Binding of Cobaltocenium-containing Polyelectrolytes with Anionic Probes

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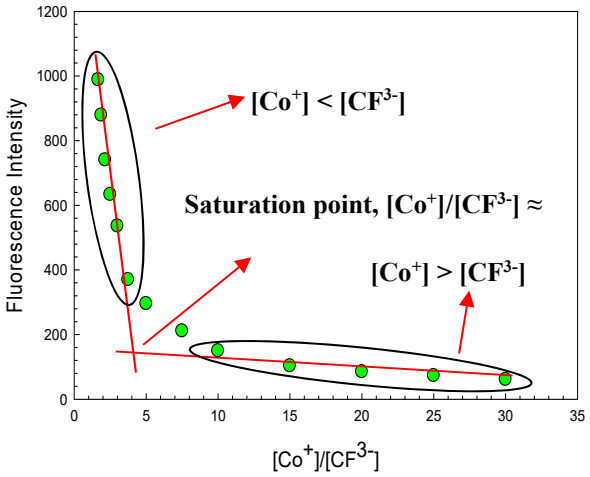
Supporting Information



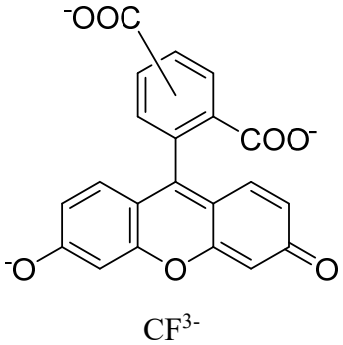


Figure S1: (Left): isotherm describing the binding of 5(6)-carboxyfluorescein (CF) to cobaltocenium containing polymer, monitored through fluorescence intensity in a buffered water solution (pH 7.4). $[CF^{3-}] = 1.0 \times 10^{-6}$ M; (Right): structure and protonation states of CF when dissolved in a buffered aqueous solution at pH 7.4.

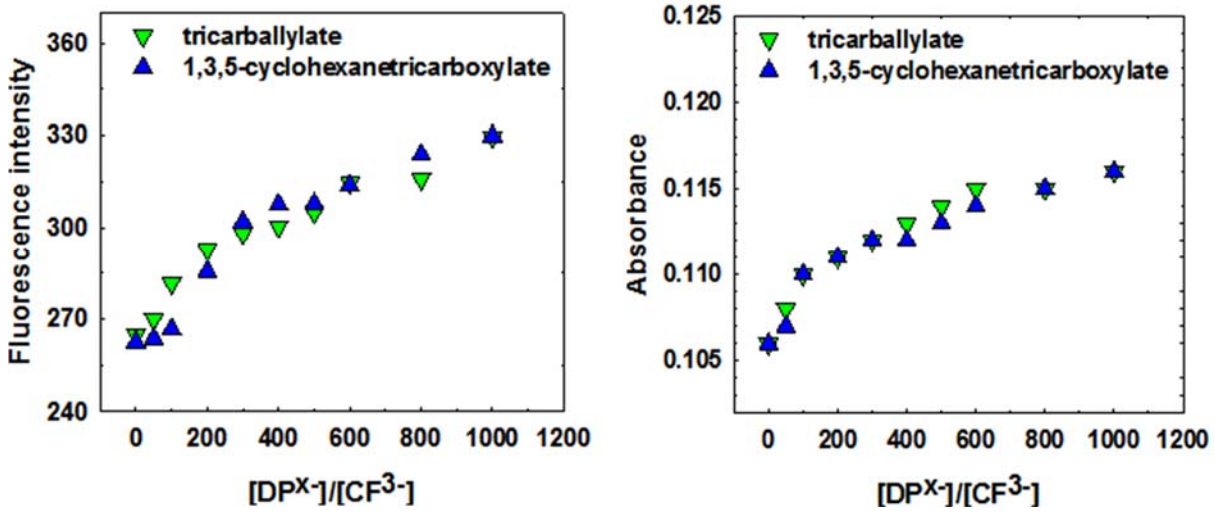


Figure S2. Fluorescence and absorbance isotherms from titration of a P-CFn complex with trianionic displacers with different shape. [CF] = 1.0×10^{-6} M, [Co^{+}] = 4.0×10^{-6} M in buffered solution (50 mM Tris at pH 7.4), λexc = 494nm**.**

