

Supplementary Information for

Mononuclear Iron Complexes Relevant to Nonheme Iron Oxygenases.

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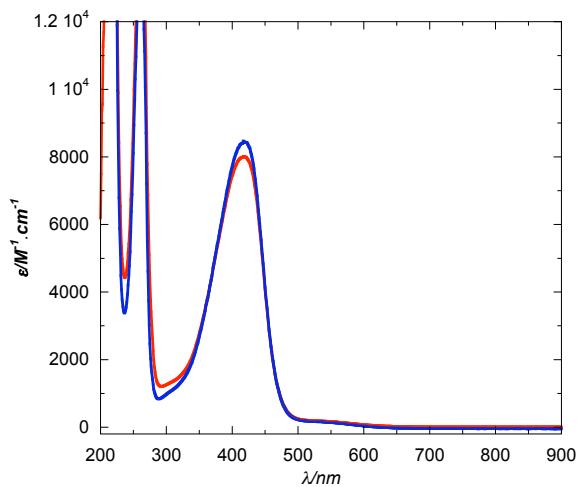


Fig. S1 UV-Visible spectra of $[(L_6)^24E]Fe^{II}(PF_6)_2$ in acetonitrile (blue) and in MeOH (red).

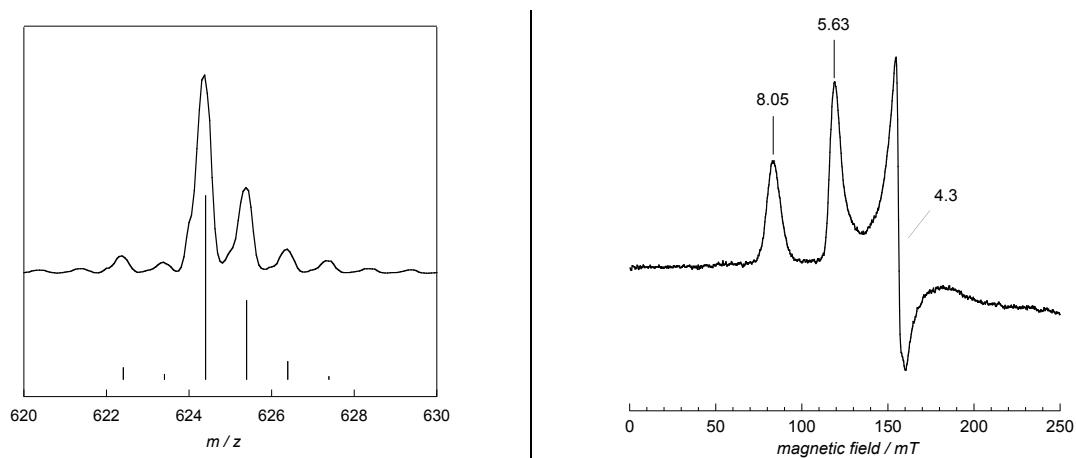


Fig. S2 Isotopic pattern of $[(L_6)^24E]Fe^{III}(OO)]^+$ obtained by ESI-MS (top) with its theoretical distribution pattern. Right, X-band EPR spectrum at 5 K of the turquoise blue solution obtained after NEt_3 treatment of $[(L_6)^24E]Fe^{III}(OOH)]^{2+}$.

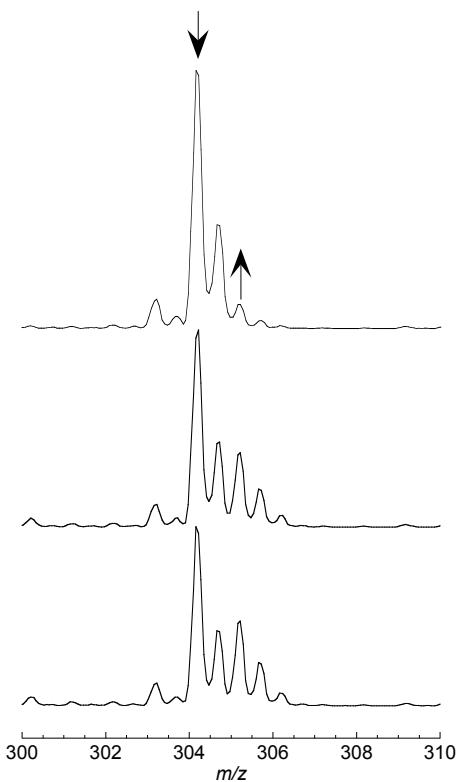


Fig. S3 Evolution of the isotopic pattern of $[(L_6^{24}E)FeO]^{2+}$ obtained by ESI-MS (top) in presence of $H_2^{18}O$, time of incubation increasing from top to bottom.

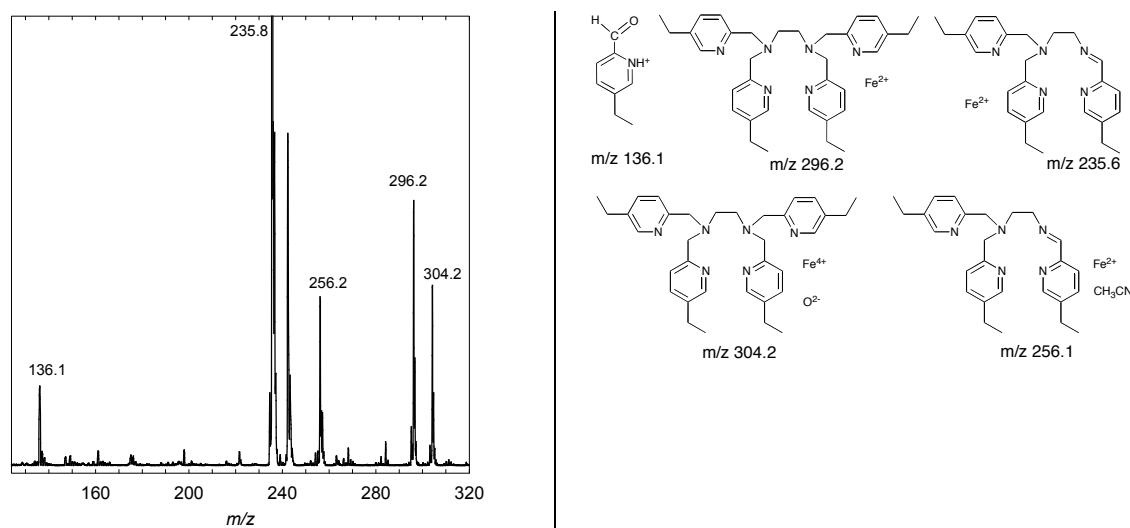


Fig. S4 ESI mass spectrum of $[(L_6^{24}E)Fe]^{2+}$ (0.5 mM) + 1.2 equiv. of *m*CPBA in acetonitrile at 0°C (left); and assignment of some features (right).