Supporting Information

Fluorescent "OFF–ON" Sensors for the Detection of Sn^{2+} Ions Based on Amine-Functionalized Rhodamine 6G

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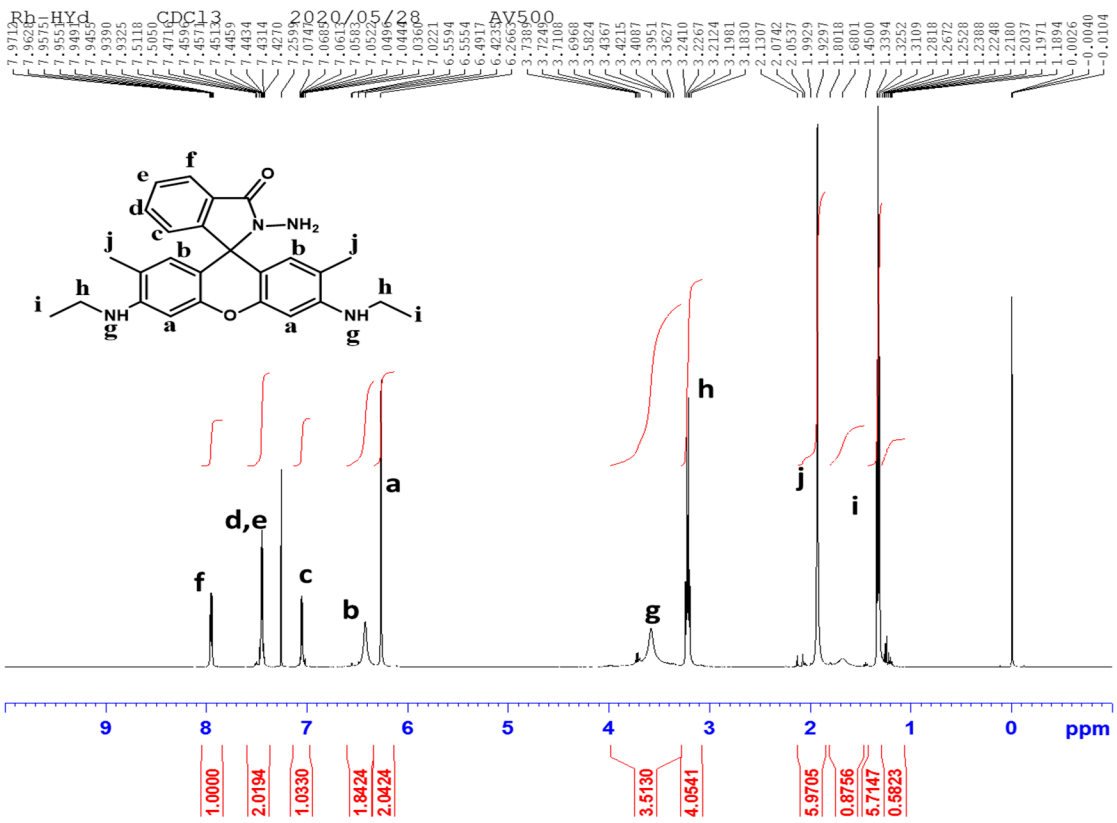

Figure S1. ^{1}H-NMR spectrum of Rh-Hyd in $CDCl_3$.

