Supporting Information

Aggregation induced FRET *via* Polymer-Surfactant Complexation: A New Strategy for the Detection of Spermine

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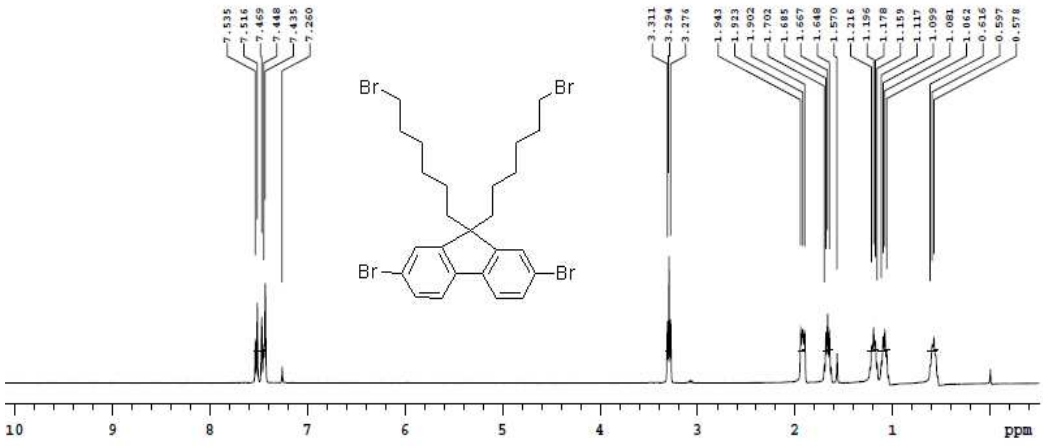


Figure S1. ^{1}H NMR (400 MHz, $CDCl_3$) spectrum of M0.

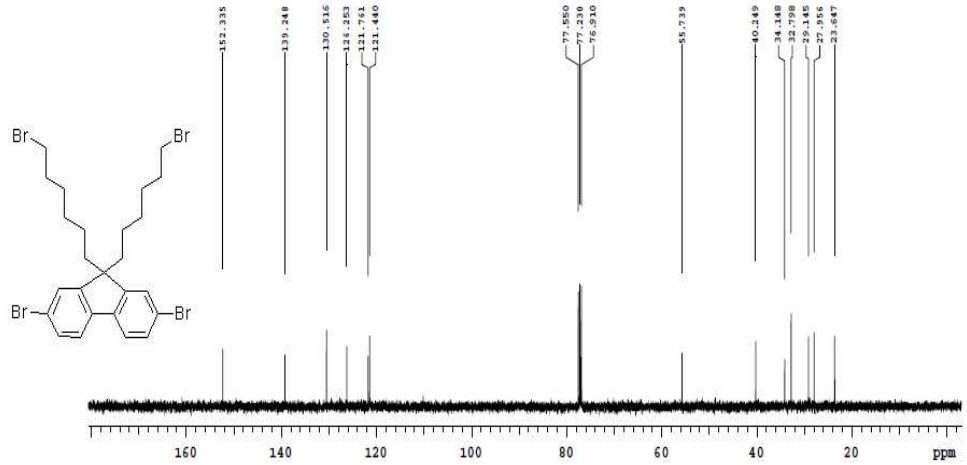


Figure S2. ^{13}C NMR (100 MHz, $CDCl_3$) spectrum of M0.

