Supporting Information

Sensitive Naked Eye Detection of Hydrogen Sulfide (H_2S) and Nitric Oxide (NO) by Aza-BODIPY Dyes in Aqueous Medium

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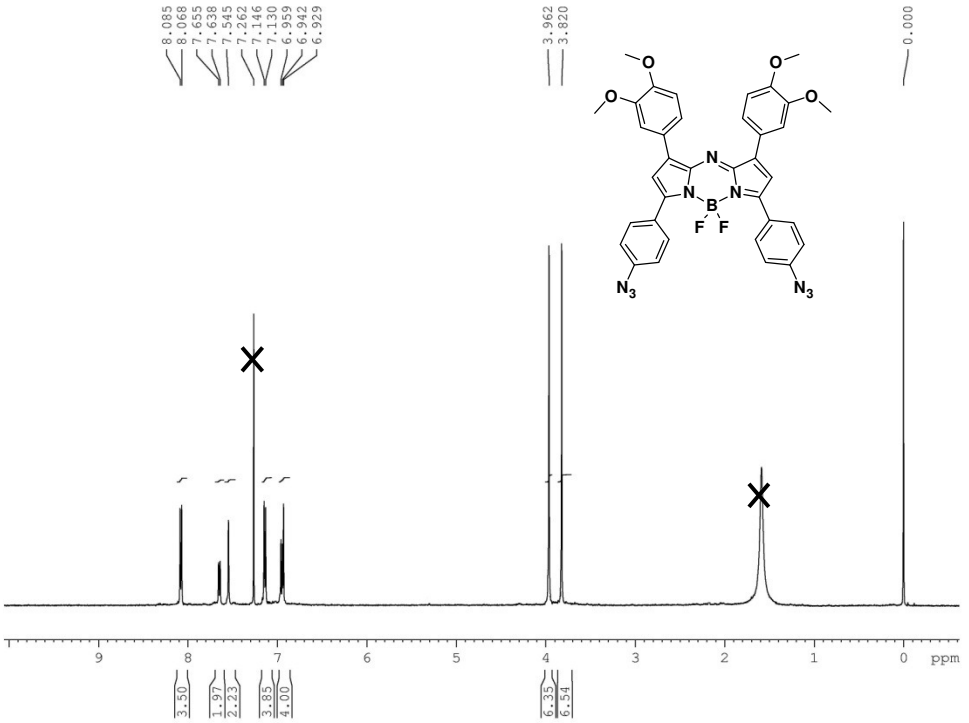

Figure S1. ^{1}H NMR spectrum of the aza-BODIPY derivative **3a** in $CDCl_3$.