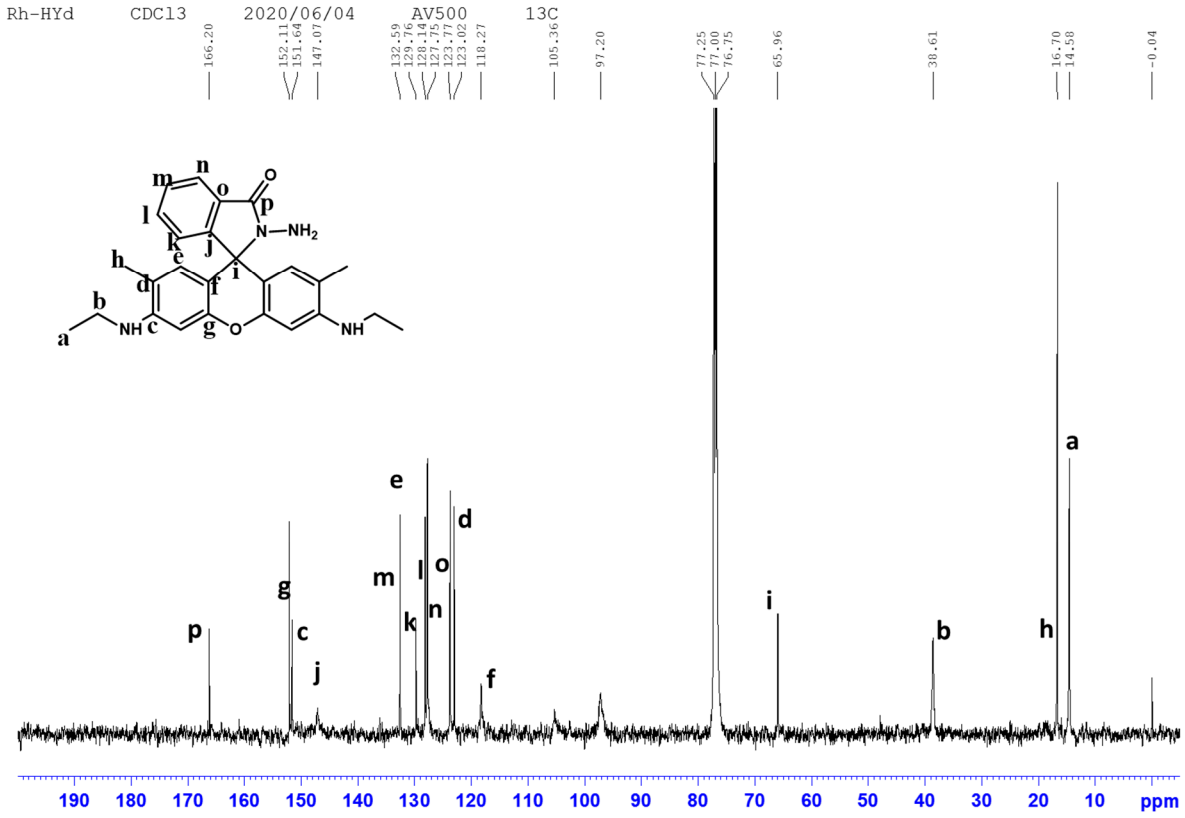

Figure S2. ^{13}C-NMR spectrum of Rh-Hyd in $CDCl_3$.