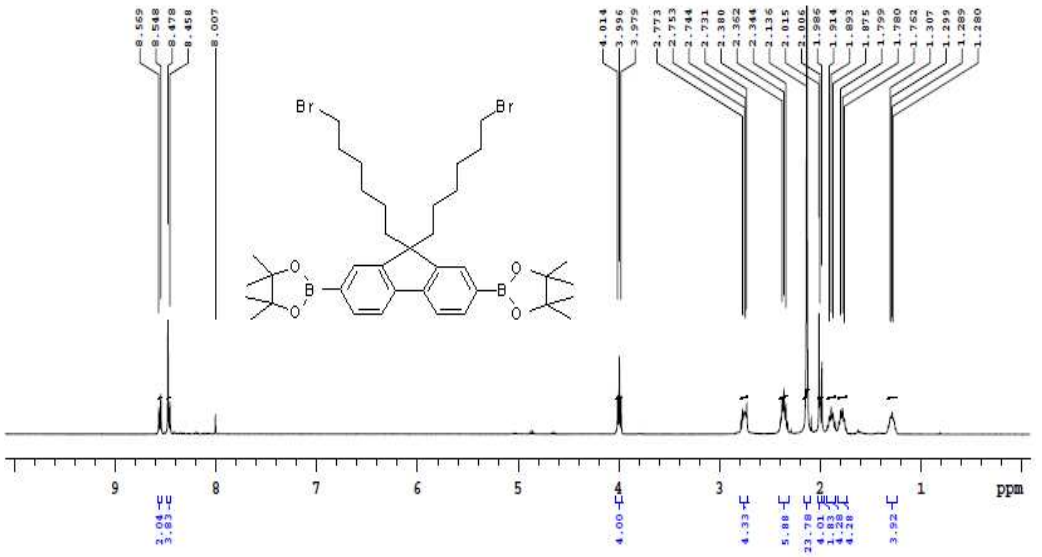


Figure S3. ^{1}H NMR (400 MHz, $CDCl_3$) spectrum of M1.

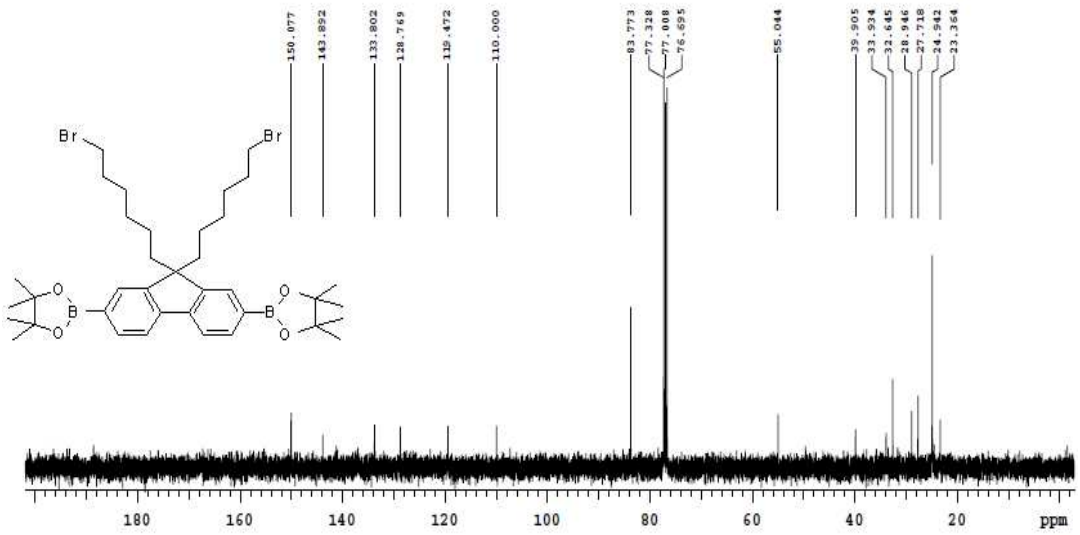


Figure S4. ^{13}C NMR (100 MHz, $CDCl_3$) spectrum of M1.

