

Supporting Information

for

Investigation of a bimetallic terbium(III)/copper(II) chemosensor for the detection of aqueous hydrogen sulfide

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Copies of HRMS, ¹H NMR and fluorescence emission spectra

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Figure S1: HRMS of [Tb.1·2Na⁺]⁻, insert: Simulated MS using EnviPat Web 2.4 software, available at <u>https://www.envipat.eawag.ch/</u>.





Figure S3: (a) Changes in the luminescence emission spectrum of $[Tb.1]^{3-}$ (5 µM) upon the addition of Cu^{2+} (0–25 µM); spectra measured in 10 mM Tris HCl buffer (pH 7.4) with $\lambda_{ex} = 250$ nm. (b) Luminescence intensity detected at 545 nm upon the addition of Cu^{2+} (n = 3). http://app.supramolecular.org/bindfit/view/d0e6f7ef-6faf-450b-b842-d8ae13300612



Figure S4: (a) Changes in the luminescence emission spectrum of $[Tb.1]^{3-}$ (5 µM) upon the addition of Cu²⁺ (0–25 µM); spectra measured in 10 mM HEPES buffer (pH 7.4) with $\lambda_{ex} = 250$ nm.

(b) Luminescence intensity detected at 545 nm upon the addition of Cu^{2+} (*n* = 3).

http://app.supramolecular.org/bindfit/view/9e883727-6b75-4a9f-835b-13a80df0e89d