

Supporting Information for Publication

A Nanoprobe Synthesized by Magnetotactic Bacteria, Detecting Fluorescence Variations under Dissociation of Rhodamine B from Magnetosomes following Temperature, pH Changes, or the Application of Radiations

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Figure S1 : Absorption spectra between 350 and 700 nm of suspensions containing free rhodamine B (RhB), MC after first separation step (MC), MC@RhB-2 after the first separation step (MC@RhB-2), the supernate of MC@RhB-2 after 12 separation steps (Supernate), MC@RhB-2 after 12 separation steps (MC@RhB-2 washed) for 1 mL suspensions of MC@RhB-2 prepared using 28 µg of MC and 120 ng of rhodamine, (a), 28 µg of MC and 240 ng of rhodamine B, (b), 28 µg of MC and 2.6 µg of rhodamine B, (c), 28µg of MC and 3.9 µg of rhodamine B, (d).

Figure S2: Calibration curve of rhodamine B at pH 2, showing the variation of the fluorescence intensity measured at 580 nm for an excitation at 405 nm, as a function of rhodamine B concentration, (a). Calibration curve of rhodamine B at pH 7, showing the variation of the optical density measured at 550 nm, as a function of rhodamine B concentration, (b). Fluorescence spectrum, measured between 560 nm and 660 nm, for an excitation at 405 nm, of a suspension containing 166 µg/mL of MCR400 dissolved at pH 2, (c).

Figure S3: Heating temperatures measured during the heating of MCR400 suspensions when temperatures are set to 90, 80, 70, 60, 50, 40, 30 and 20°C.

