}, SCN^{-}, HS^{-}, HPO_4^{2-}, $H_2PO_4^{-}$, SO_3^{2-}, CO_3^{2-}, Ac^{-}, S^{2-}, blank

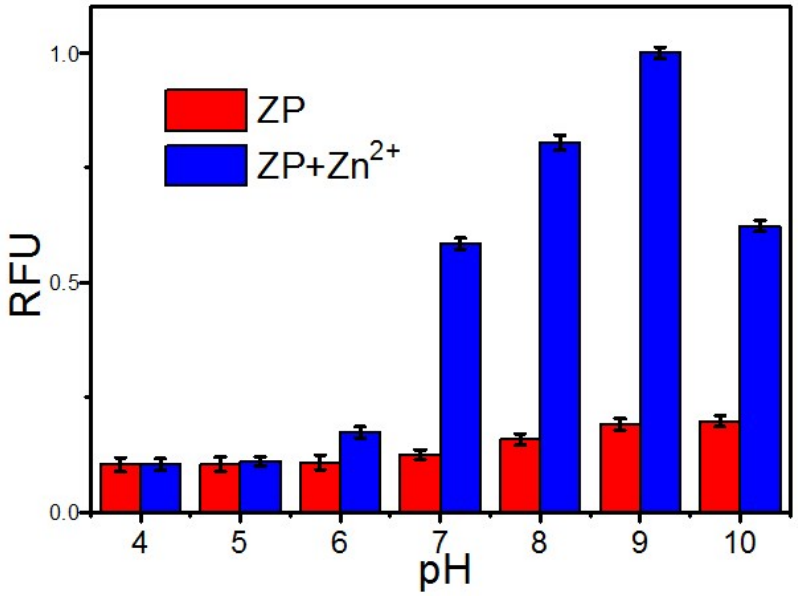

Fig. S2. Fluorescence coloum bars of **ZP** and **ZP**+Zn^{2+} at various pH values in Hepes buffer with 0.01% Triton X-100 (λ_{ex} = 400 nm).