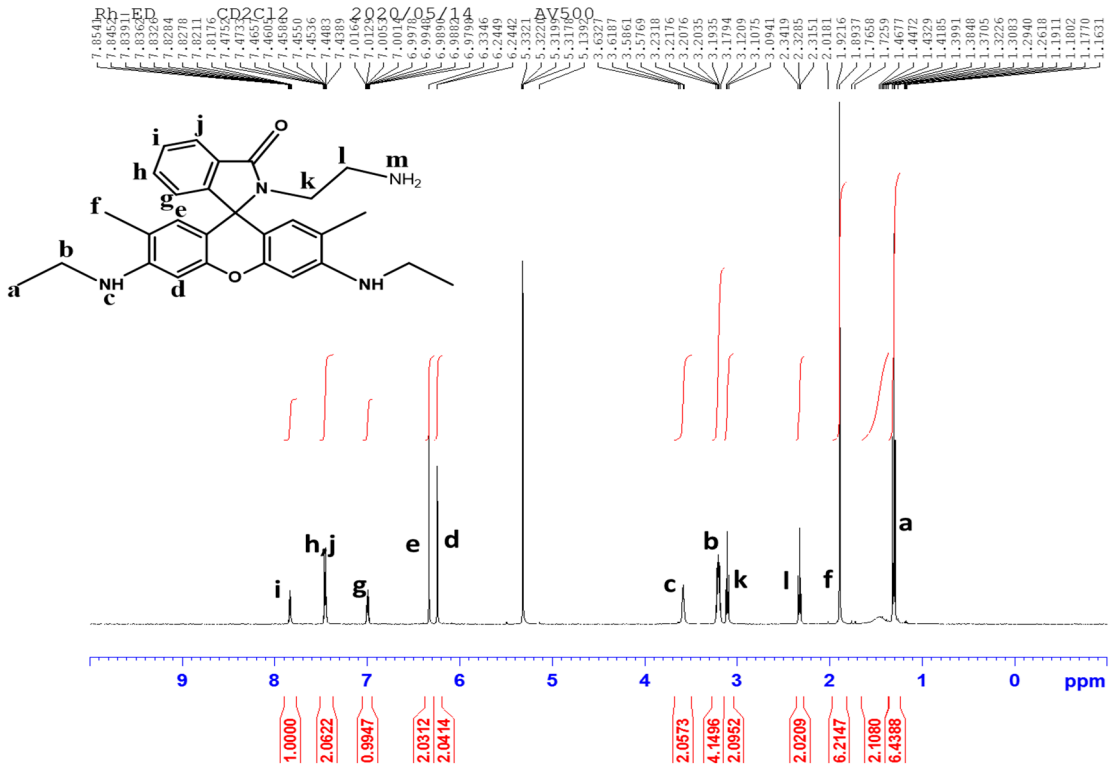

Figure S3. ^{1}H-NMR spectrum of Rh-ED in $CDCl_3$.

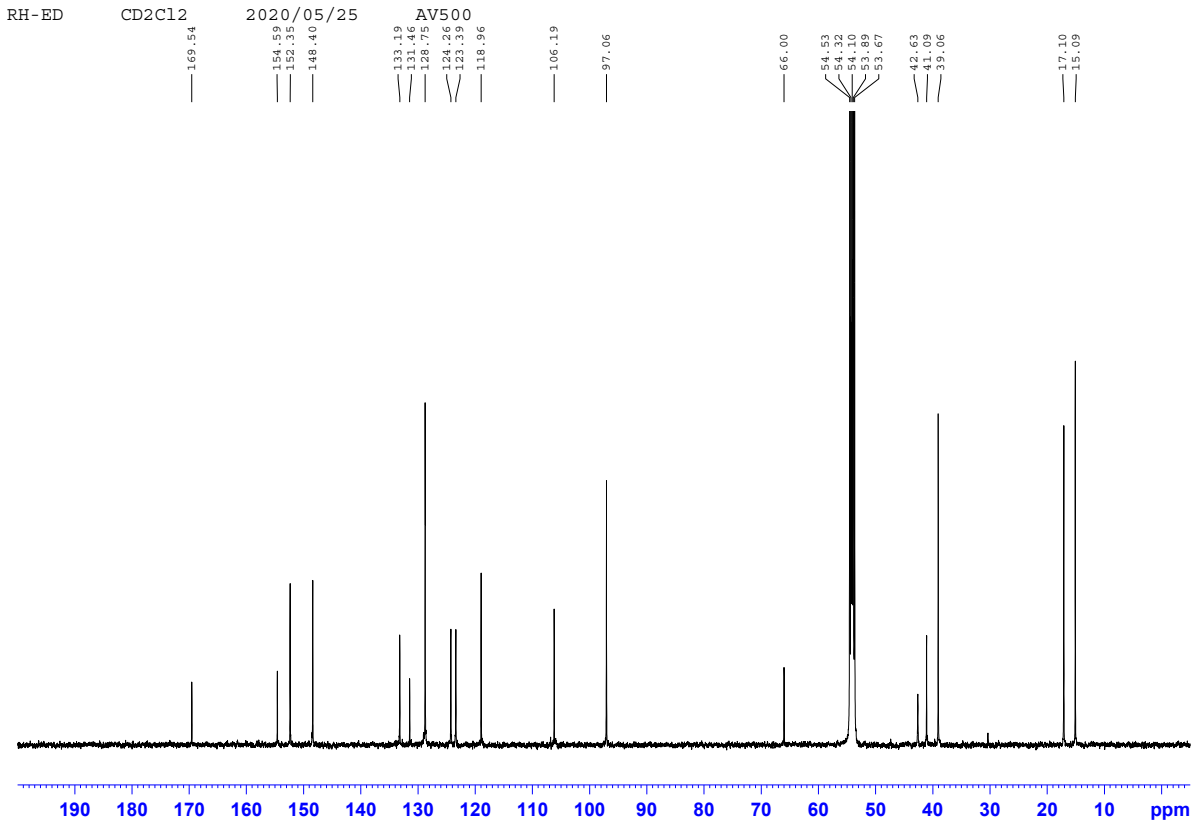

Figure S4. ^{13}C-NMR spectrum of Rh-ED in $CDCl_3$.