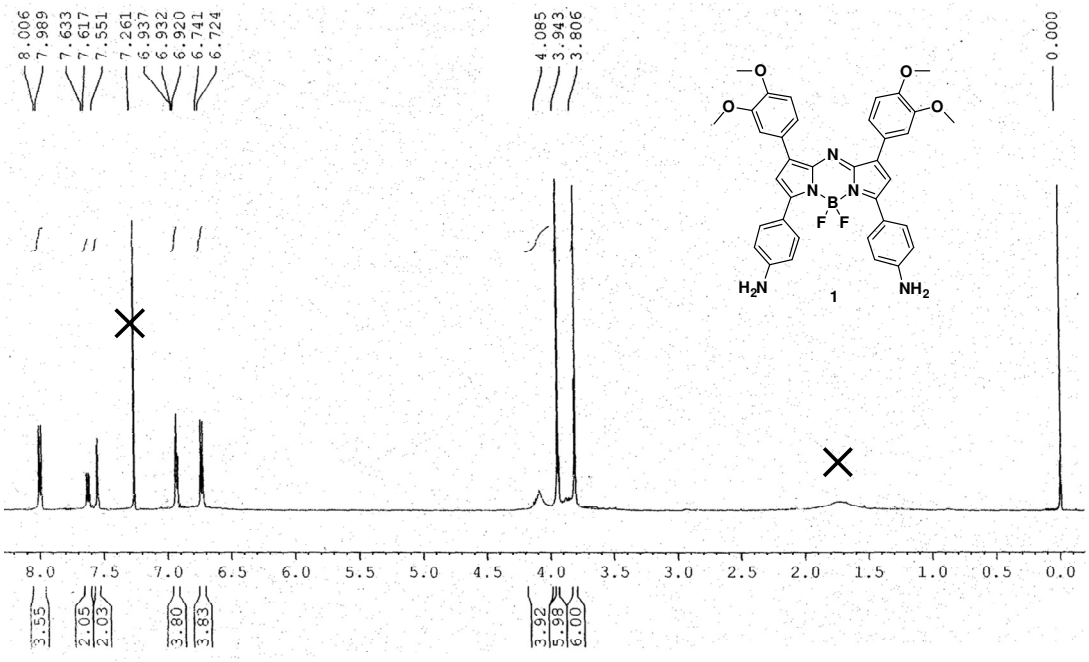

Figure S2. ^{1}H NMR spectrum of the aza-BODIPY derivative **3b** in $CDCl_3$.

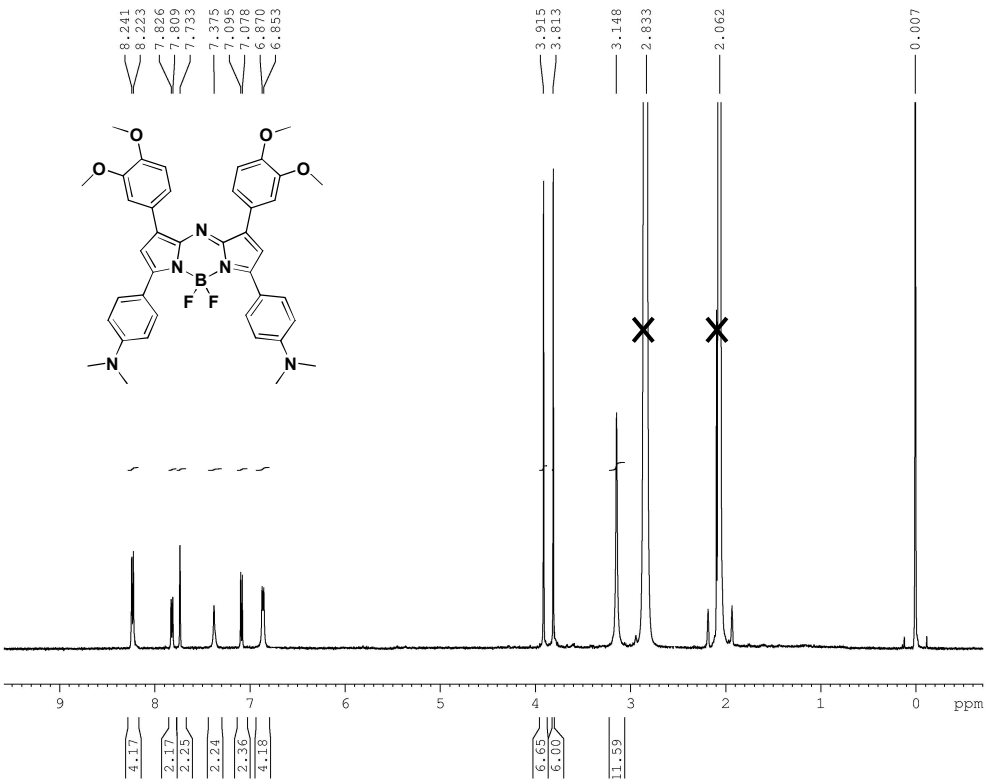

Figure S3.[1]H NMR spectrum of the aza-BODIPY derivative **3c** in Acetone-*d6*.