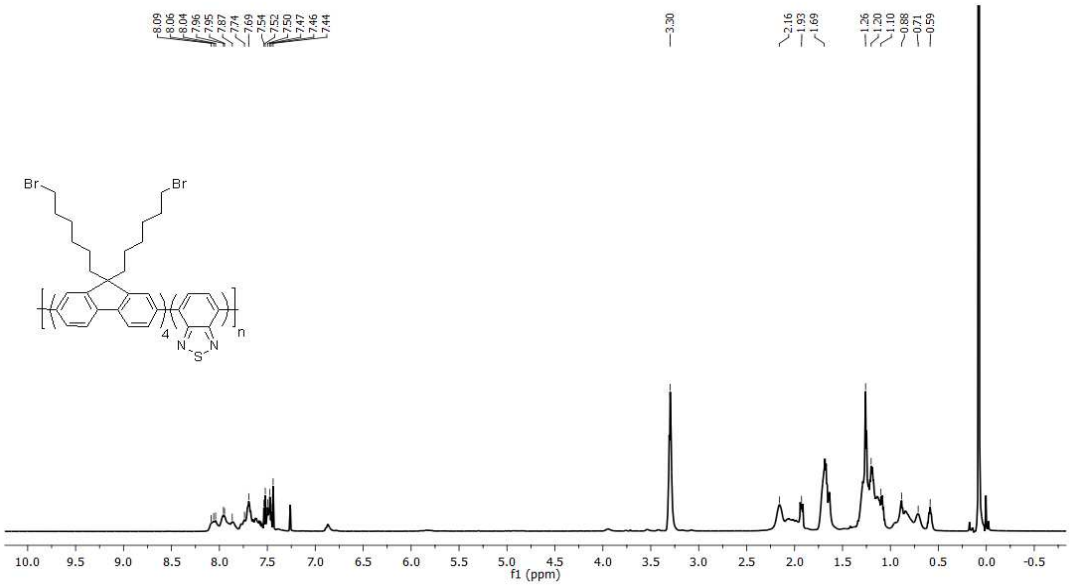


Figure S5. ^{1}H NMR (600 MHz, $CDCl_3$) spectrum of PFBT.

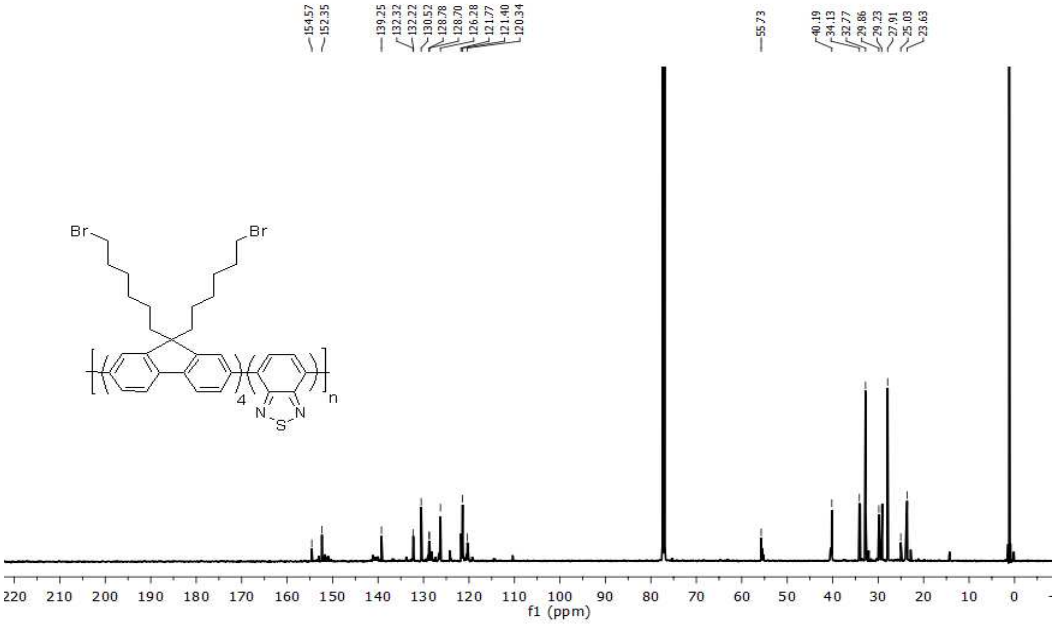


Figure S6. ^{13}C NMR (150 MHz, $CDCl_3$) spectrum of PFBT.

