

# Supporting Information

## For

## A new approach for the step by step control of magnetic nanostructures functionalization

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**Figura S5.** <sup>1</sup>H-NMR Spectrum of Fluo2

**Figure S6.** <sup>1</sup>H-NMR Spectrum of Fluo2 (Expanded)

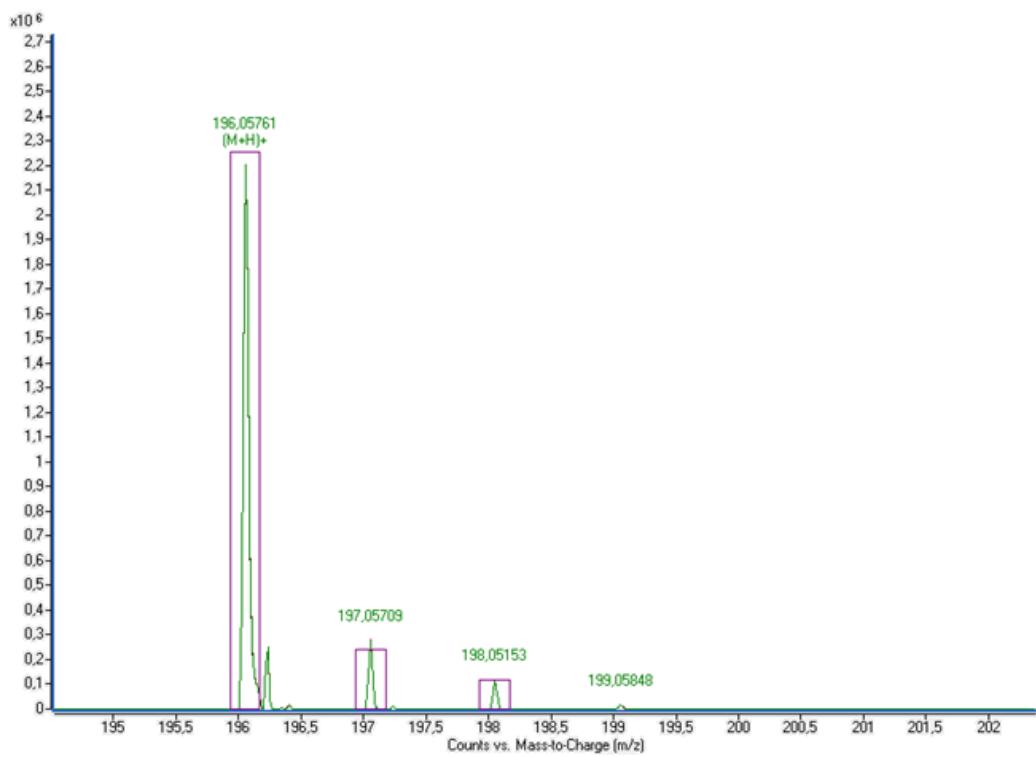
**Figure S7.** <sup>13</sup>C-NMR Spectrum of Fluo2 (a) and expanded (b,c).

**Figure S8.** gHSQC Spectrum of Fluo2

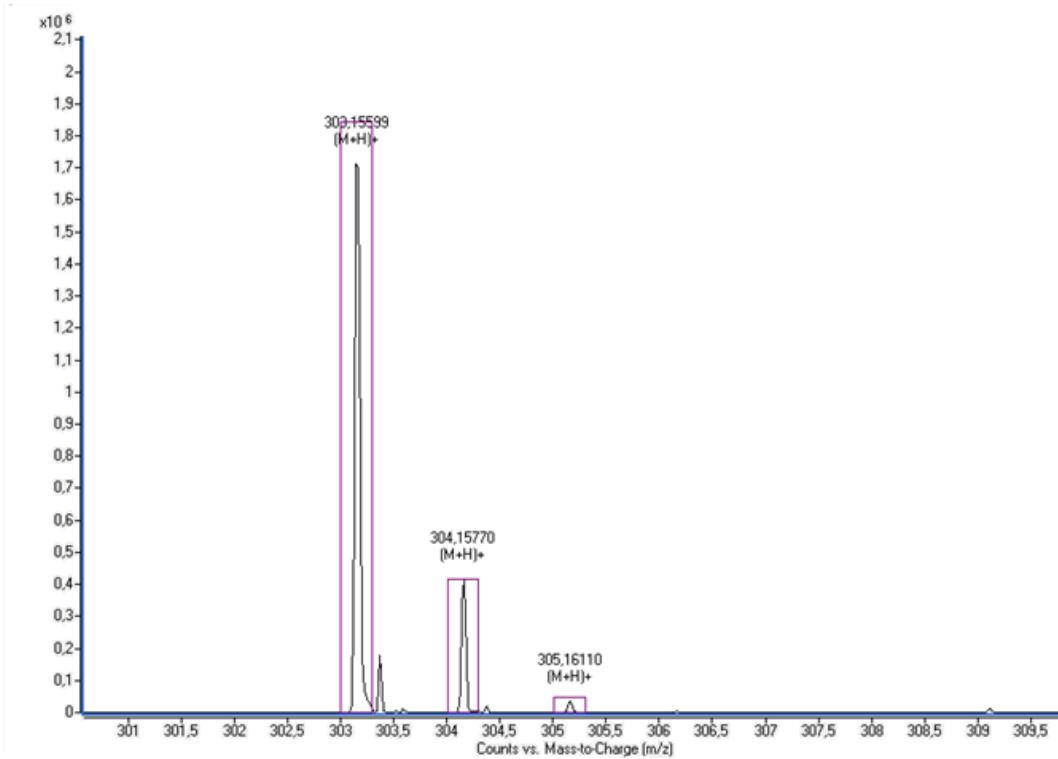
**Figure S9.** gHSQC Spectrum of Fluo2 (Expanded)