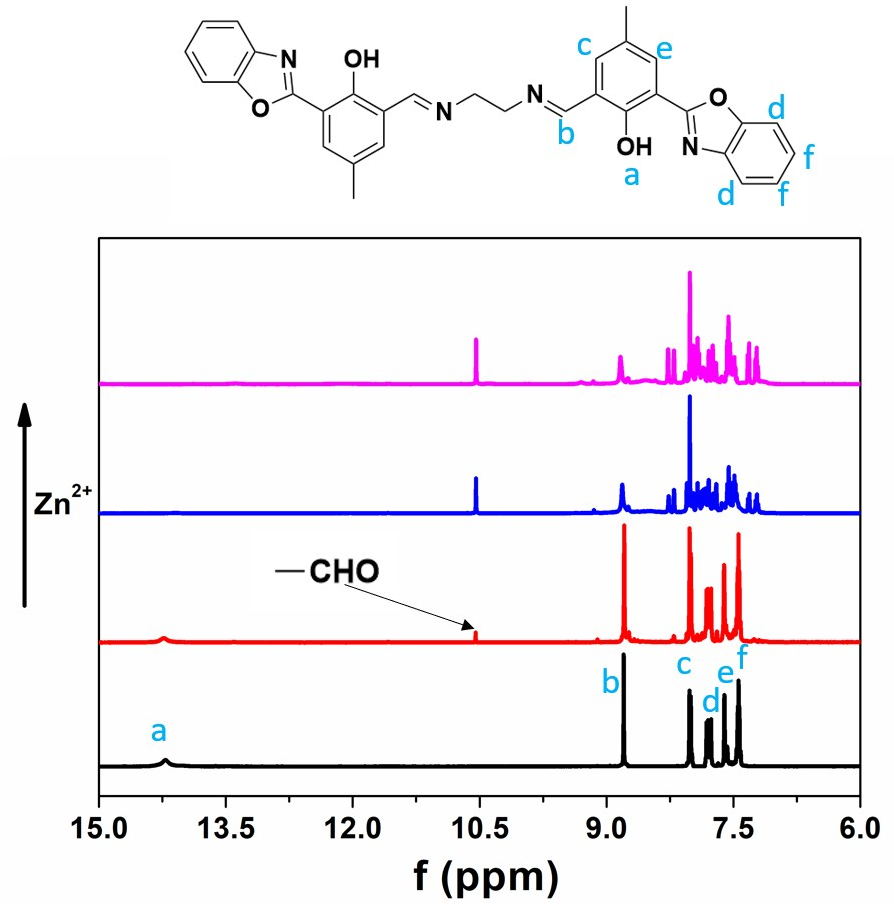

Fig. S3. ^{1}H NMR spectra of **ZP** in DMF-d_7 with the absence and presence of Zn^{2+} ions

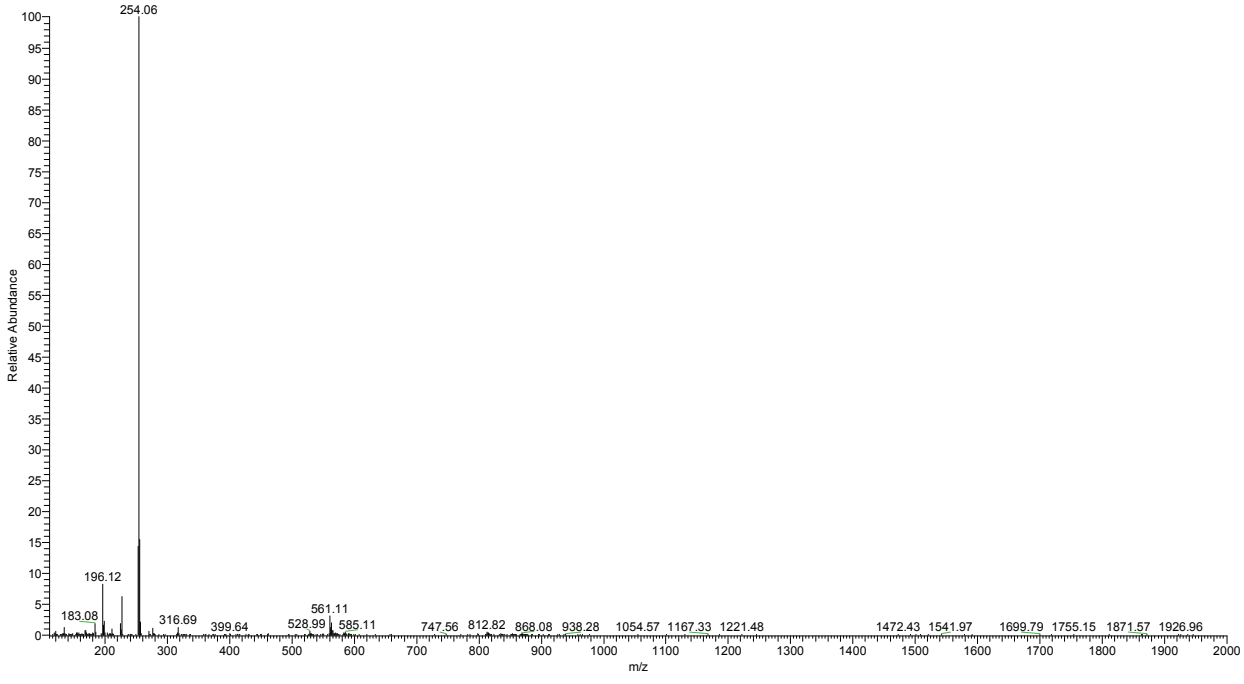

Fig. S4. The MS spectra of **ZP**+Zn^{2+}

Crystallography

CCDC 1845490 (**ZP**-Zn^{2+}) contains the supplementary crystallographic data for this paper. The data can be obtained free of charge from The Cambridge Crystallographic Data Centre via www.ccdc.cam.ac.uk/structures.

