

Figure S1: Cyclic voltammogram for $[\text{Fe}(\text{c343haH})(\text{salen})]$ showing quasi-reversibility of reduction.

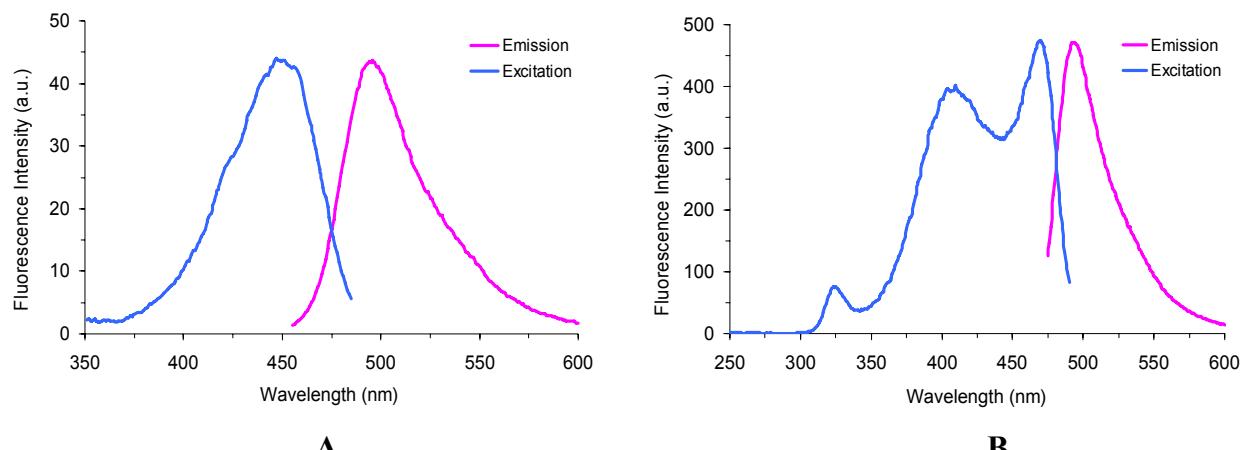
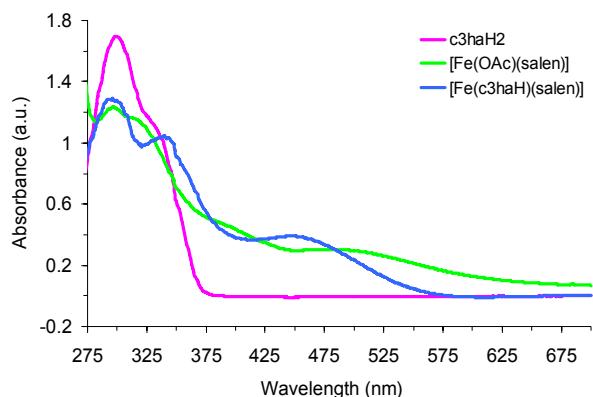
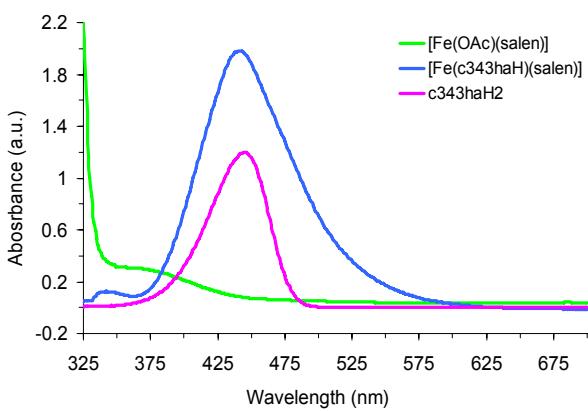


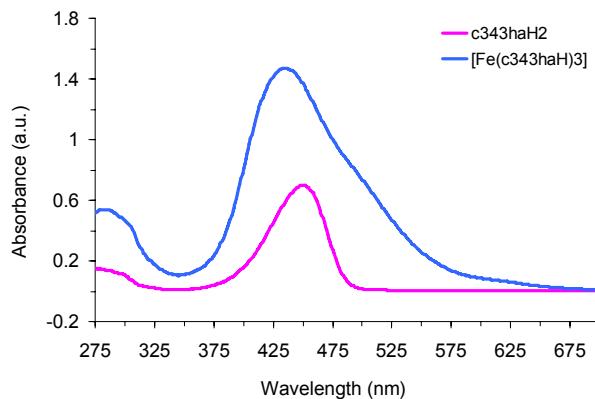
Figure S2: Excitation and emission spectra of A: c3haH₂ and B: c343haH₂.



A



B



C

Figure S3: UV-Vis Absorption spectra of A: [Fe(c3haH)(salen)], B: [Fe(C343haH)(salen)]) and C: [Fe(c343haH)₃], compared to their respective free ligands, and for A and B, the iron-salen precursor, [Fe(OAc)(salen)].