**Figure S10.** gHSQC Spectrum of Fluo2 (Expanded)

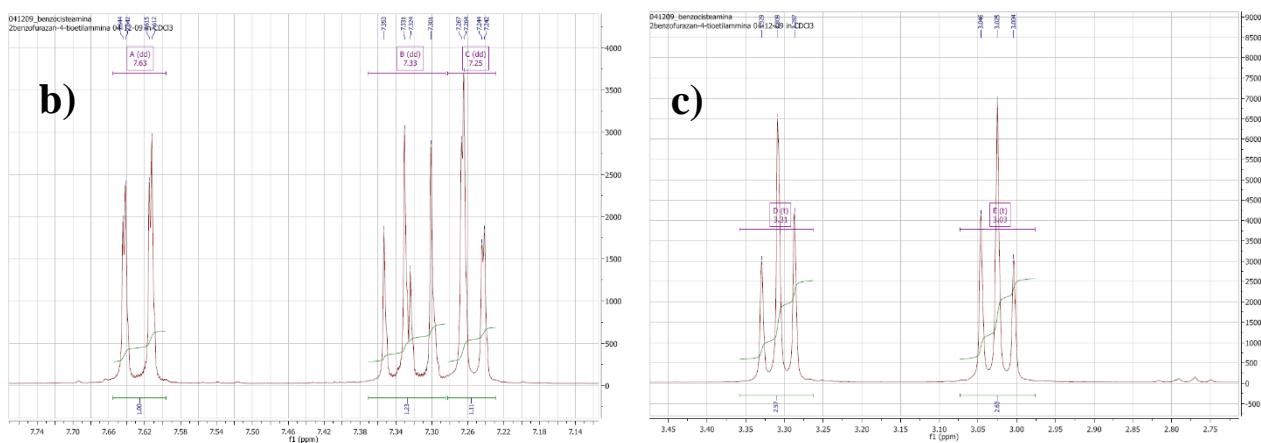
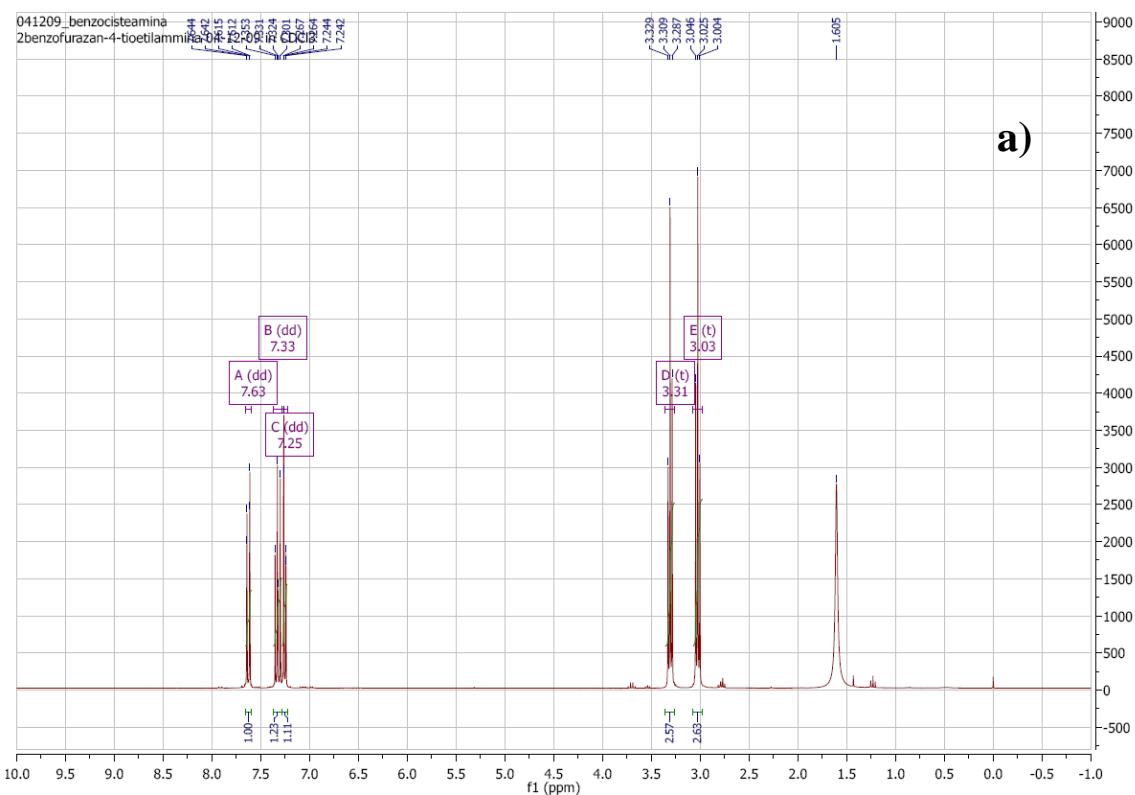
**Figure S11.** Spectra evolution with concentration of Fluo1 in solutions.