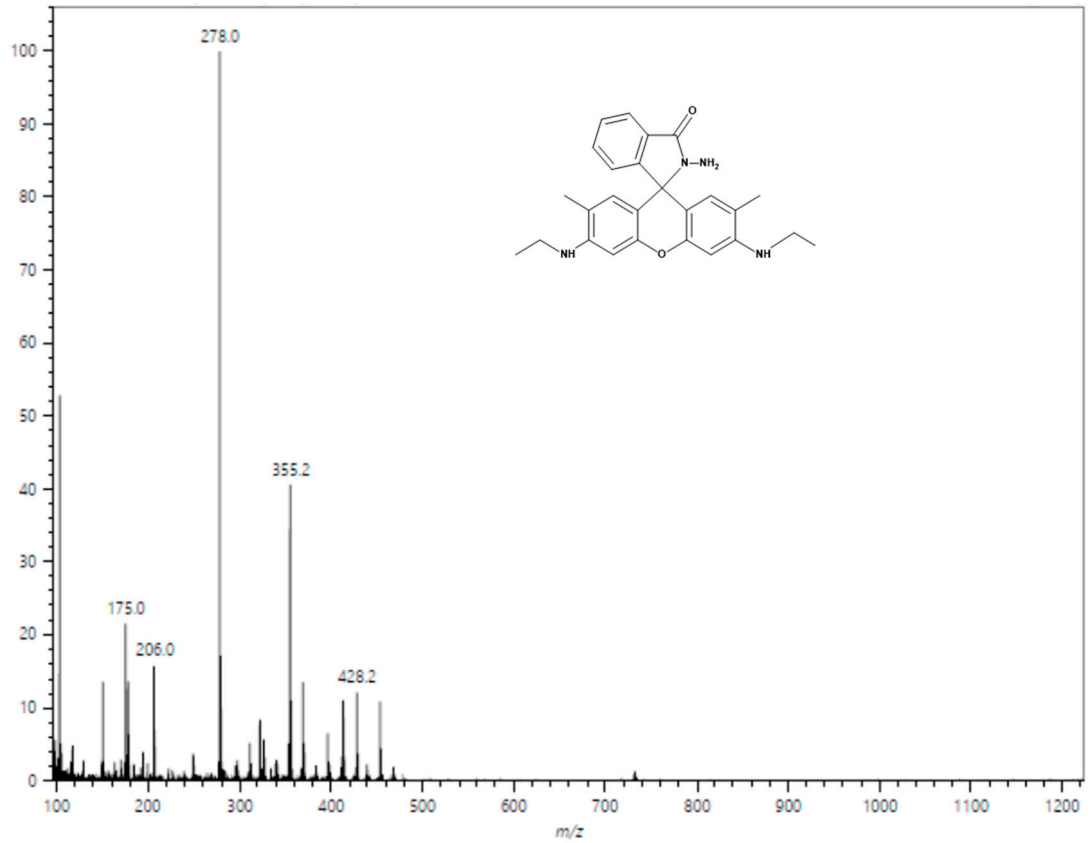

Figure S5. Mass spectrum of Rh-Hyd.

