

Supporting Information

EF-hand Mimicking Calcium Binding Polymer

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Figure S1. Gel permeation chromatograms of PEG, PAEz-PEG-PAEz, PA-PAE-PEG-PAE-PA (CBP).

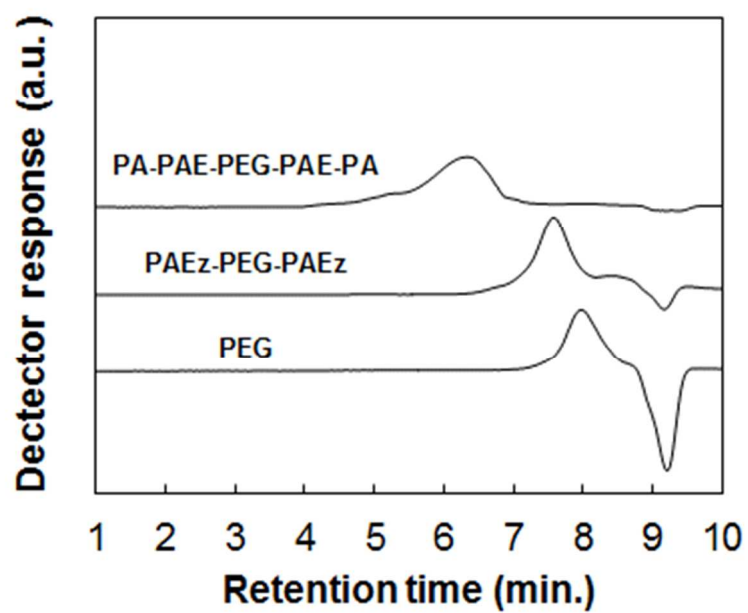


Figure S2. Hydrophobic dye (1,6-diphenyl-1,3,5-hexatriene) solubilization. The legend is the CBP concentration in water (pH 7.5) at a fixed dye concentration of 4.0 μM . When hydrophobic domain (micelles) forms, the characteristic triplet bands appear at 350, 388, 410 nm.

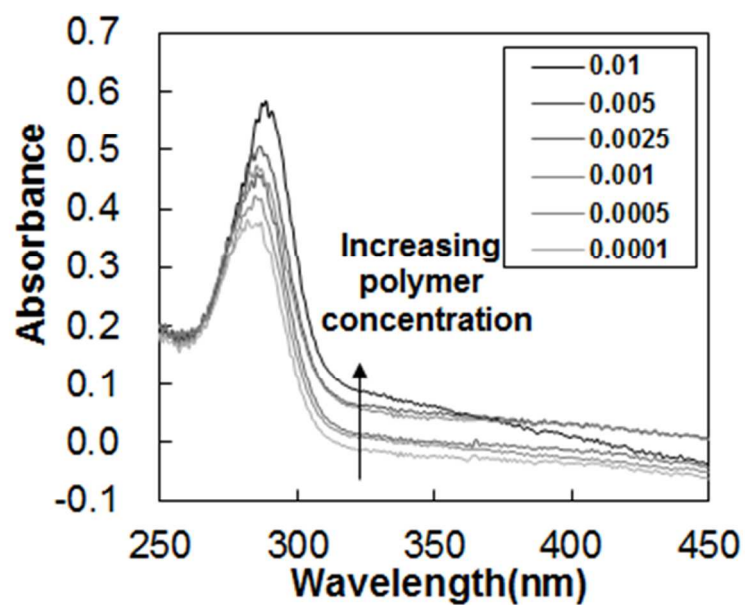


Figure S3. ^{13}C -NMR spectra of CBP (1.0 wt.% in D_2O) as a function of Cu^{2+} (a) or Zn^{2+} (b) concentration at 15 $^\circ\text{C}$. The legend indicate the molar ratio of Ca^{2+} to polymer ranging from 0.0, 0.5, 1.0, 2.0, to 3.0.