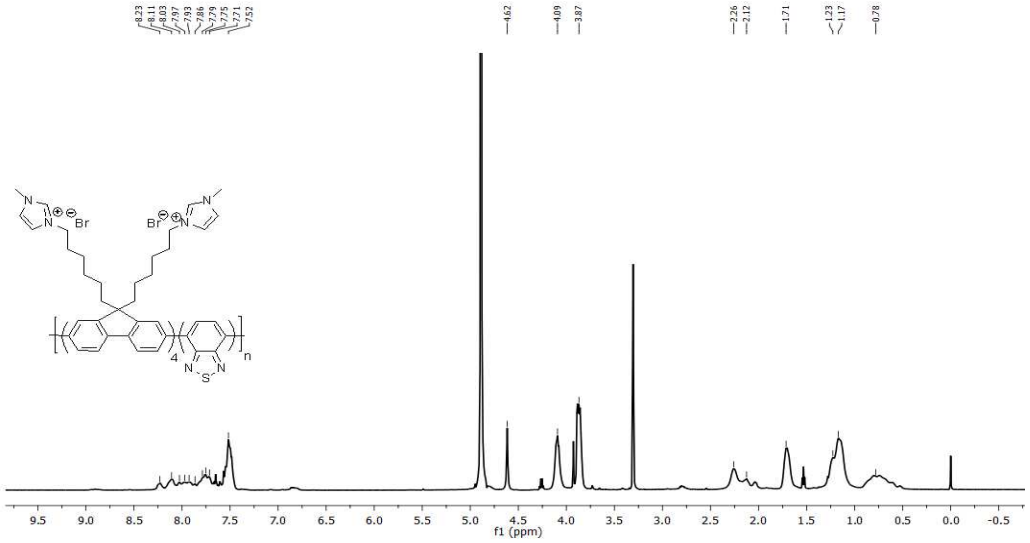


Figure S7. ^{1}H NMR (600 MHz, CD_3OD) spectrum of PFBT-MI.

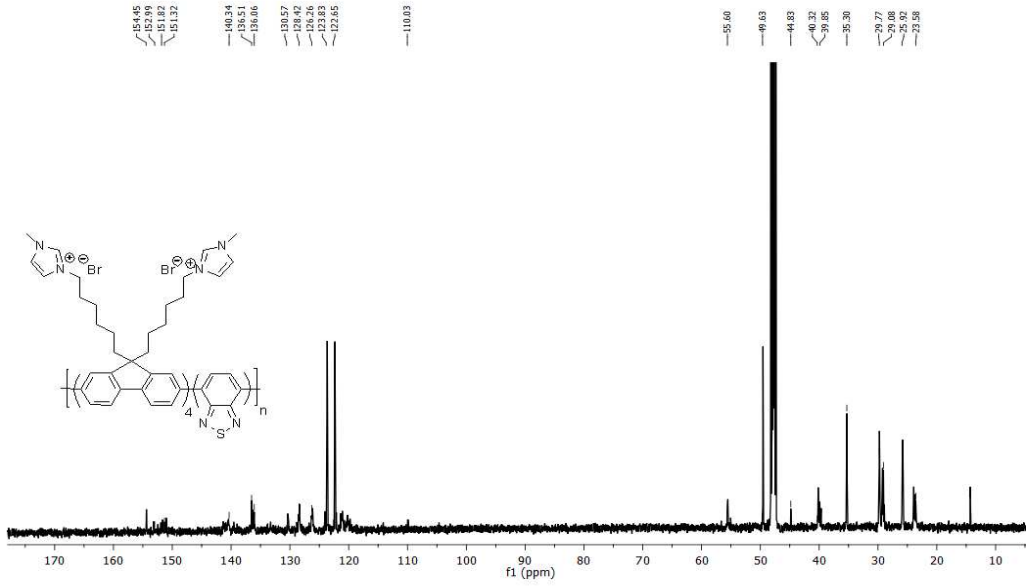
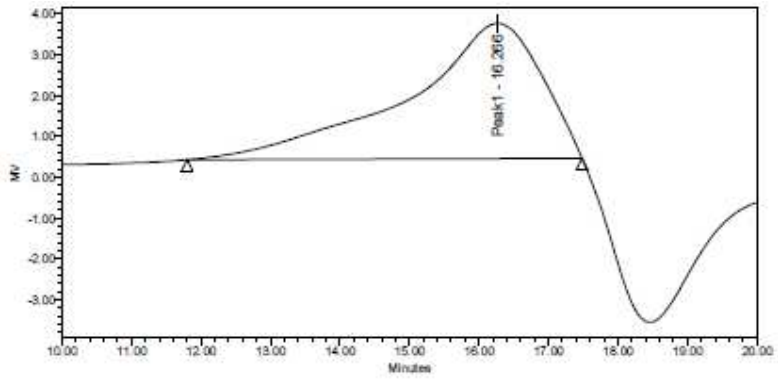


Figure S8. ^{13}C NMR (150 MHz, CD_3OD) spectrum of PFBT-MI.



GPC Results

	SampleName	Mn	Mw	MP	Mz	Mz+1	Polydispersity
1	PFBT-O6_Br	6707	14103		29529	43058	2.102760

Figure S9. GPC chromatogram of PFBT.