Table S1. The detailed crystal and structure refinement data of the compounds

Compounds	**ZP**-Zn^{2+}
empirical formula	$C_{30}H_{20}N_4O_{12}Zn_2$
formula weight	759.24
crystal system	Monoclinic
space group	C 2/c
a [Å]	24.696(2)
b [Å]	8.3538(6)
c [Å]	16.7962(14)
α [°]	90
β [°]	125.219(2)
γ [°]	90
V [Å^3]	2830.9(4)
Z	4
T [K]	296(2)
D called [g·cm^{-3}]	1.781
M [mm^{-1}]	1.773
θ rang [°]	2.639-24.992
total no. data	2483
no. unique data	2138
no. params refined	218
R_1	0.0312
wR_2	0.0747
GOF	1.017

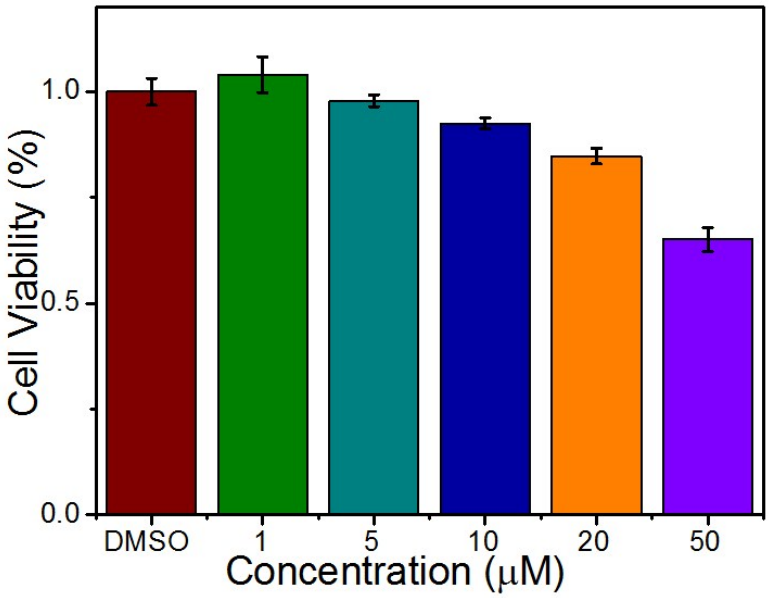

Fig. S5. Cytotoxicity data of **ZP** (Hela cells incubated for 12 h).