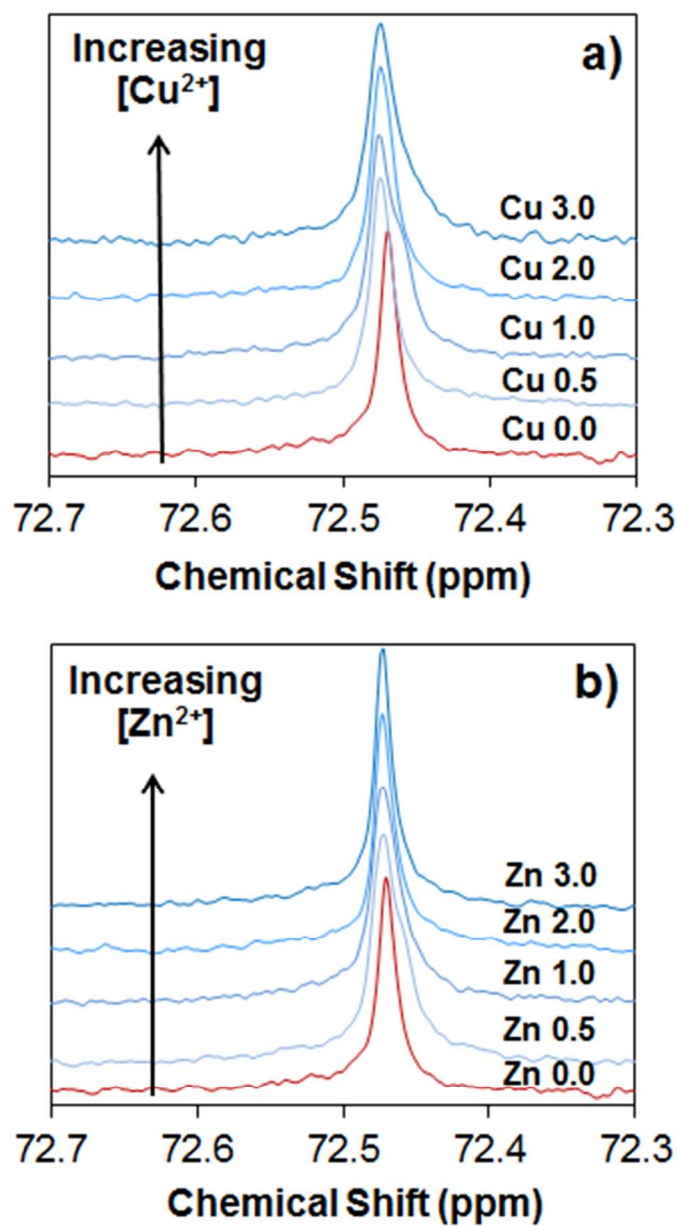


Figure S4. Apparent size of CBP in water (0.01 wt.%) as a function of Ca^{2+} concentration. The legend indicates the molar ratio of Ca^{2+} to polymer ranging from 0.0, 0.5, 1.0, 2.0, 3.0, to 4.0.

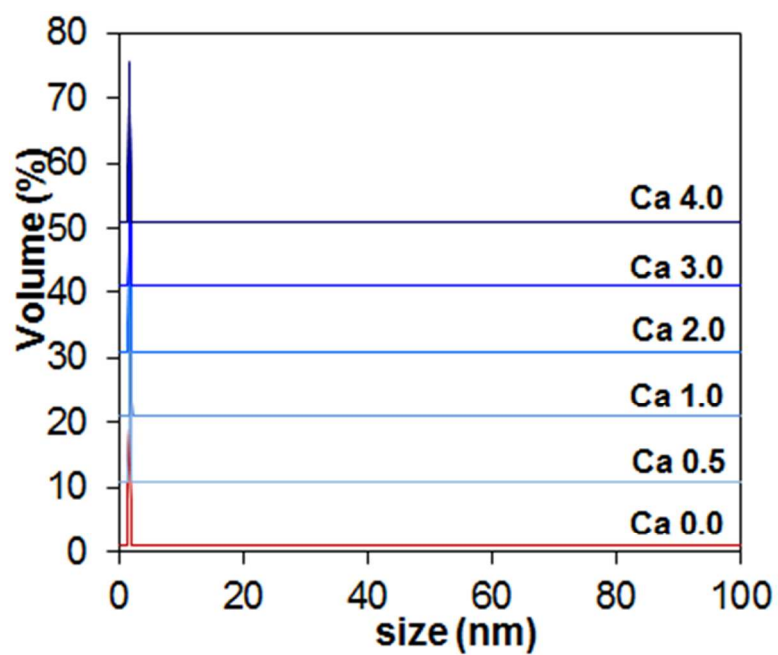


Figure S5. a) UV-vis spectra of murexide (50 μM) as a function of Ca^{2+} concentration. Ca^{2+} concentration was varied between 0, 50, 100(thick deep blue), 200, 400, 500, 1000, 2000, 3000, 4000, 5000, 6000, 8000, 10000, 20000, 30000, 40000, 50000, and 60000 μM in the absence of CBP. The red curve is the UV-vis spectra of murexide (50 μM) at a fixed concentration of Cu^{2+} (100 μM) and CBP (100 μM). b) UV-vis spectra of murexide (50 μM) as a function of Zn^{2+} concentration. Zn^{2+} concentration was varied between 0, 10, 20, 30, 40, 50, 100 (thick deep blue), 200, 300, 400, 500 200, 300, 400, 500, 600, 700, 800, 900, 1000, 2000, 3000, 4000, and 5000 μM in the absence of CBP. The red curve is the UV-vis spectra of murexide (50 μM) at a fixed concentration of Zn^{2+} (100 μM) and CBP (100 μM).