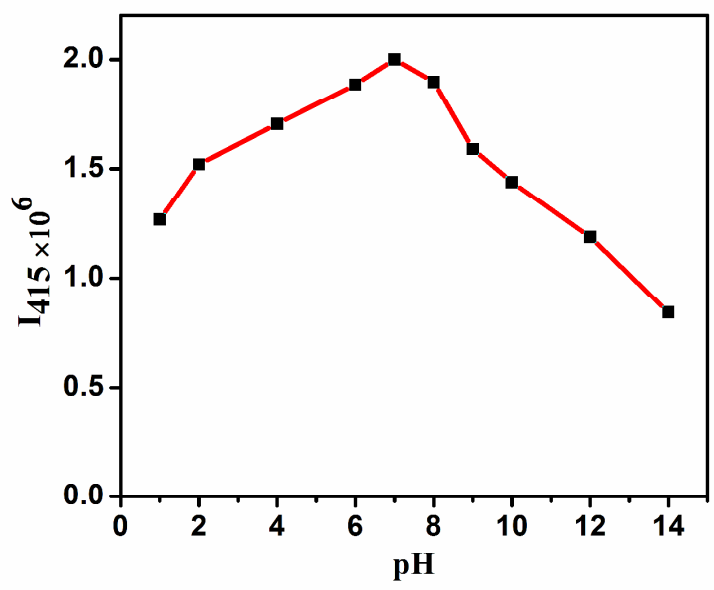


Figure S10. The pH dependent fluorescence response of PFBT-MI (6.6 μM) in different pH buffers.

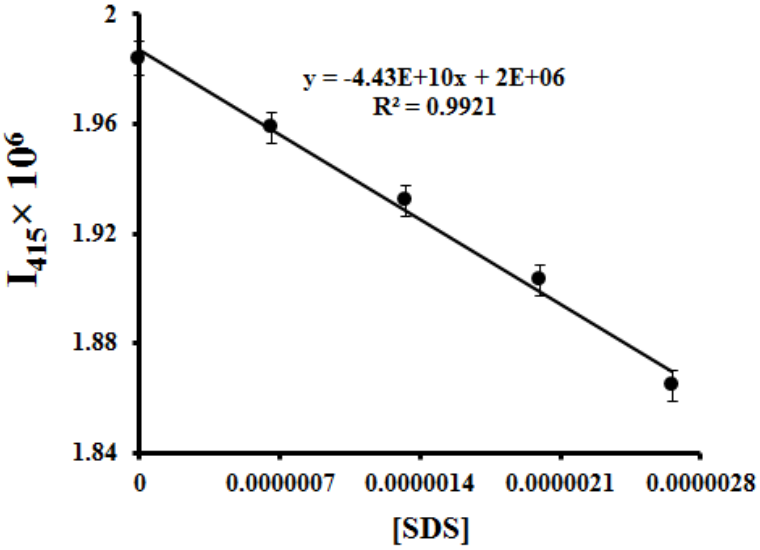


Figure S11. Detection limit plot for SDS.

LOD = 3 × σ/k

LOD = 3 × 1725.58/ 4.43 × 10^{10}

= 0.12 μM (34 ppb)

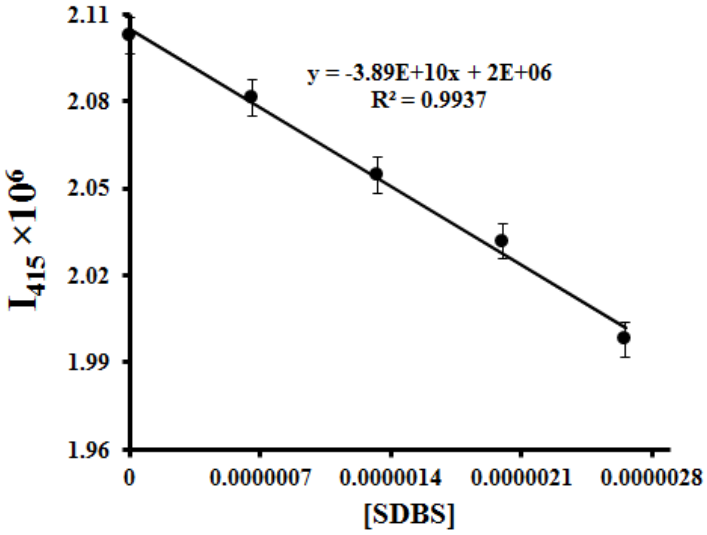


Figure S12. Detection limit plot for SDBS.