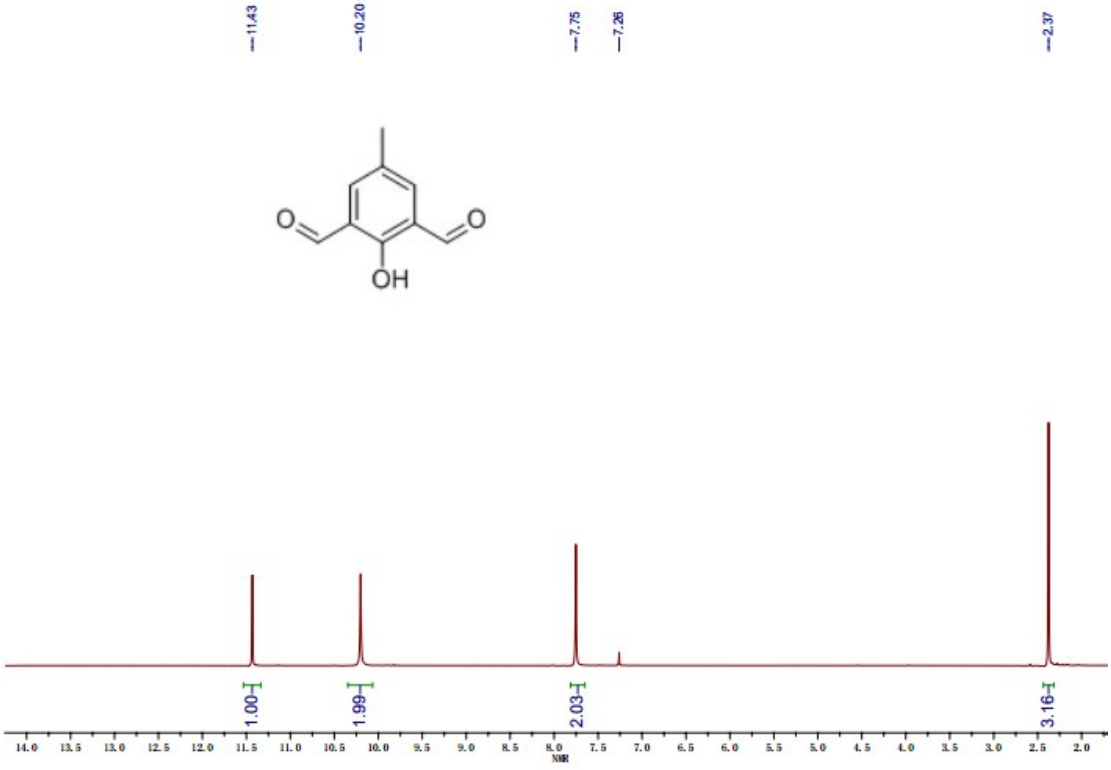

Fig. S6. ^{1}H NMR spectrum of compound **1** in $CDCl_3$.

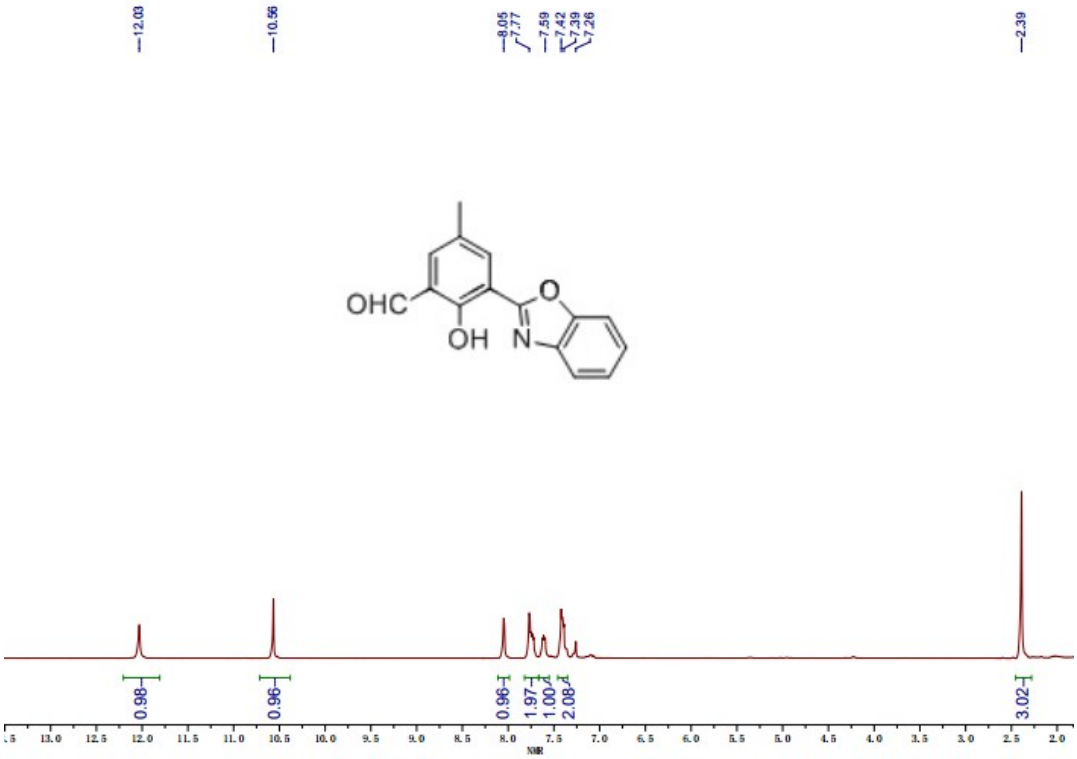

Fig. S7. ^{1}H NMR spectrum of compound **2** in $CDCl_3$.