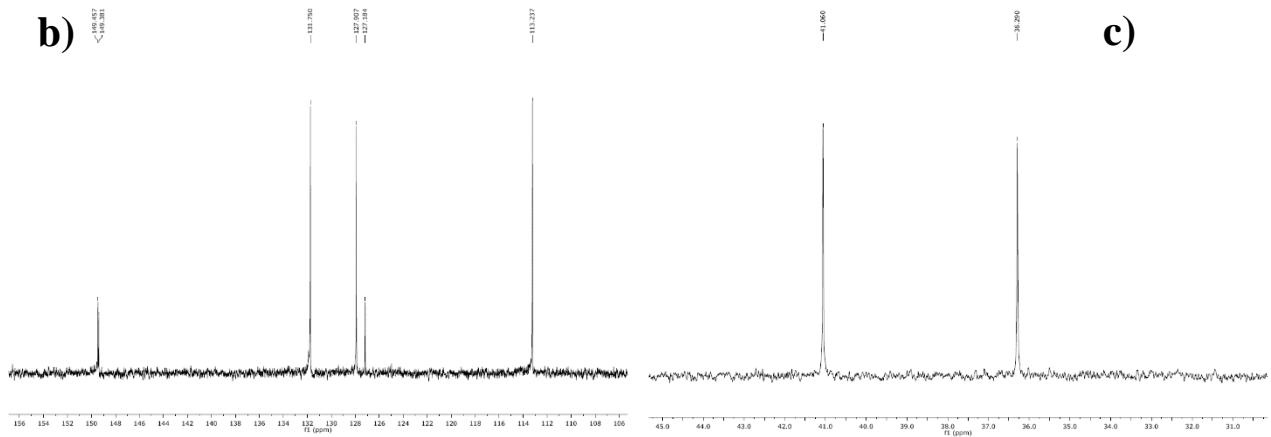
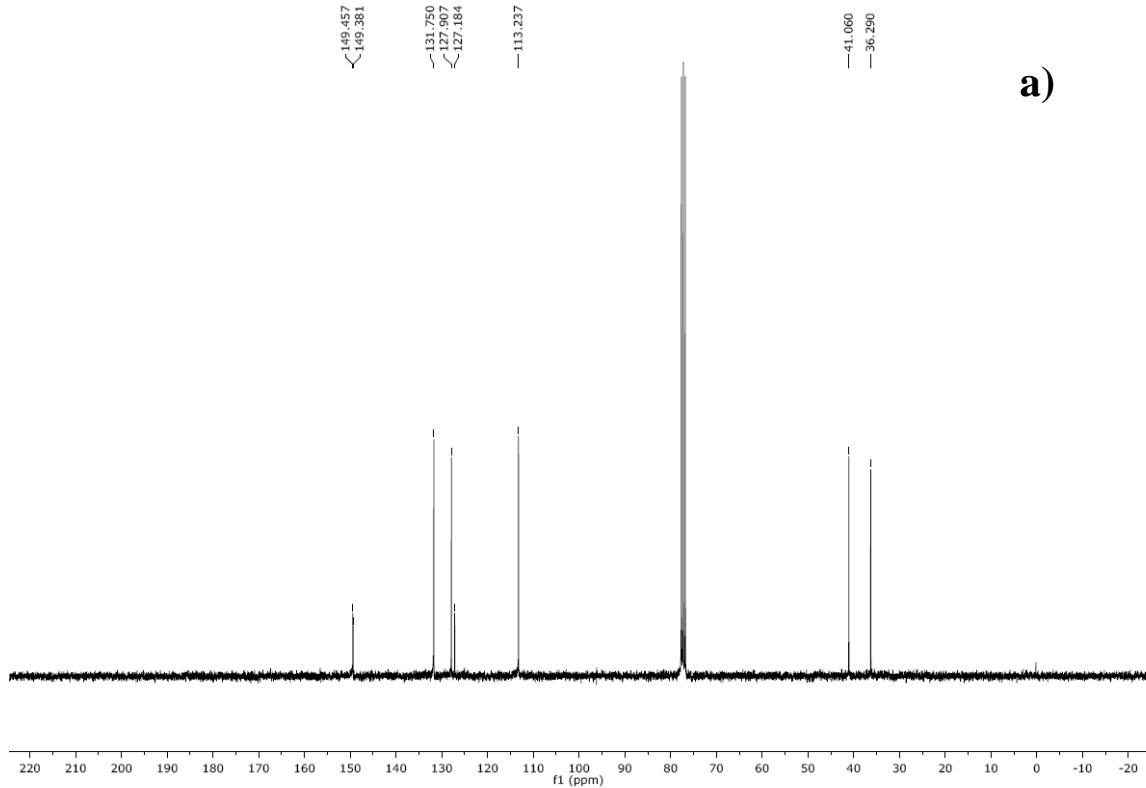
**Figure S1.** ESI-FT HRMS of Fluo1