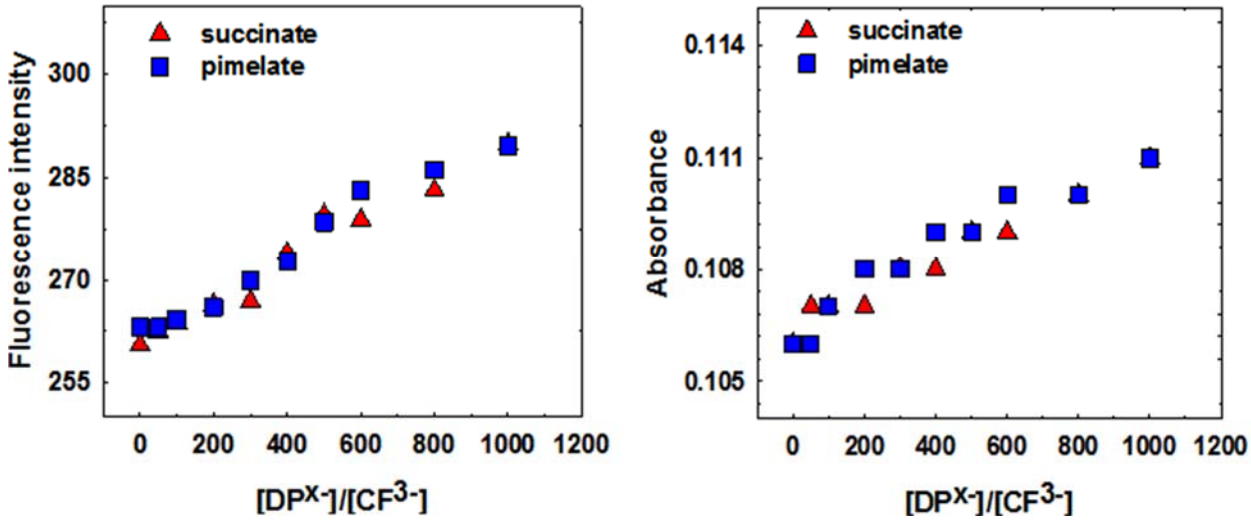


Figure S3. Fluorescence and absorbance isotherms from titration of a P-CFn complex with different size of displacers. [CF] = 1.0×10^{-6} M, [Co^{+}] = 4.0×10^{-6} M in buffered solution (50 mM Tris at pH 7.4), λexc = 494nm.

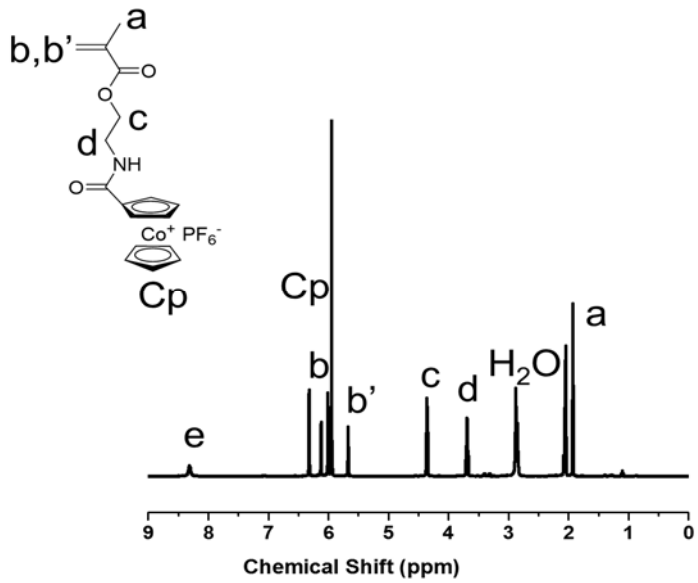


Figure S4. ^{1}H NMR spectrum of cobaltocenium monomer CoAEMAPF$_6$ in CD_3COCD_3.