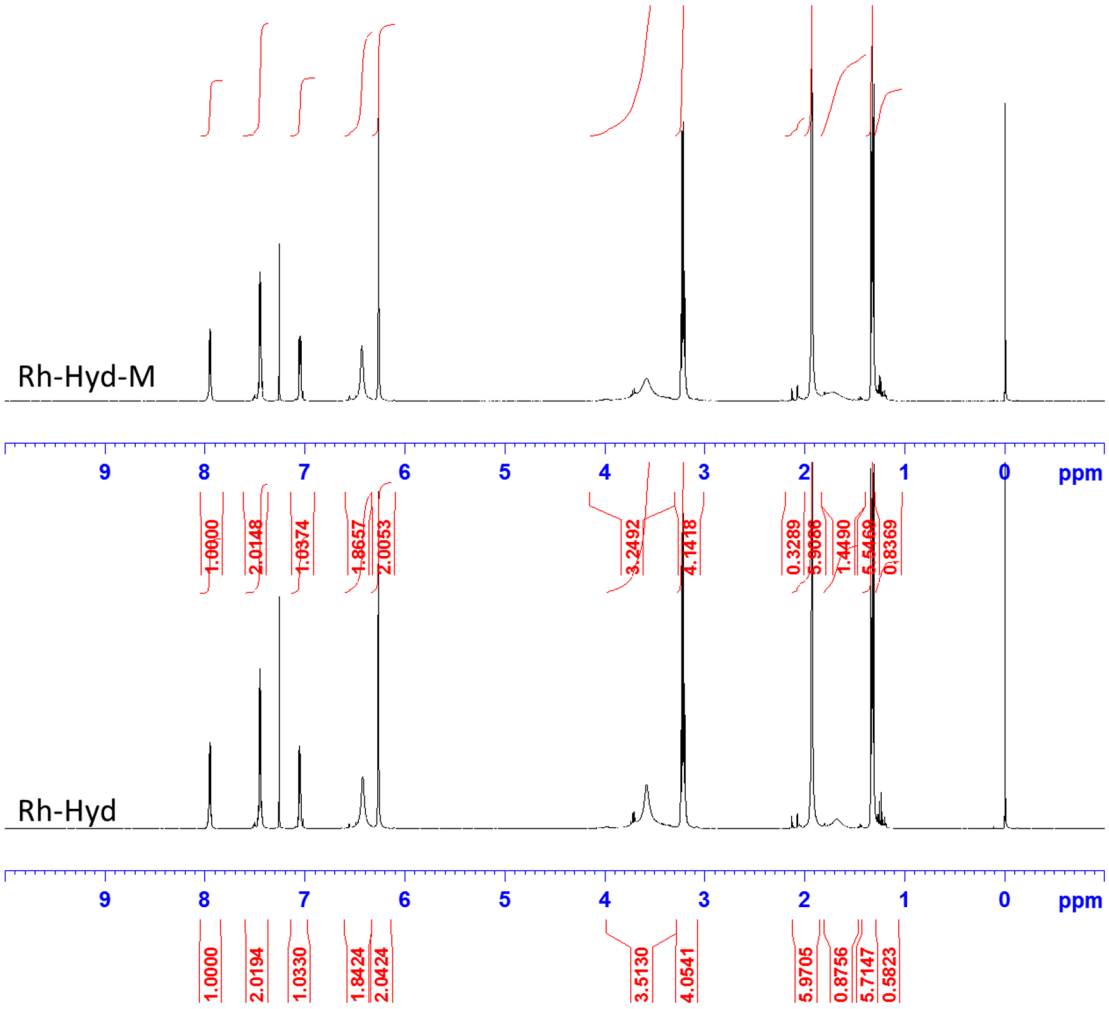

Figure S6. Comparison of ^{1}H-NMR spectra of Rh-Hyd and its complexes with Sn^{2+}.