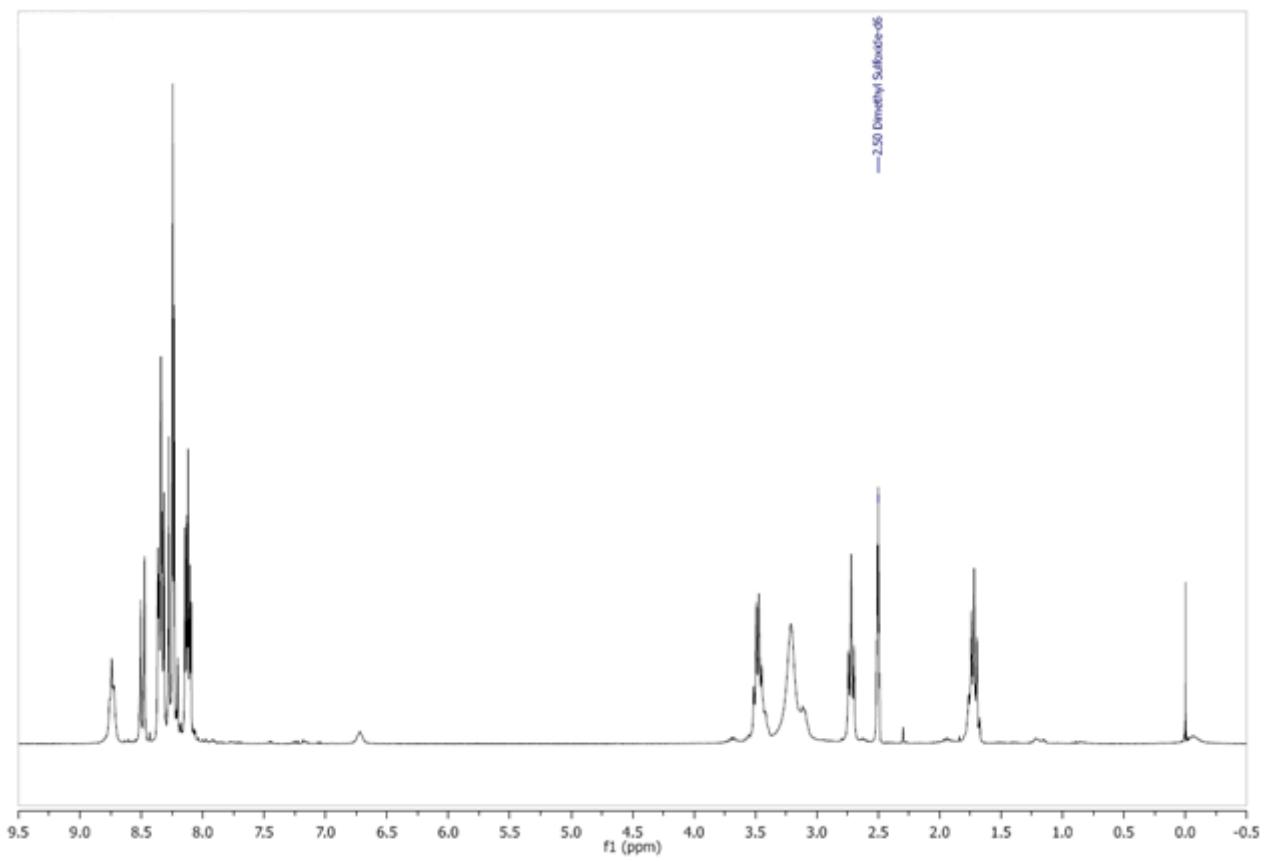
**Figure S2.** ESI-FT HRMS of Fluo2



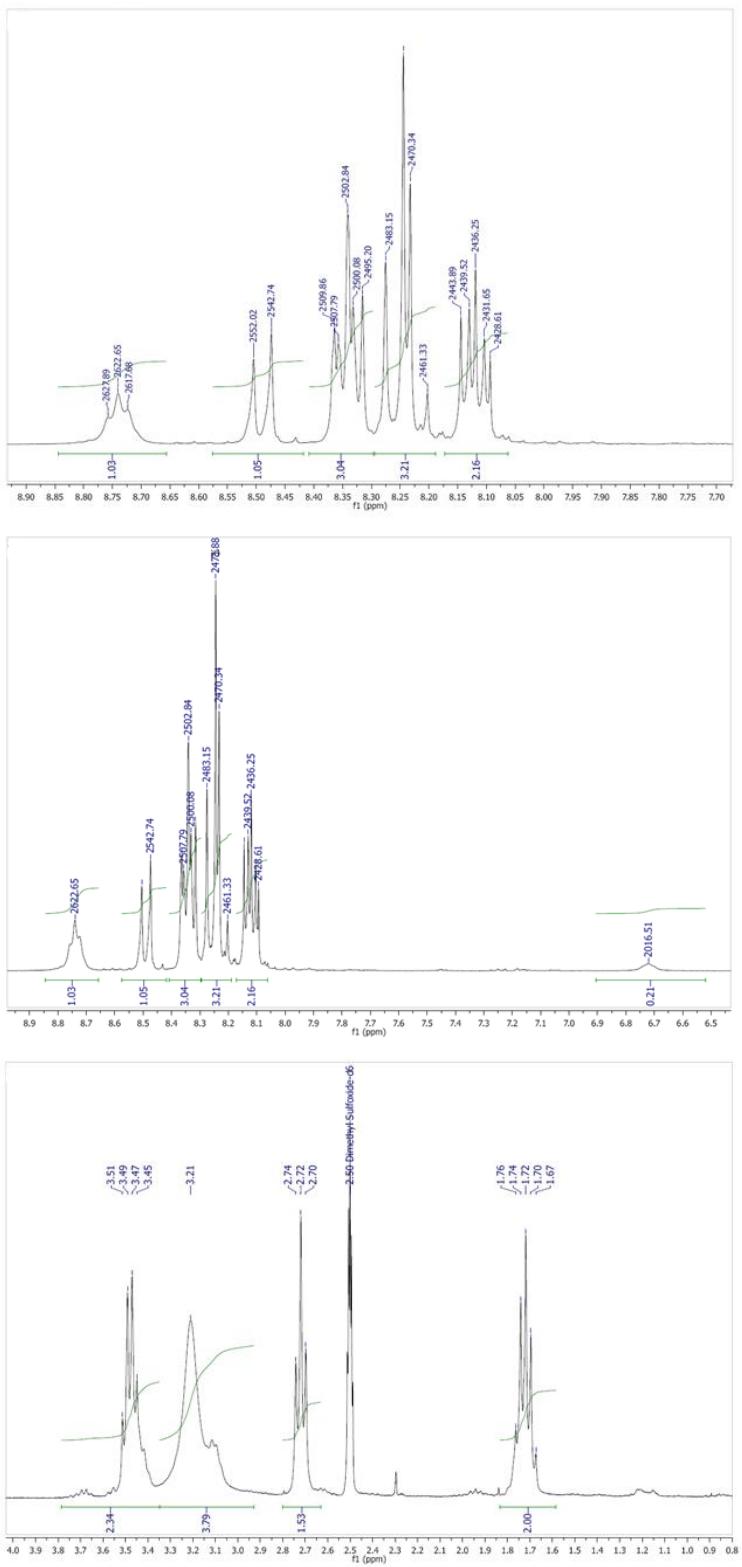
**Figure S3.**  $^1\text{H}$ -NMR Spectrum of Fluo1 (a) and expanded (b,c).  $^1\text{H}$ -NMR : (300 MHz,  $\text{CDCl}_3$ )  $\delta$  7.63 (dd,  $J=8.8, 0.8$  Hz, 1H), 7.33 (dd,  $J=8.8, 6.9$  Hz, 1H), 7.25 (dd,  $J=6.8, 0.8$  Hz, 1H), 3.31 (t,  $J=6.3$  Hz, 2H) 3.03 (t,  $J=6.4$  Hz, 2H).



**Figure S4.**  $^{13}\text{C}$ -NMR spectrum of Fluo1 (a) and expanded (b,c).  $^{13}\text{C}$ -NMR: (75 MHz,  $\text{CDCl}_3$ )  $\delta$  149.46, 149.38, 131.75, 127.91, 127.18, 113.24, 41.06, 36.29.