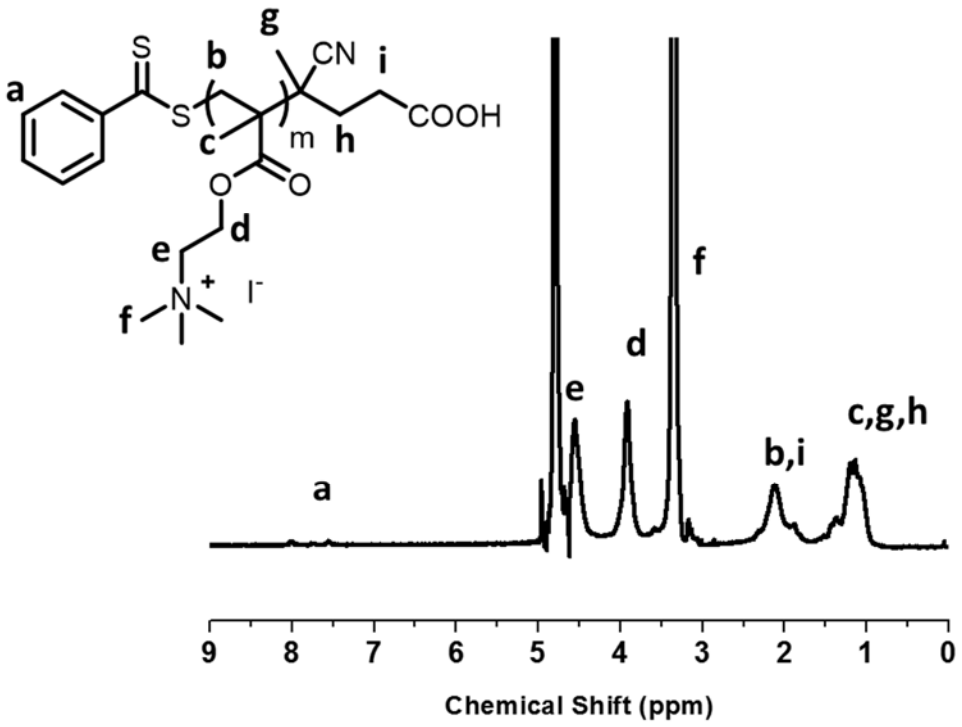


Figure S5. ^{1}H NMR spectrum of poly((2-dimethylamino)ethyl methacrylate).

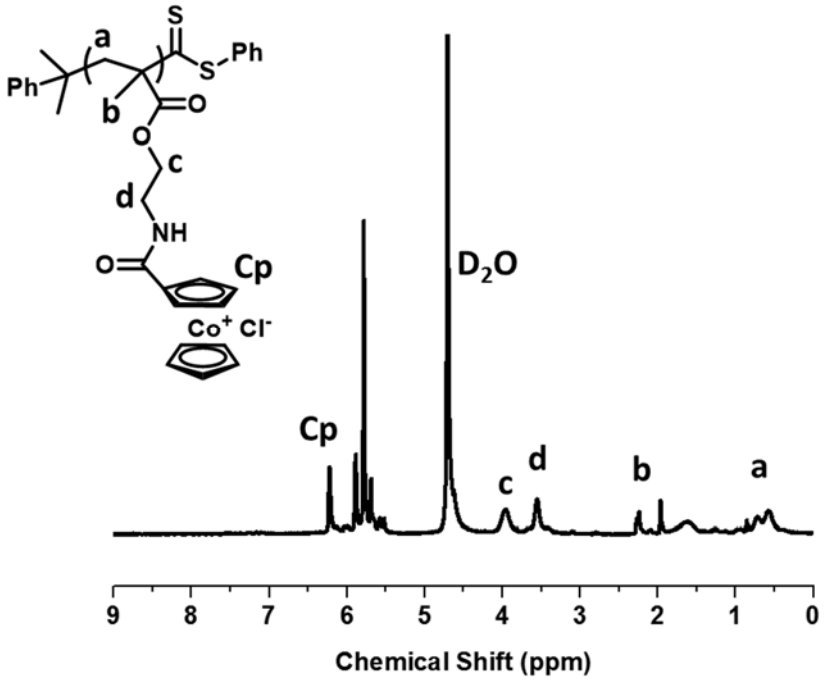


Figure S6. ^{1}H NMR spectrum of poly(cobaltocenium methacrylate).