LOD = 3 × σ/k

LOD = 3 × 1725.58/ 3.89 × 10^{10}

= 0.13 μM (45 ppb)

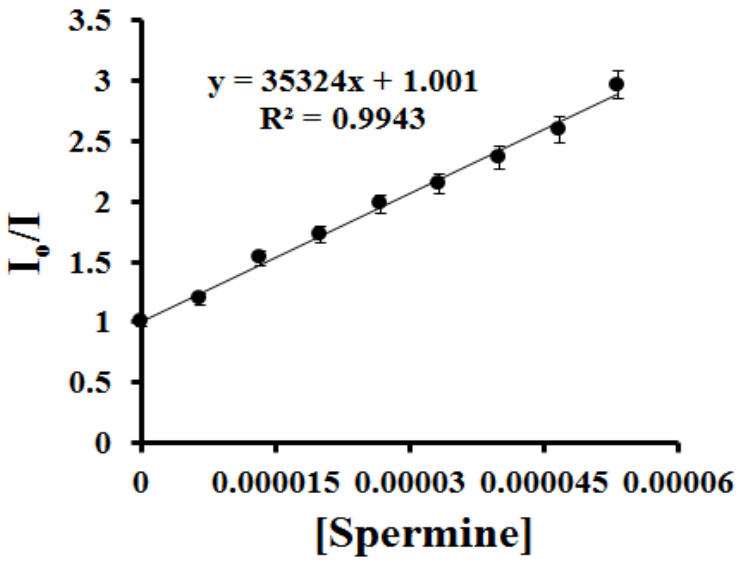


Figure S13. Stern-Volmer plot for spermine with PFBT-MI/SDS **(**6.6 μM/ 18 μM**).**

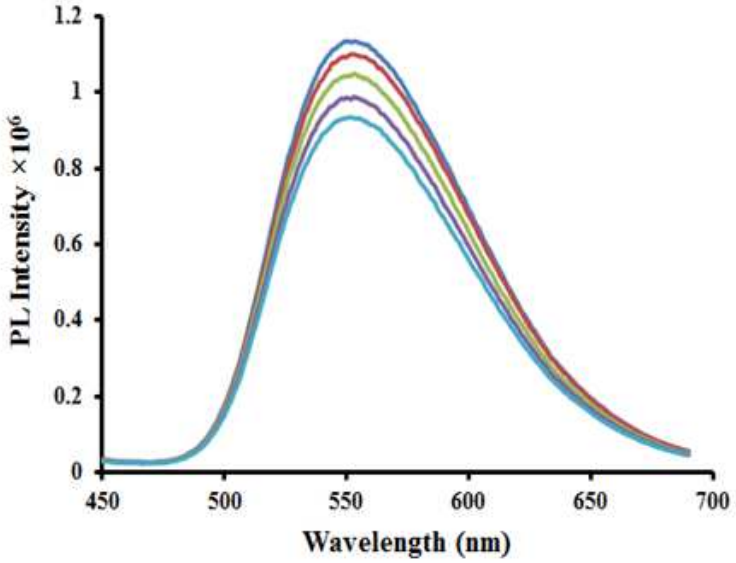


Figure S14. (a) Changes in the emission spectra of PFBT-MI/SDS (6.6 μM/ 18 μM) with various concentrations of spermine (0, 1.6, 3.3, 5.0, 6.6 μM) in aqueous solution.

LOD = 3 × σ/k

LOD = 3 × 3363.20/ 3.0 × 10^{10}

= 0.33 μM (66 ppb)