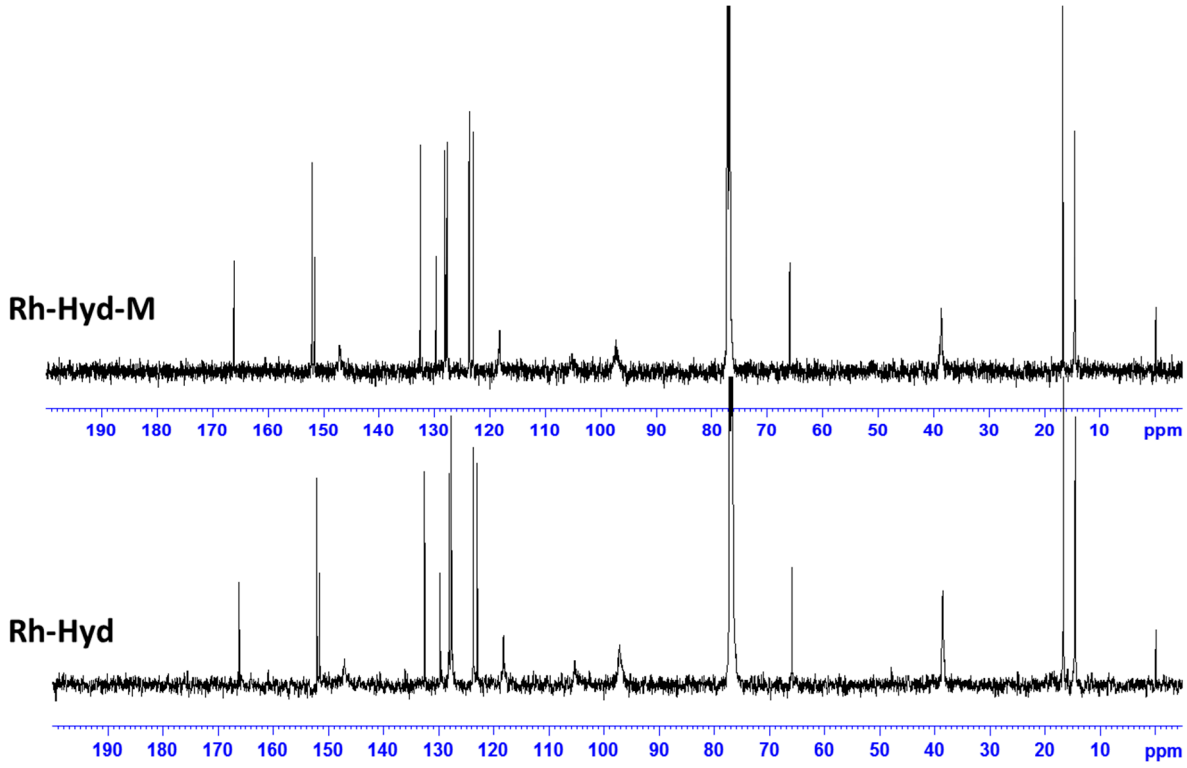

Figure S7. Comparison of ^{13}C-NMR spectra of Rh-Hyd and its complexes with Sn^{2+}.