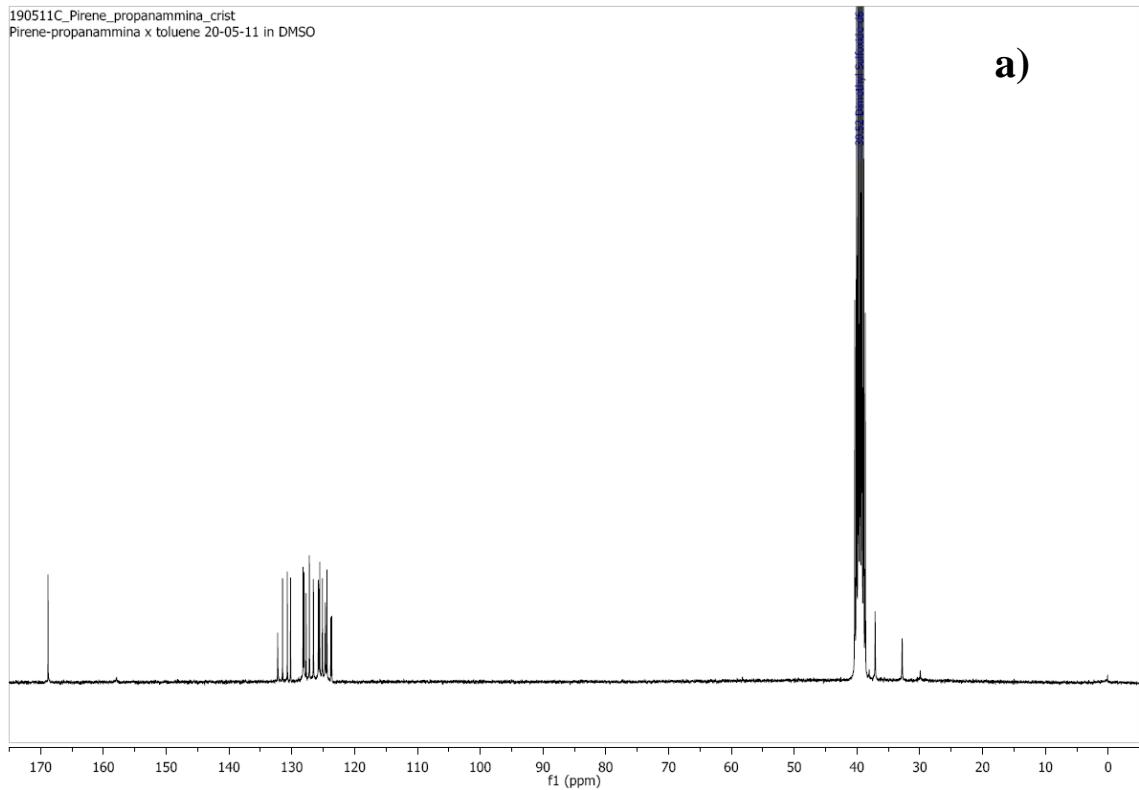
**Figure S5.** <sup>1</sup>H-NMR Spectrum of Fluo2.



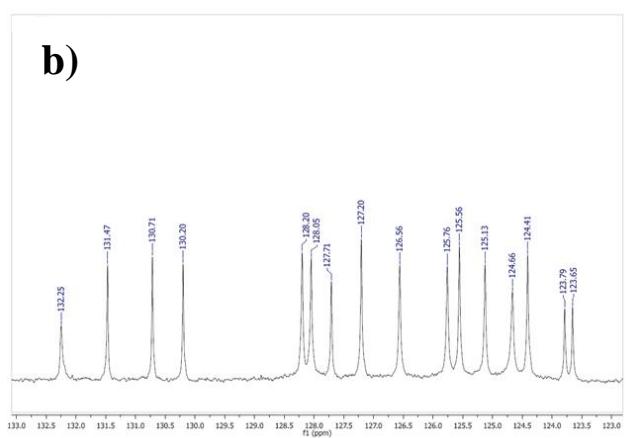
**Figure S6.** <sup>1</sup>H-NMR Spectrum of Fluo2 (Expanded)

190511C\_Pirene\_propanammina\_crist  
Pirene-propanammina x toluene 20-05-11 in DMSO

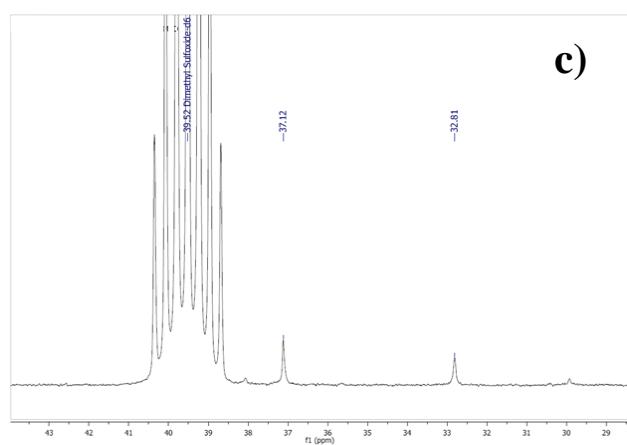
a)