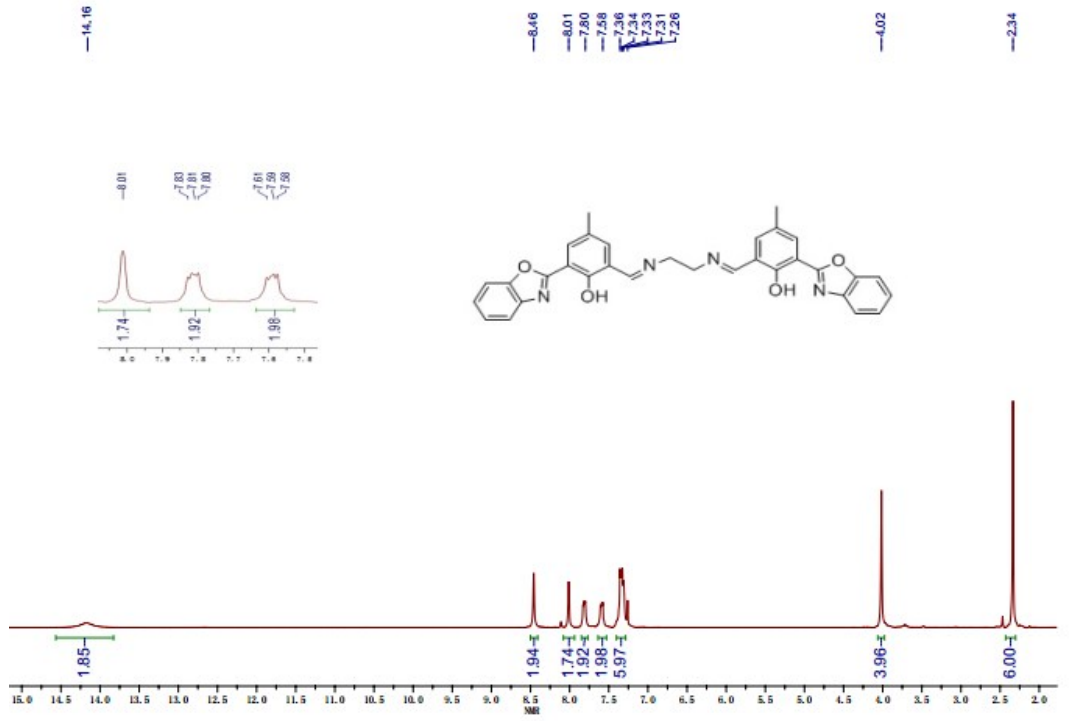

Fig. S8. ^{1}H NMR spectrum of **ZP** in $CDCl_3$.