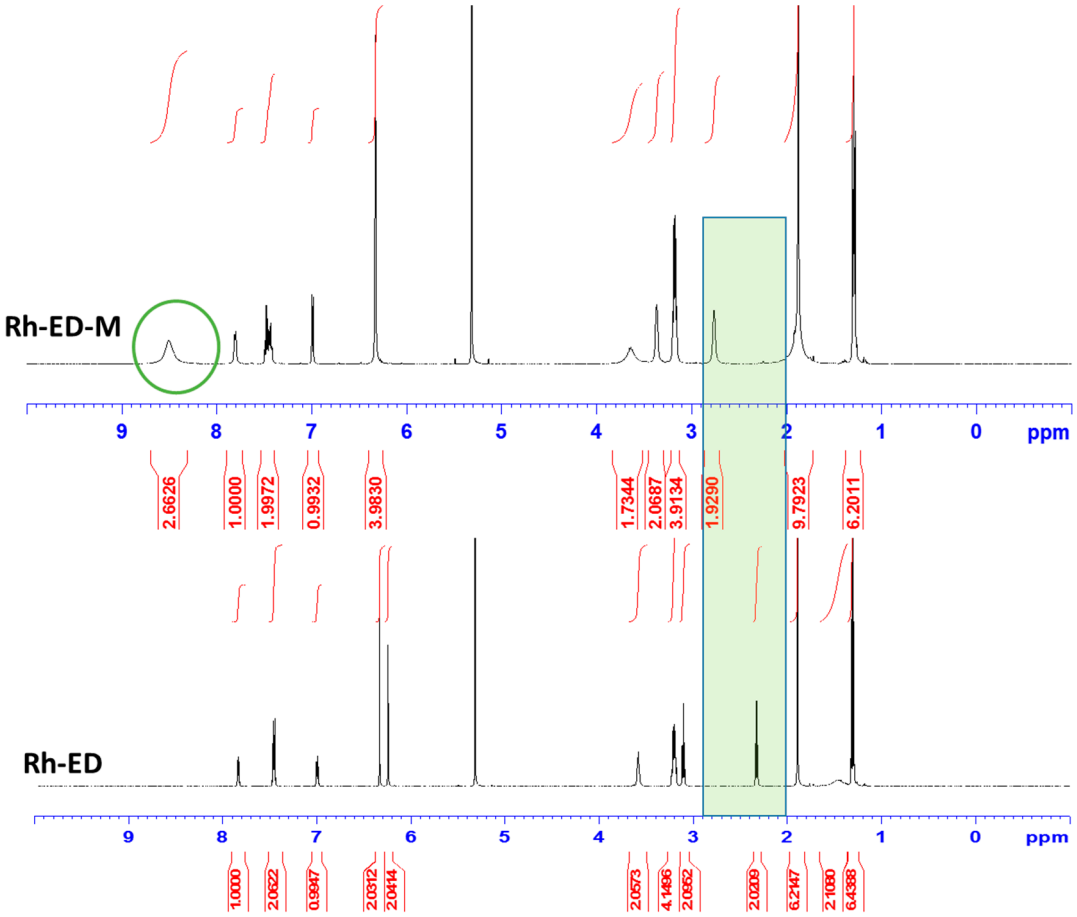

Figure S8. Comparison of ^{1}H-NMR spectra of Rh-ED and its complexes with Sn^{2+}.

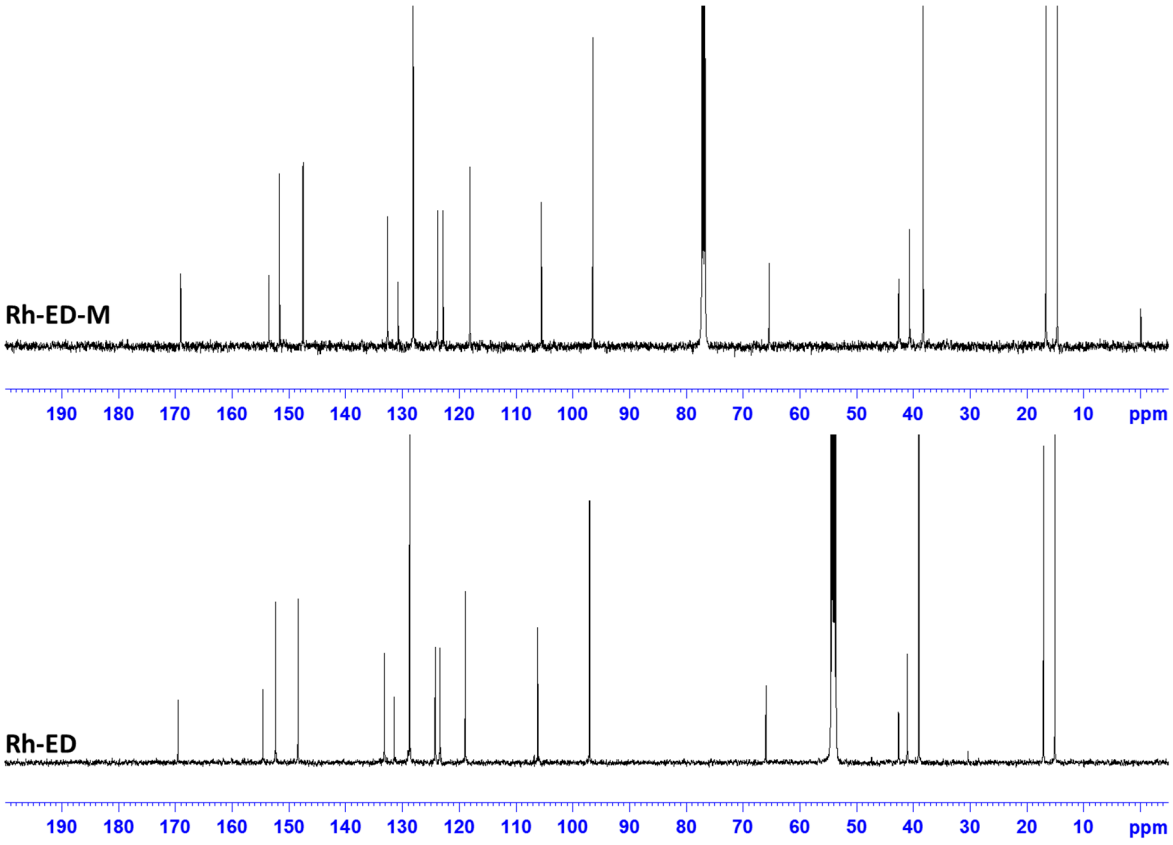

Figure S9. Comparison of ^{13}C-NMR spectra of Rh-ED in CD_2Cl_2 and its complexes with Sn^{2+} in $CDCl_3$.