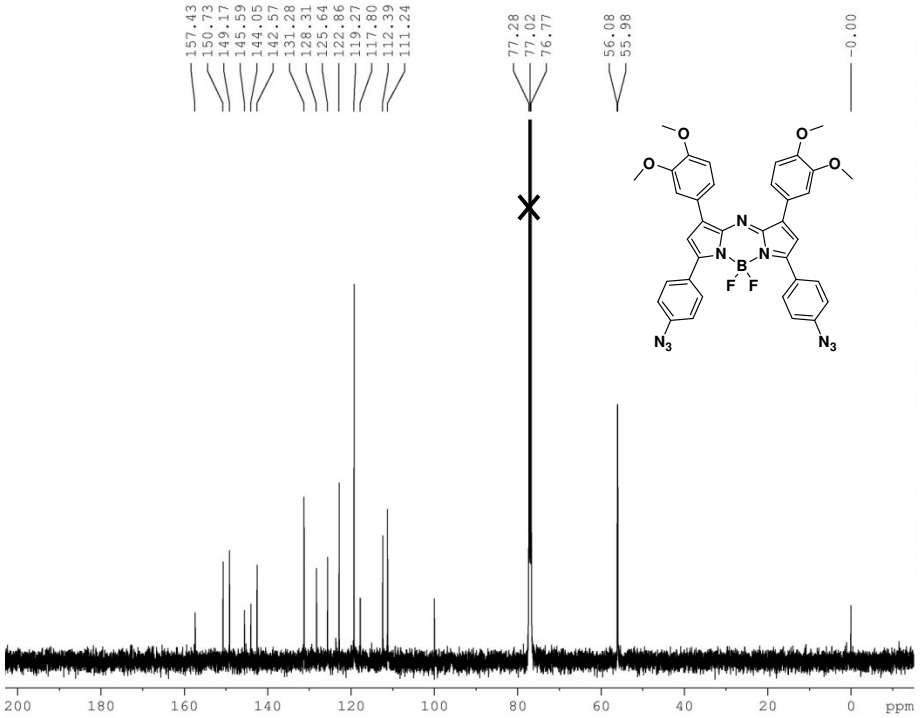

Figure S4.[13]C NMR spectrum of the aza-BODIPY derivative **3a** in $CDCl_3$.

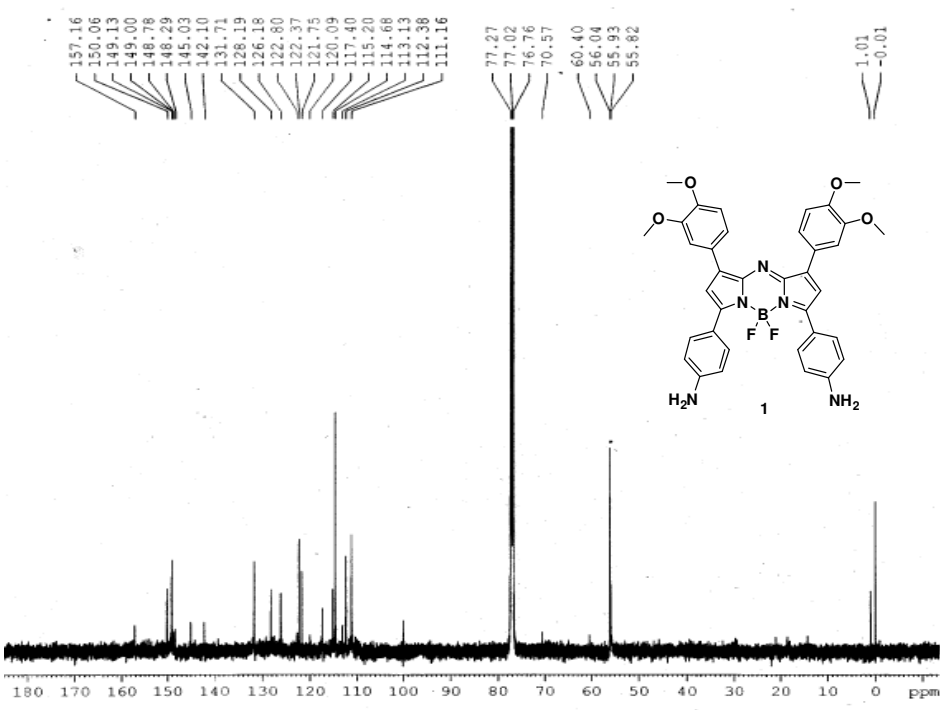

Figure S5.[13]C NMR spectrum of the aza-BODIPY derivative **3b** in $CDCl_3$.