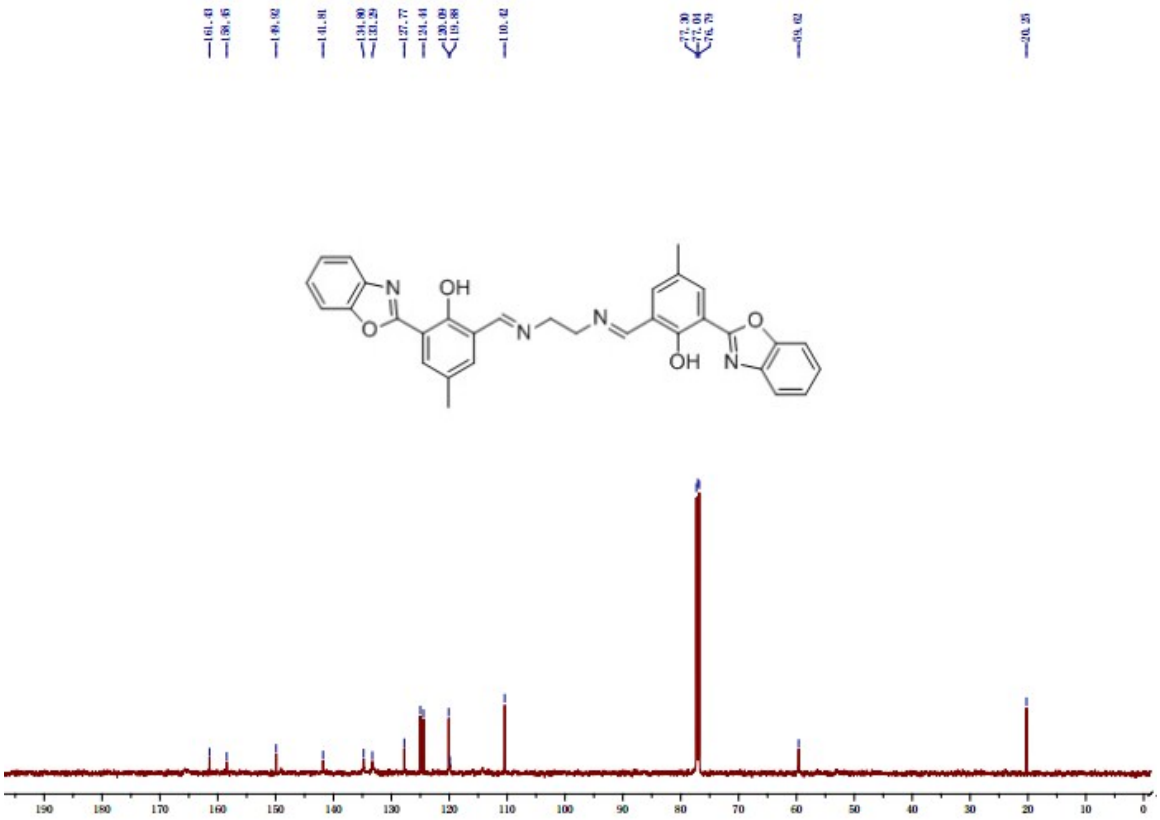

Fig. S9. ^{1}C NMR spectrum of **ZP** in $CDCl_3$.

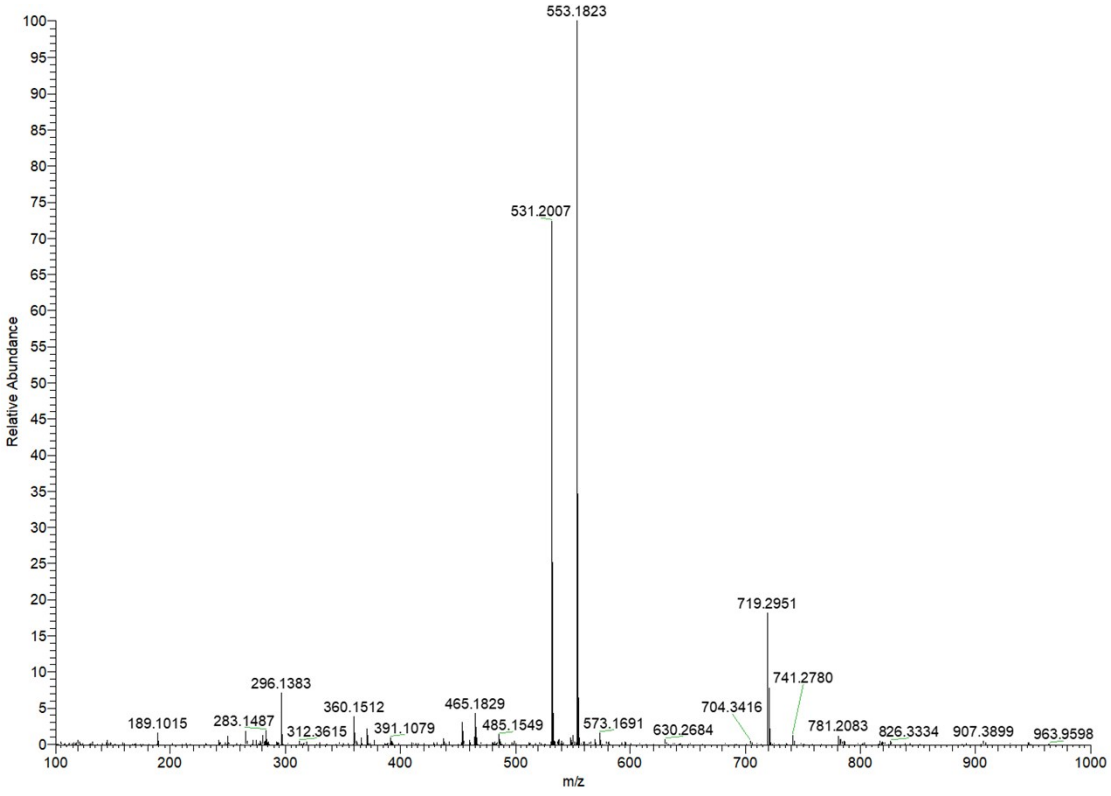

Fig. S10. HRMS spectrum of **ZP**.