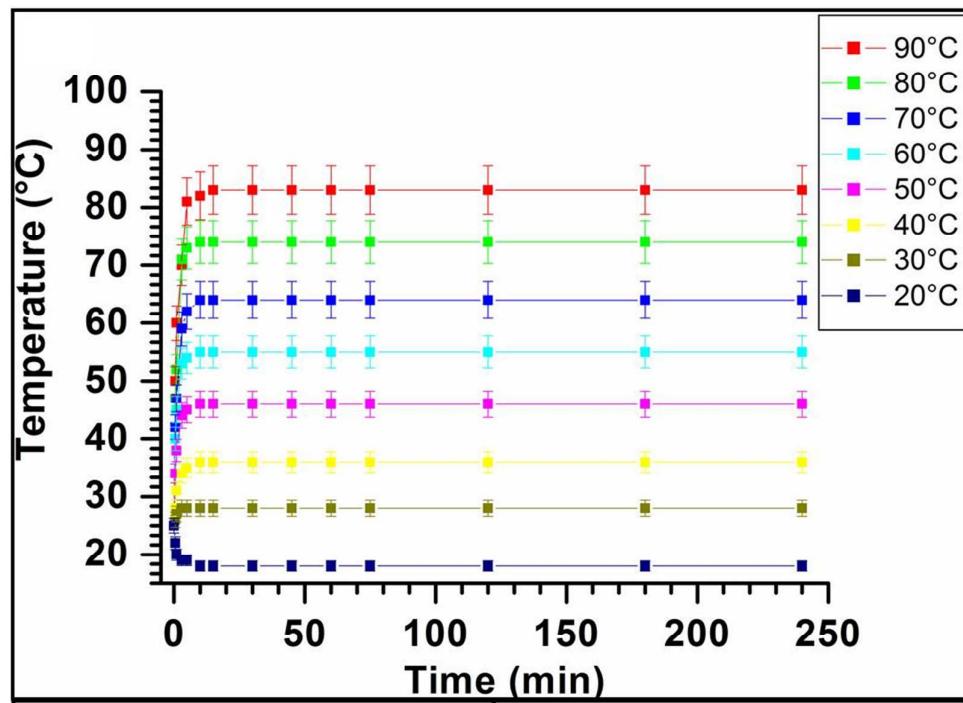


Figure S1

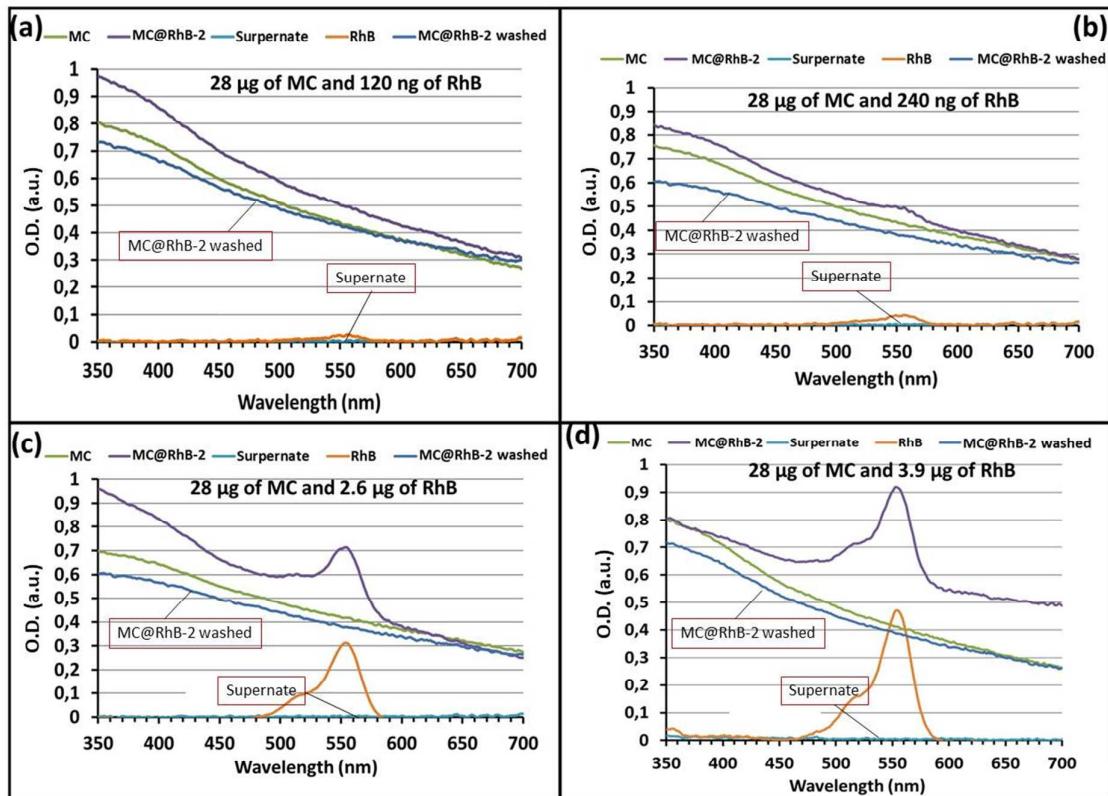


Figure S2

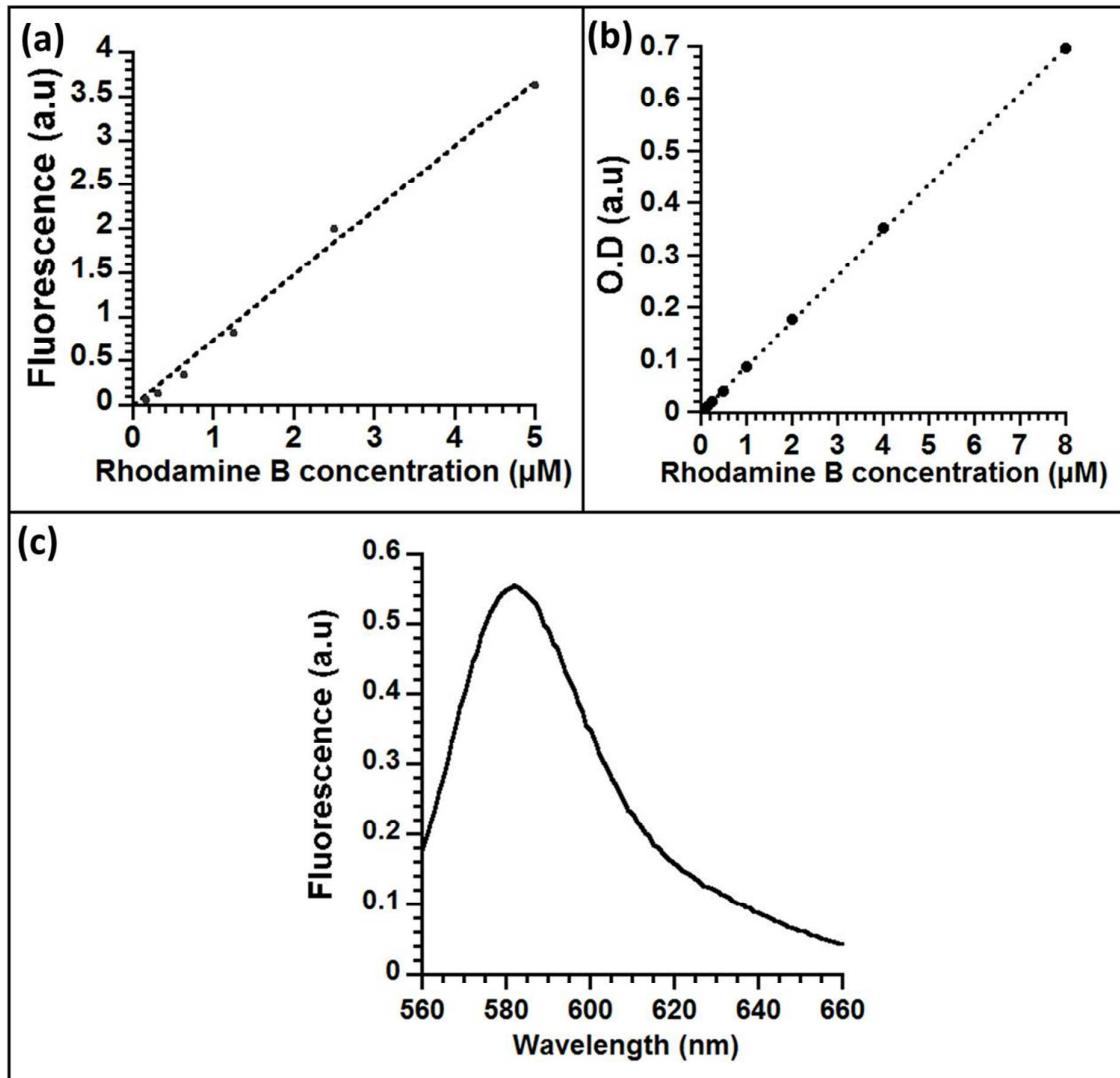


Figure S3