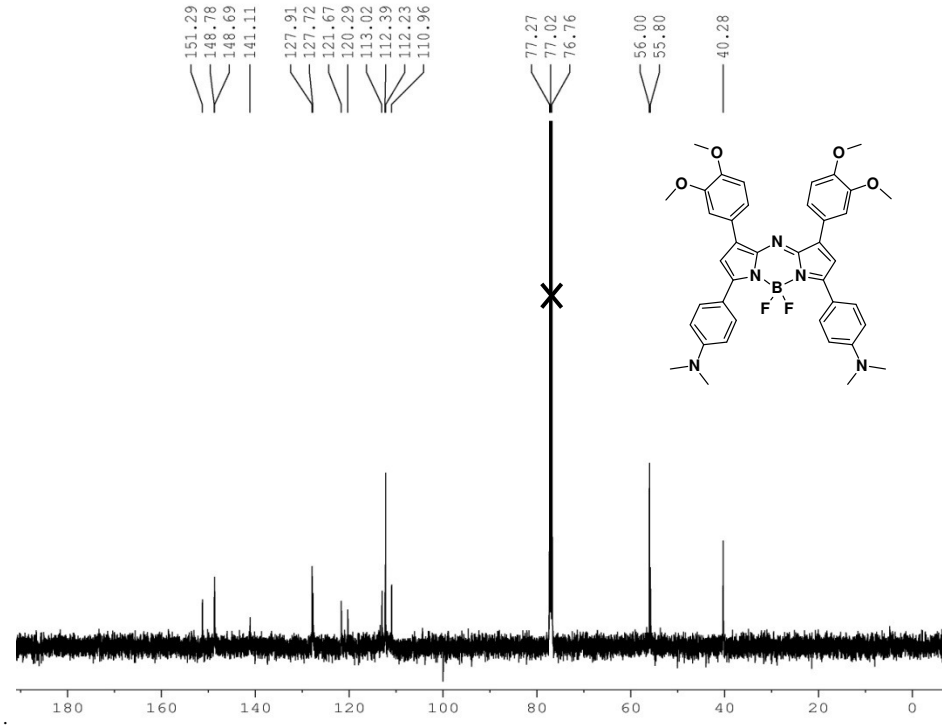

Figure S6.[13]C NMR spectrum of the aza-BODIPY derivative **3c** in $CDCl_3$.

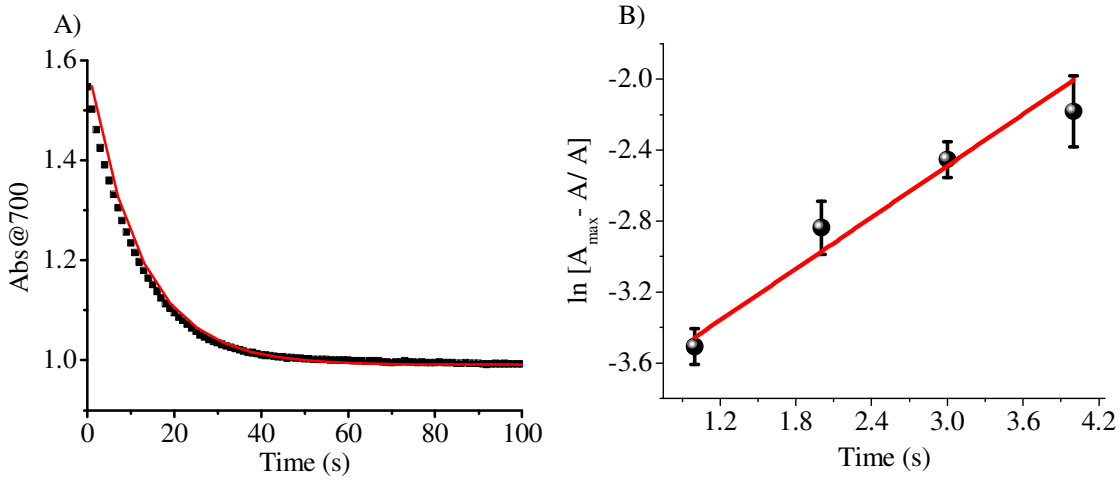

Figure S7: A) The temporal profile of absorbance at λ_{abs} = 700 nm observed due to the reaction between probe **3a** and hydrogen sulfide. B) Pseudo first-order kinetic plot of reaction of probe **3a** (5 µM) with hydrogen sulfide (50 µM). Slope (Rate constant) = 0.083 ± 0.021 s^{-1}.