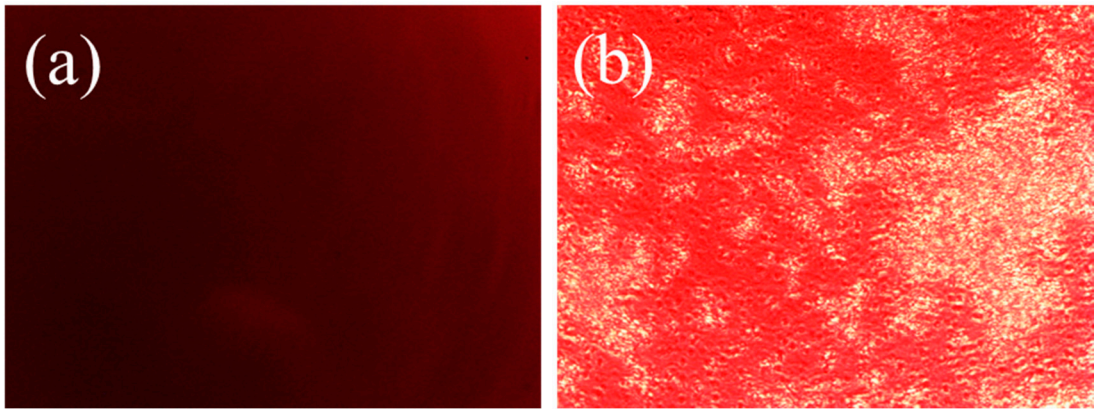

Figure S10. Fluorescence images of (a) Rh-Hyd and (b) the respective Sn^{2+} complex (magnification 10x).

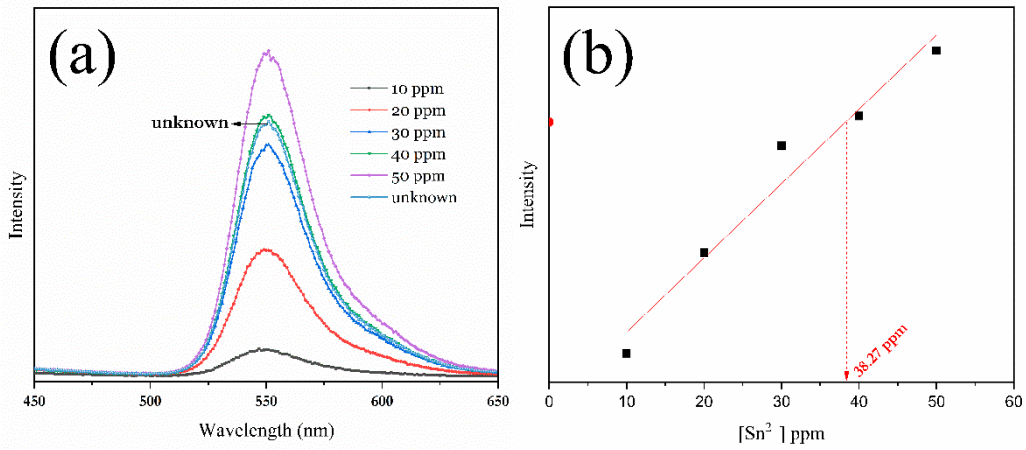

Figure S11. (**a**) Fluorescent spectra of Rh-Hyd with $SnCl_2$ of known and unknown concentration samples, and (**b**) the corresponding calibration curve.

The determination of total tin content is based on the following calculation: 1 mL of ethanolic solution of aminophenol containing = (0.789 × 38.27) ppm =30.20 × 10^{-6} g of $SnCl_2$. Thus, 30.20 × 10^{-6} g of $SnCl_2$ containing = [(118.71/189.6) × 30.20 × 10^{-6}] =18.91 × 10^{-6} g of Sn. Therefore, 63 mg of aminophenol containing = (18.91 × 10^{-6}/0.063) = 300.2 ppm of Sn.