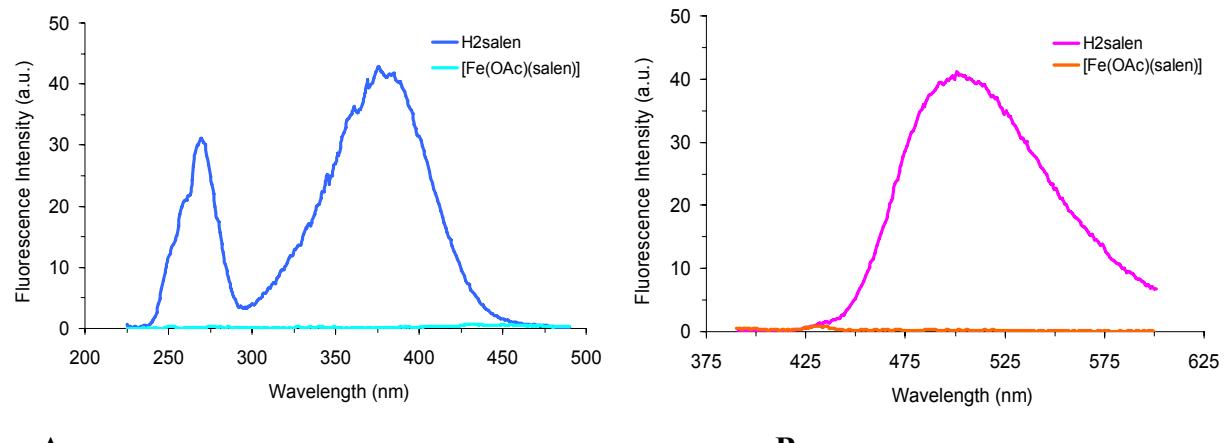


Figure S4: **A:** Excitation and **B:** emission spectra of [Fe(OAc)(salen)] and H₂salen in DMF/water.

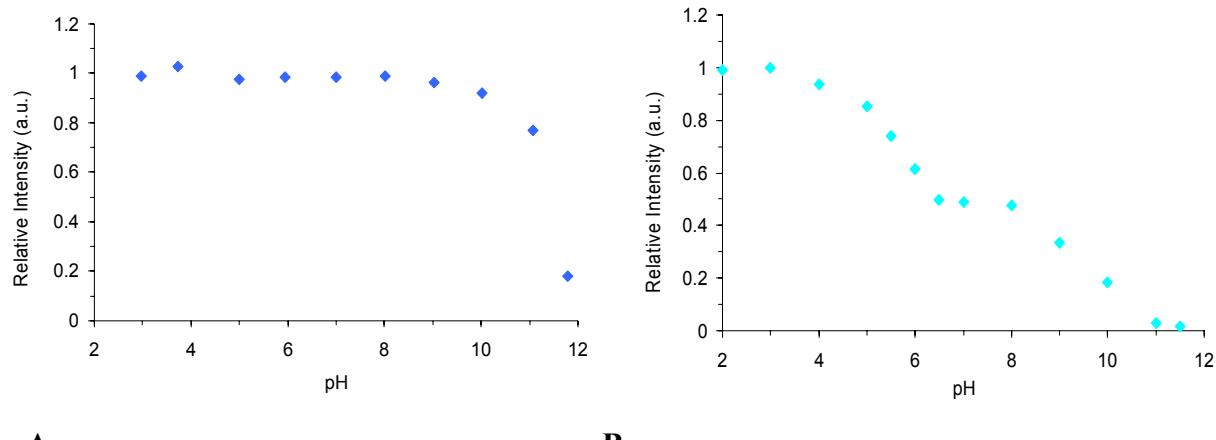


Figure S5: pH dependence of **A**: $c343haH_2$, obtained by Yamamoto,¹⁴¹ and **B**: $[Fe(c343haH)(salen)]$ in acetone/water.

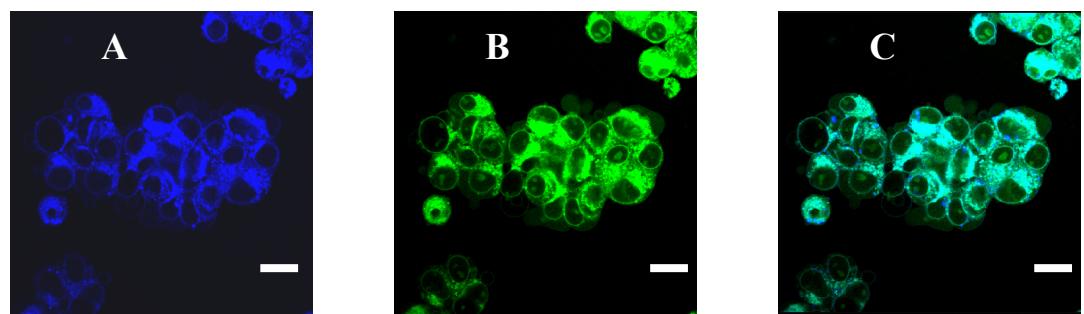


Figure S6: Fluorescence of c343haH₂ after 4 hour incubation collected in **A**: blue region, 410 to 450 nm, **B**: green region, 500 to 600 nm. **C**: overlay of the two emission patterns.