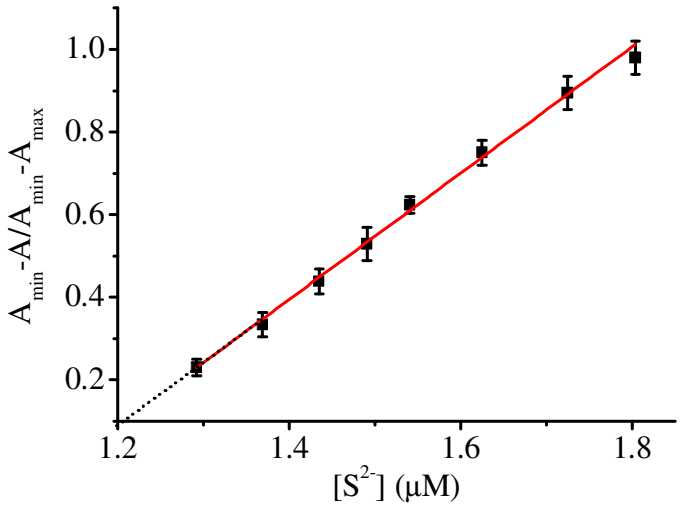

Figure S8: Linear plot for the estimation of limit of detection (LOD) from the absorption changes of **3a** with hydrogen sulfide (H_2S). Data points represent the mean of more than three independent experiments (±SD).