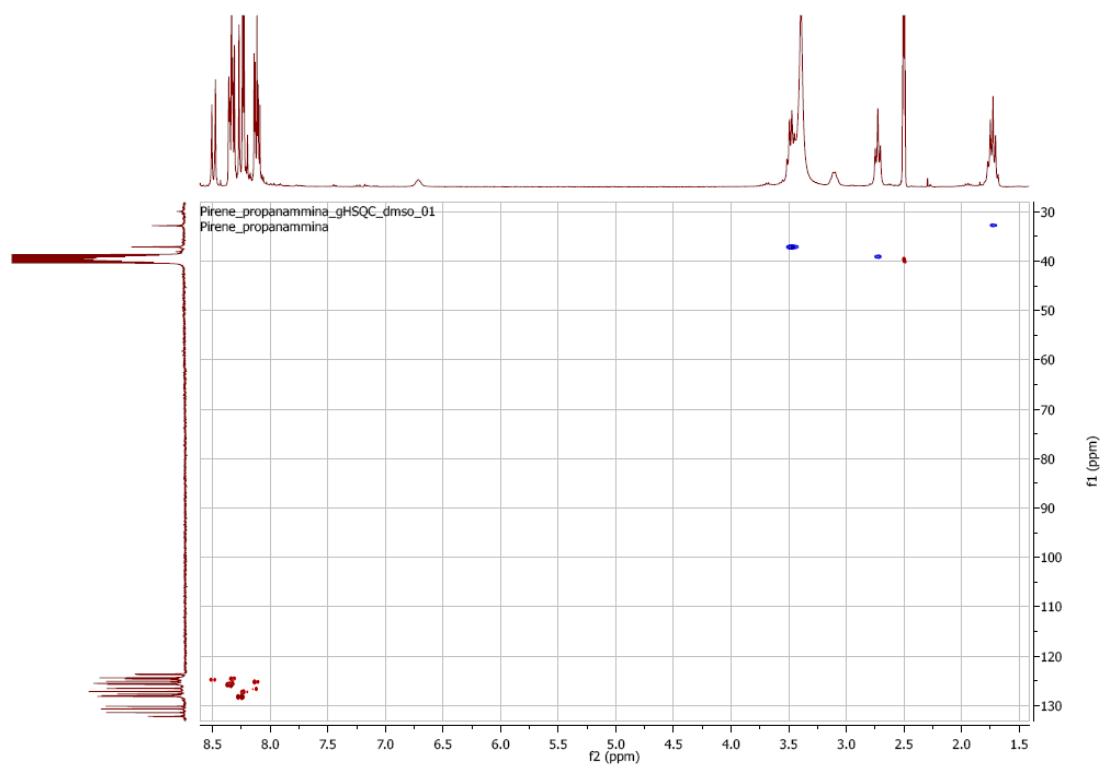
b)



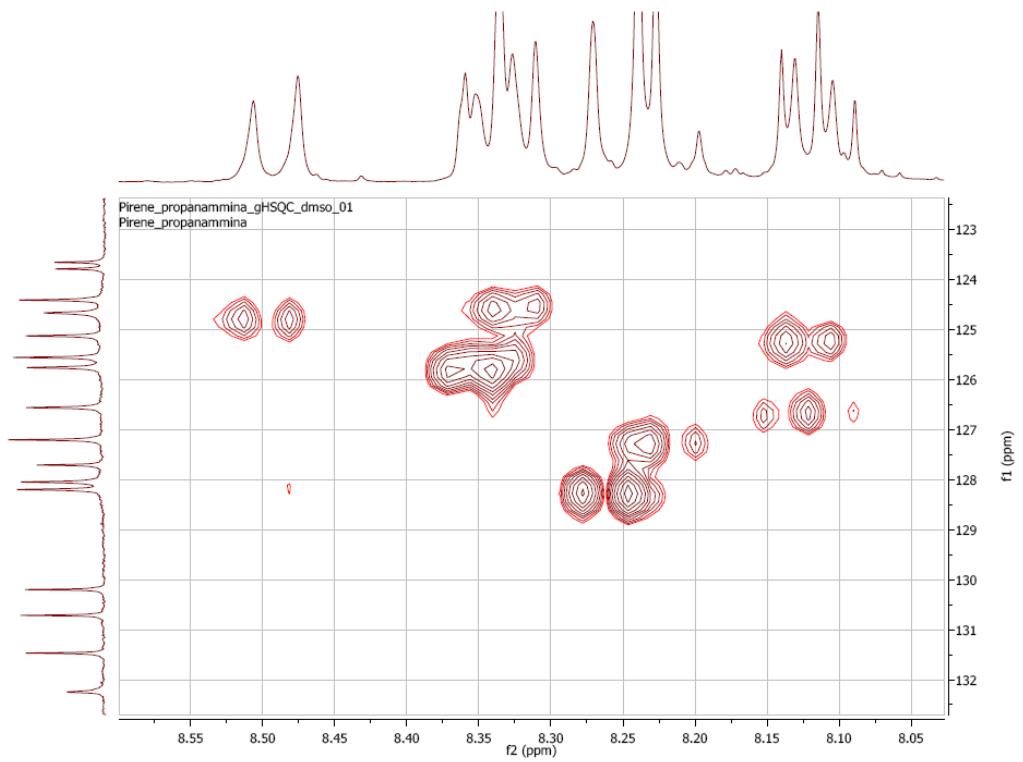
c)