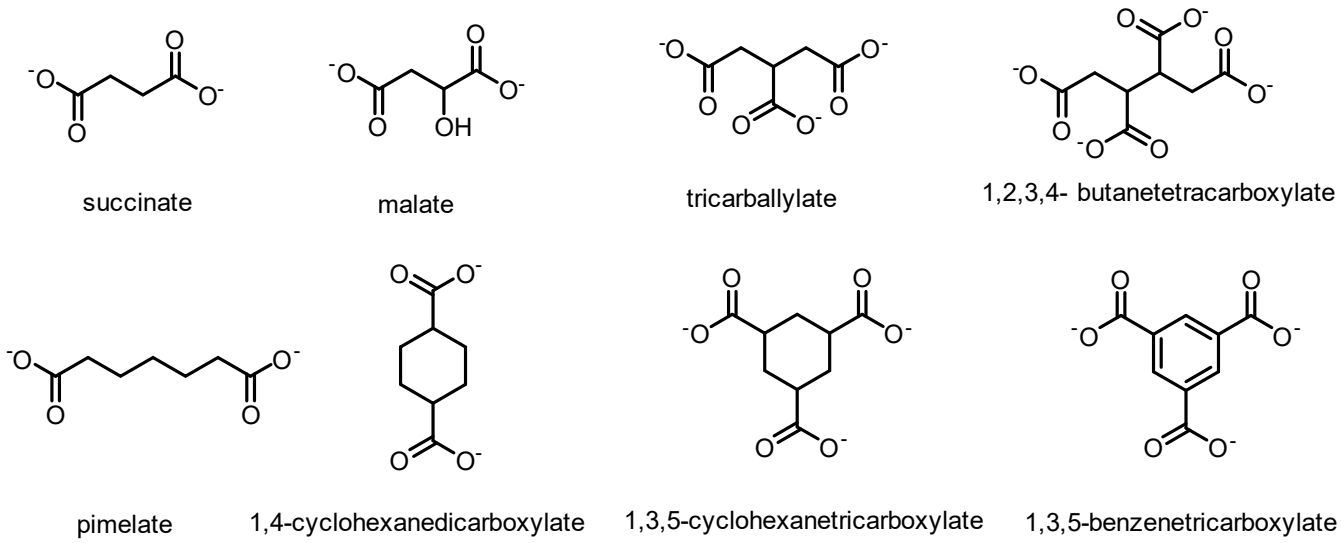


Figure S7. Model carboxylates used as anionic probes.

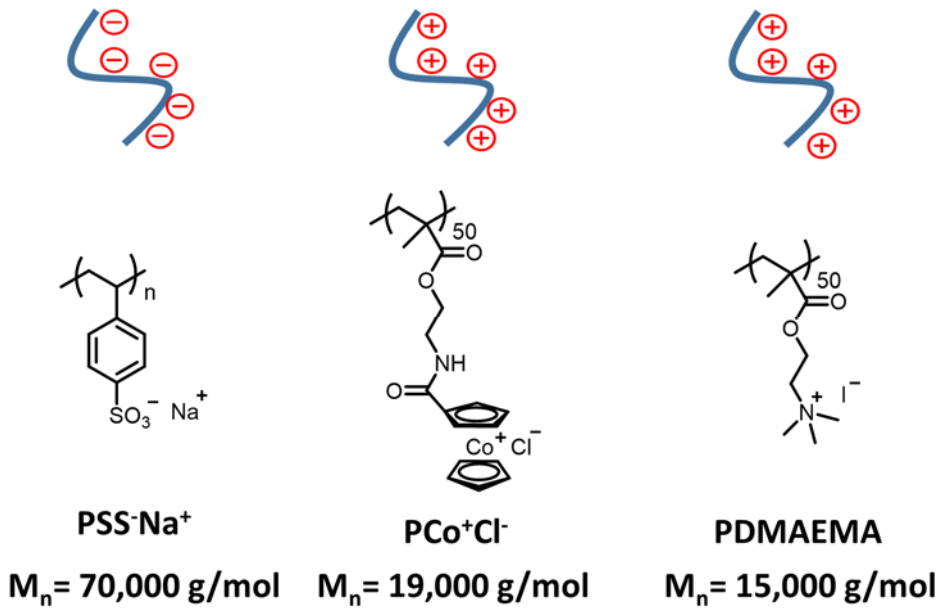


Figure S8. Polyelectrolytes used for this experiment.

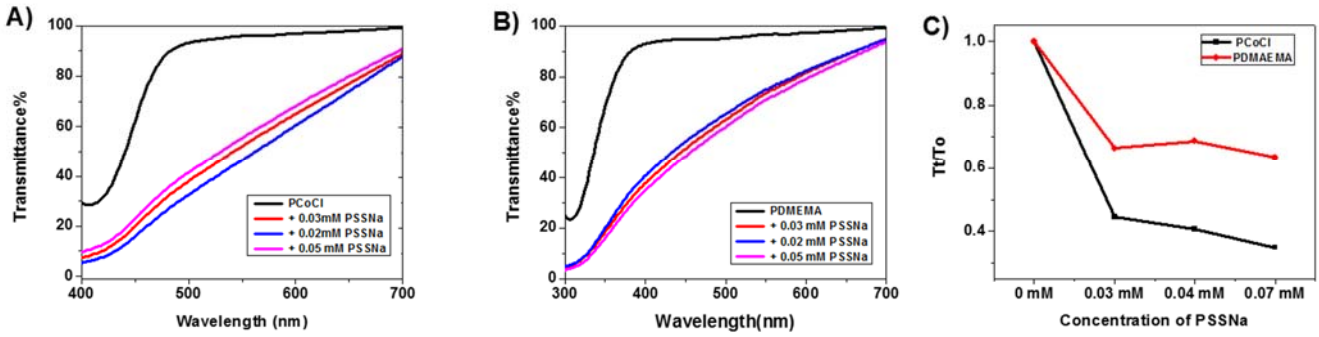


Figure S9. The transmittance of various polyelectrolyte solutions: A) 1.0 mL 0.10 mM PCoCl solution with different concentration of 1.0 mL PSSNa; B) 1.0 mL 0.10 mM PDMAEMA solution with various concentrations of 1.0 mL PSSNa; C) Transmittance ratio (T_t /T_o) as a function of concentrations of PSSNa.