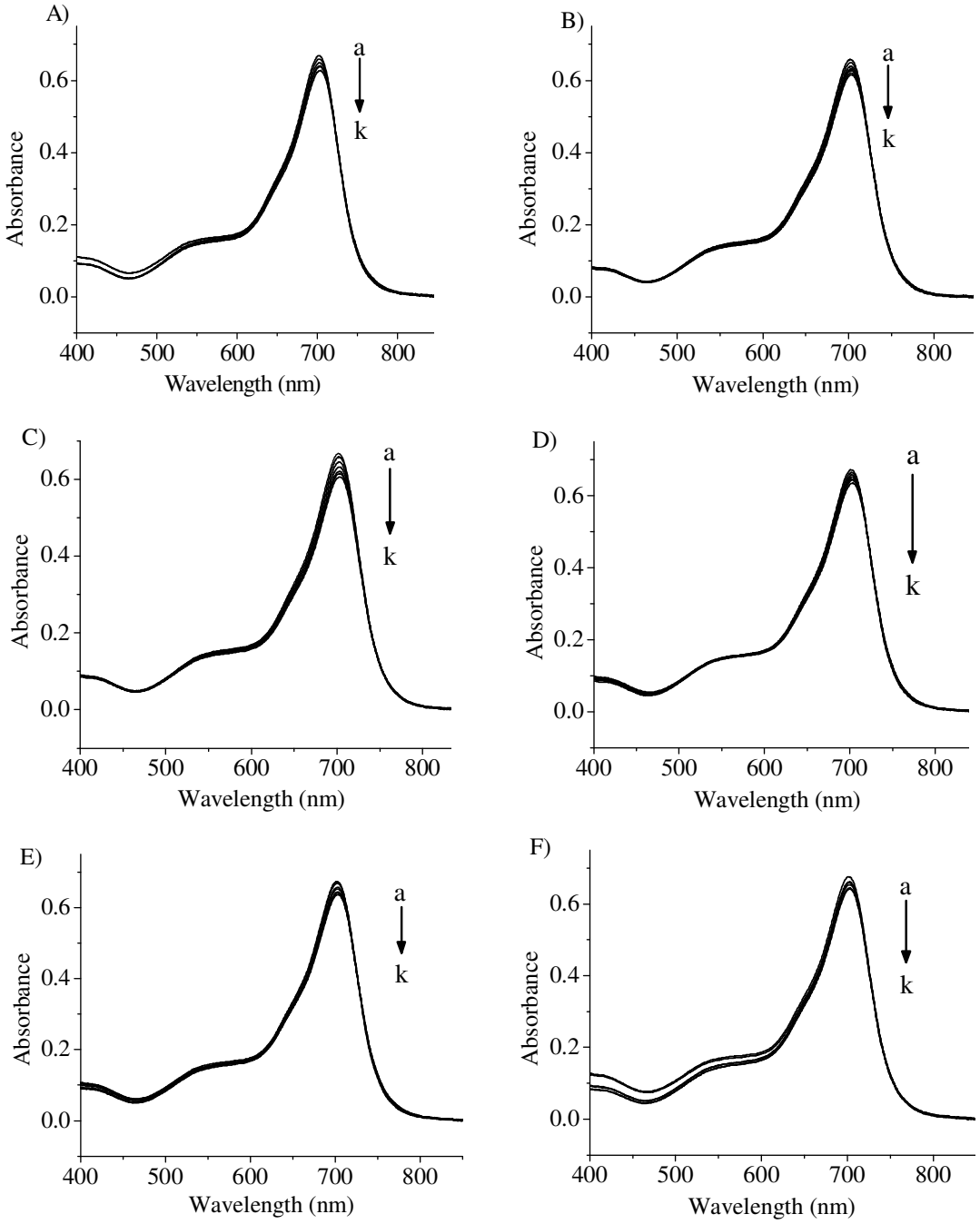

Figure S9: Absorption spectral changes showing the negligible interaction of the probe **3a** (12 μM) with the addition of various competitive anions, a) 0 and k) 40 mM. A) SO_4^{2-}, B) HSO_3^-, C) ($S_2O_3^{2-}$), D) (NO_3^-), E) (NO_2^-), F) (N_3^-) ions.

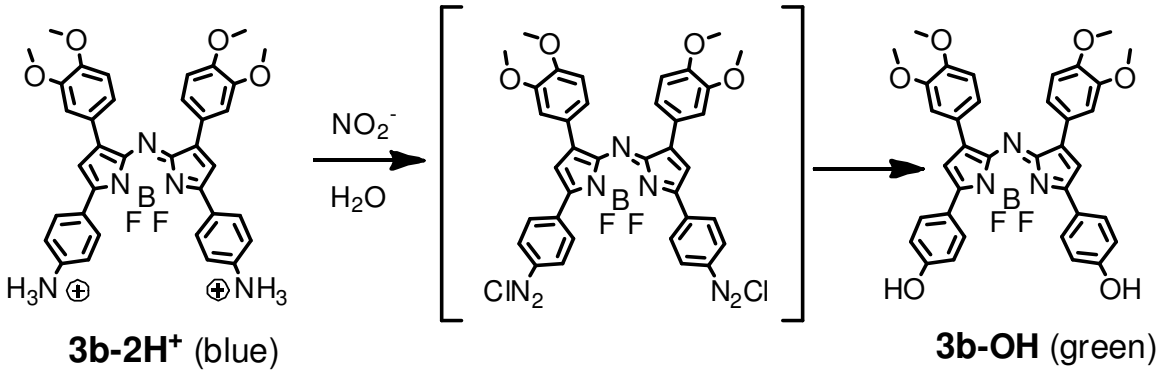

Figure S10: Possible mechanism for the detection of nitrite ions sensing using aza-BODIPY derivative **3b**.

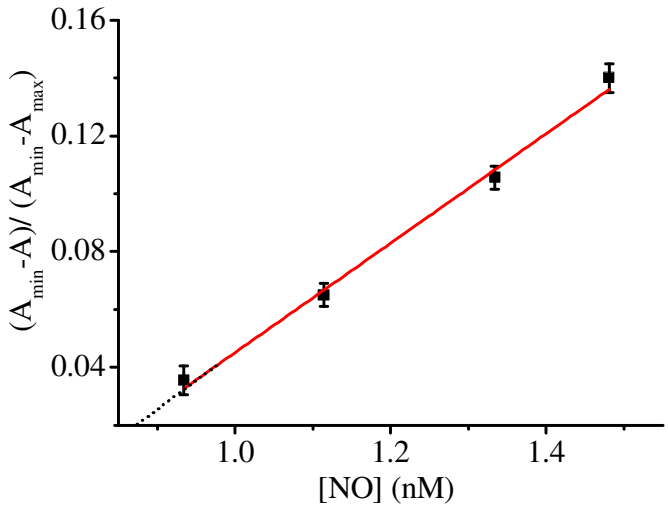

Figure S11: Linear plot for the estimation of limit of detection (LOD) from the absorption changes of **3b** with nitric oxide (NO). Data points represent the mean of more than three independent experiments (±SD).