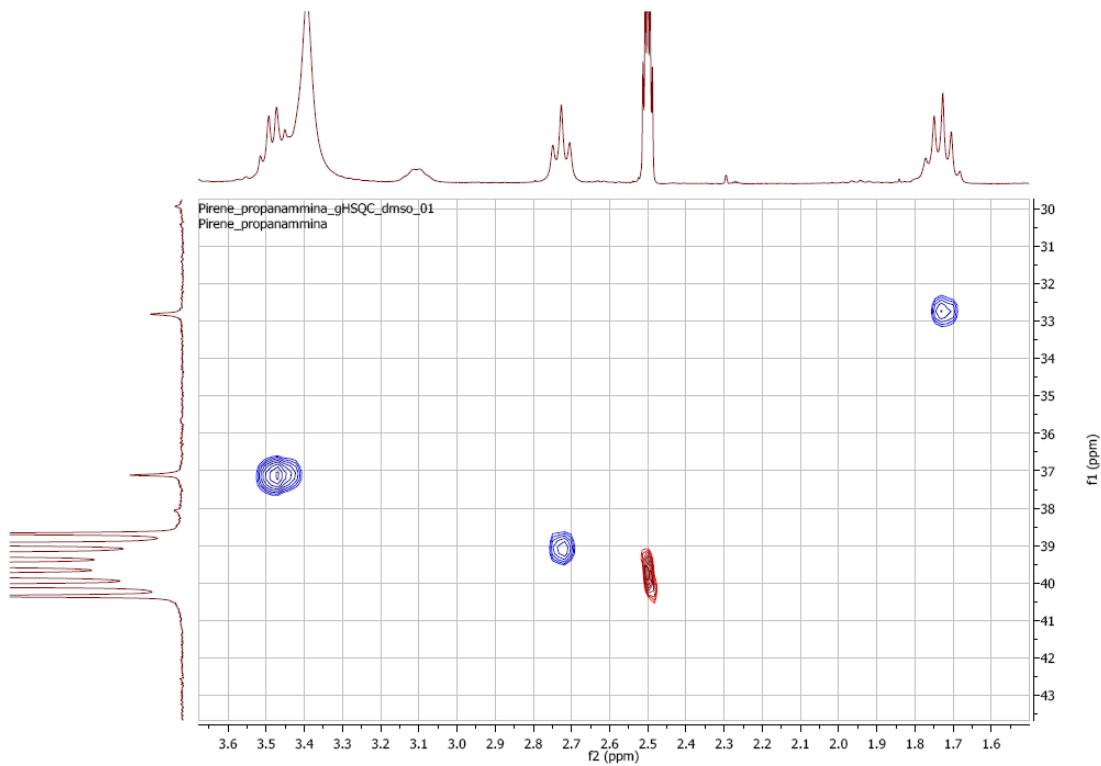
**Figure S7.** <sup>13</sup>C-NMR Spectrum of Fluo2 (a) and expanded (b,c).



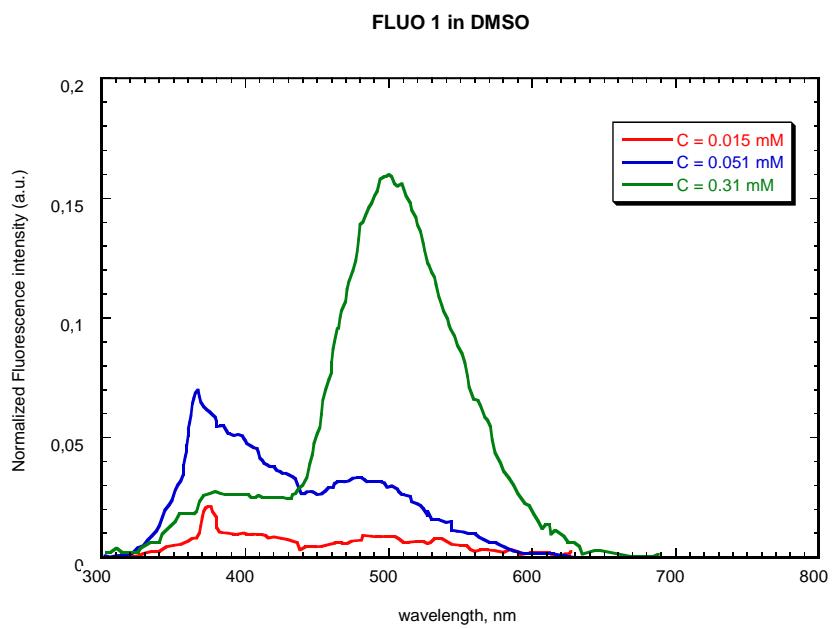
**Figure S8.** gHSQC Spectrum of Fluo2



**Figure S9.** gHSQC Spectrum of Fluo2 (Expanded)



**Figure S10.** gHSQC Spectrum of Fluo2 (Expanded)



**Figure S11.** Spectra evolution with concentration of Fluo1 in solutions. Experimental conditions: room temperature, wavelength excitation = 334 nm, quartz cuvette 1 cm path length, fluorescence intensity normalized by a standard of Rhodamine B in PMMA