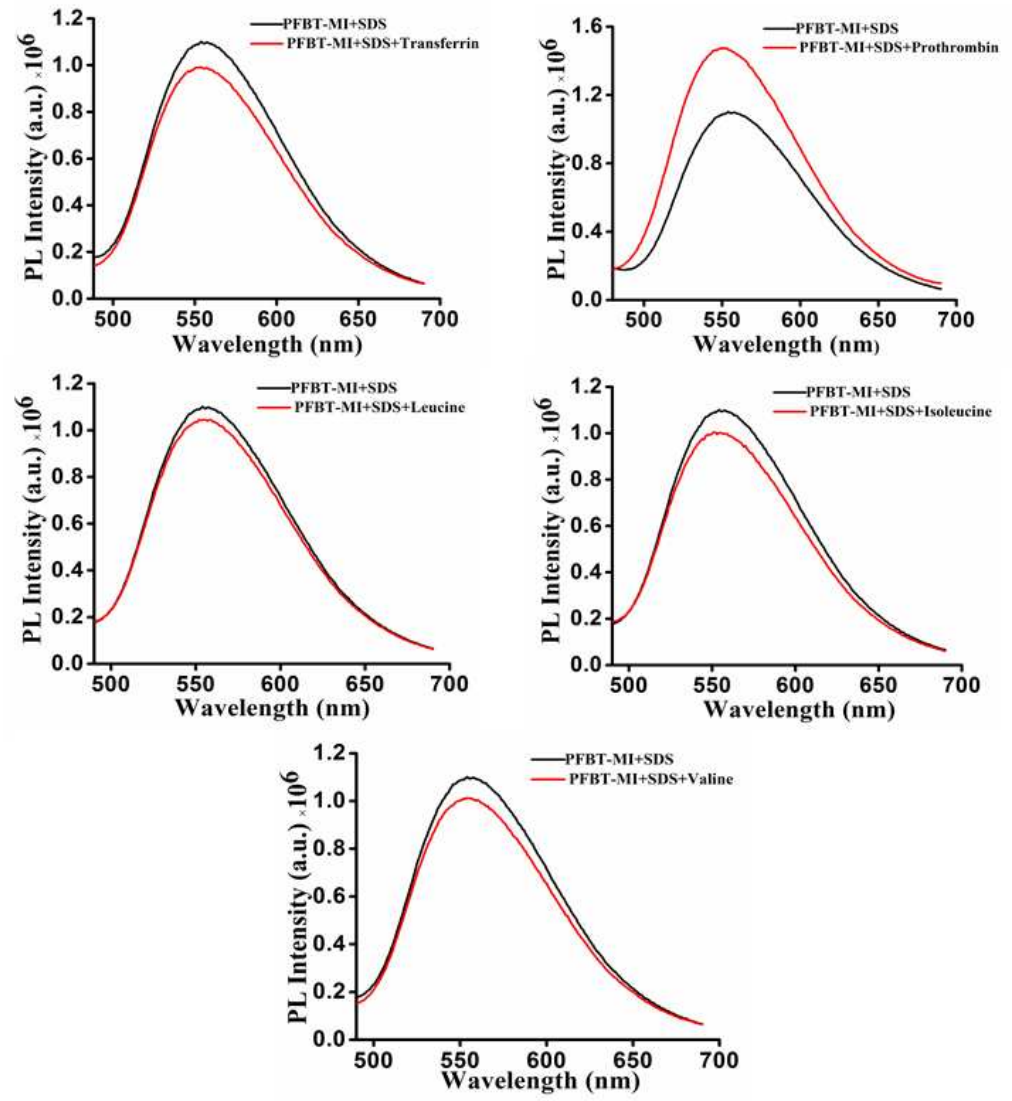


Figure S15. Effect of various cancer biomarkers (120 μM) on the emission of PFBT-MI/SDS complex.

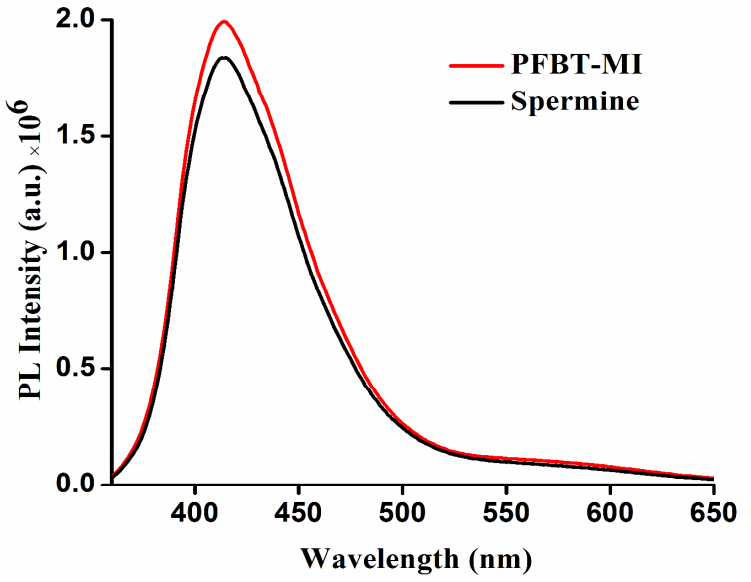


Figure S16. Effect of spermine (120 μM) on the emission of PFBT-MI.

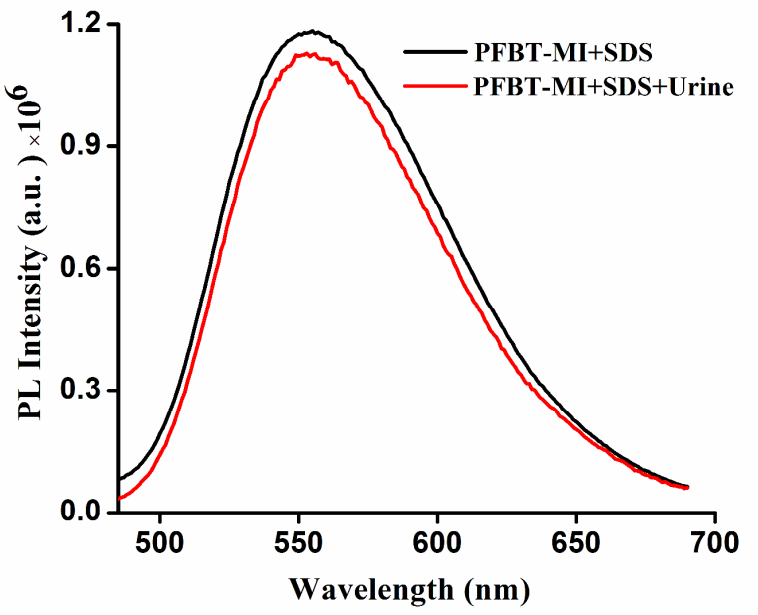


Figure S17. Control experiment showing the effect of undoped-urine specimen (10 μL) on the emission of PFBT-MI/SDS (6.6 μM/ 18 μM).

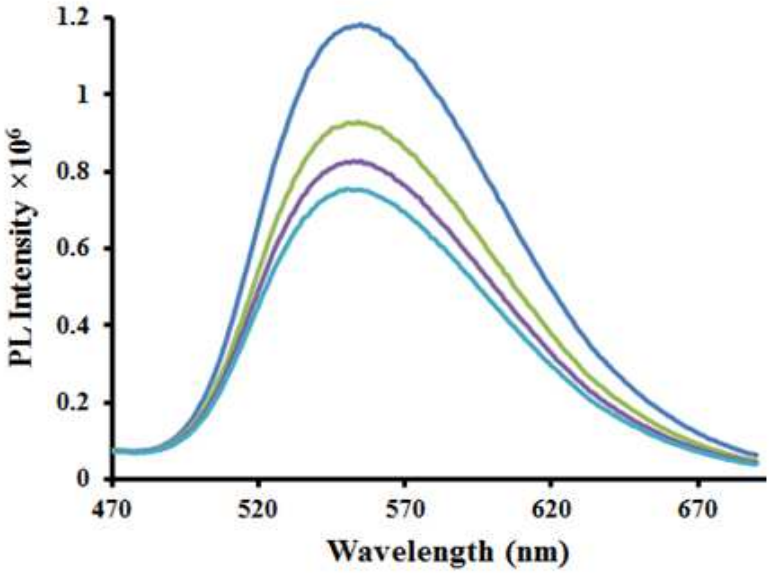


Figure S18. Fluorescence quenching of PFBT-MI/SDS (6.6 μM/ 18 μM) assembly on addition of different urine samples spiked with spermine.

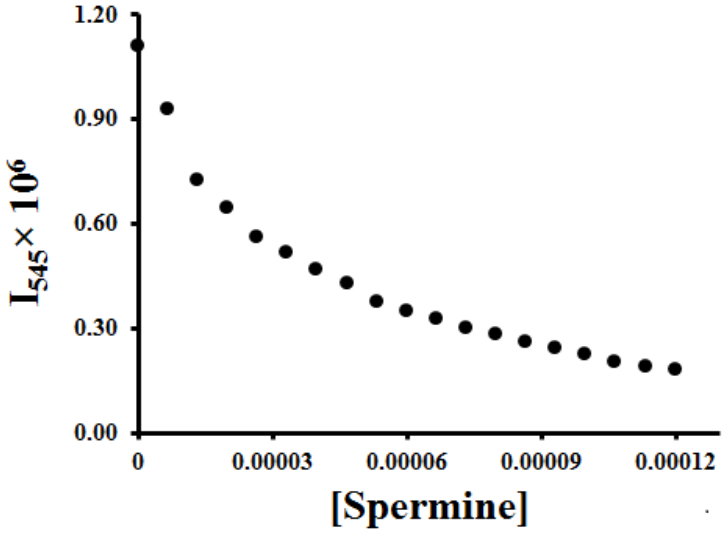


Figure S19. Calibration plot for spermine.