

Supporting information for

**Syntheses, structures and properties of a series of non-heme
alkoxide-Fe(III) complexes of a benzimidazolyl-rich ligand
as models for lipoxygenase**

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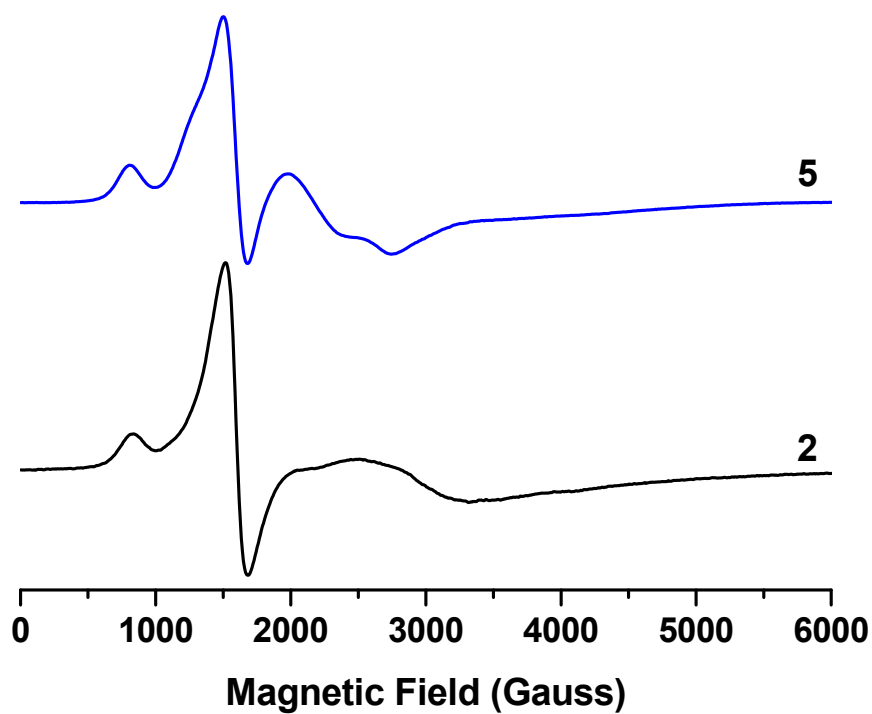


Fig. S1. X-band EPR spectra of complexes **2** and **5** in the polycrystalline state at 110 K ($f = 9.482$ GHz).

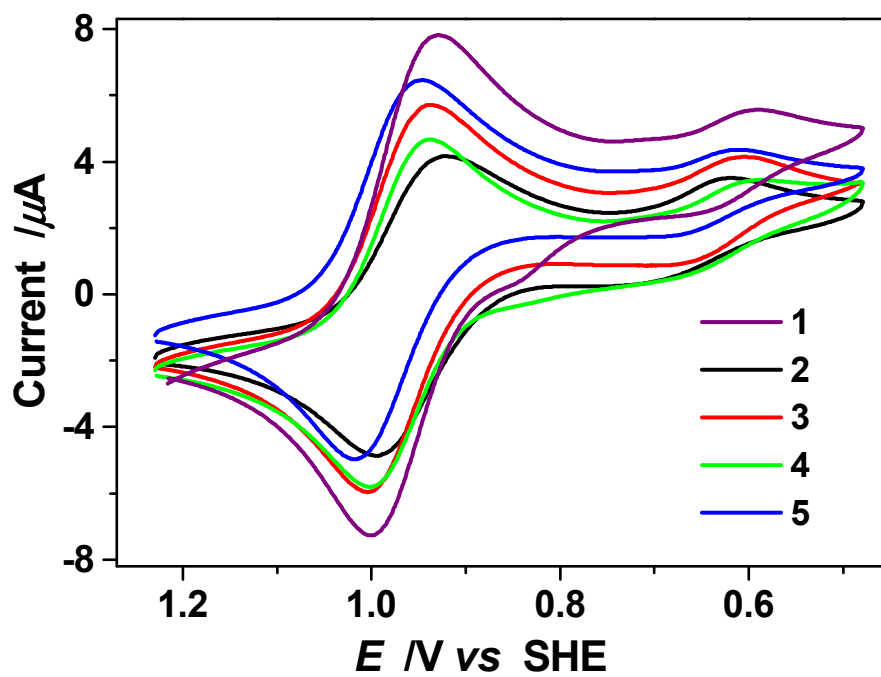


Fig. S2 Cyclic voltammograms of complexes **1**, **2**, **3**, **4** and **5** in dry acetonitrile ($c = 1.0$ mM) under dry Ar atmosphere with scan rate of 50 mV/s, 0.10 M TBAP as the supported electrolyte.

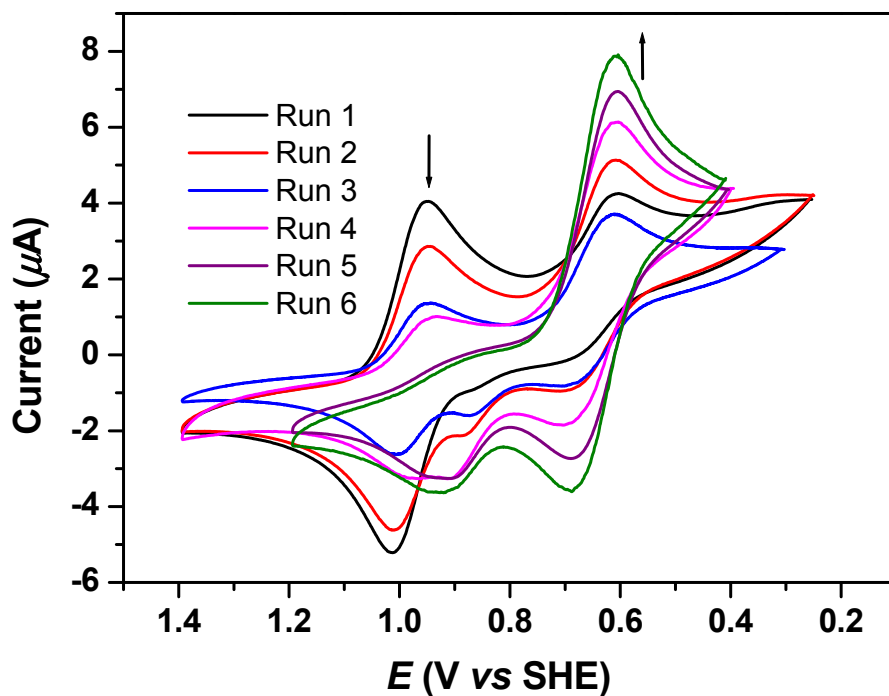


Fig. S3 Cyclic voltammograms of complex **3** in dry acetonitrile ($c = 1.0$ mM) under dry Ar atmosphere at room temperature with scan rate of 50 mV/s, 0.10 M TBAP as the supported electrolyte.

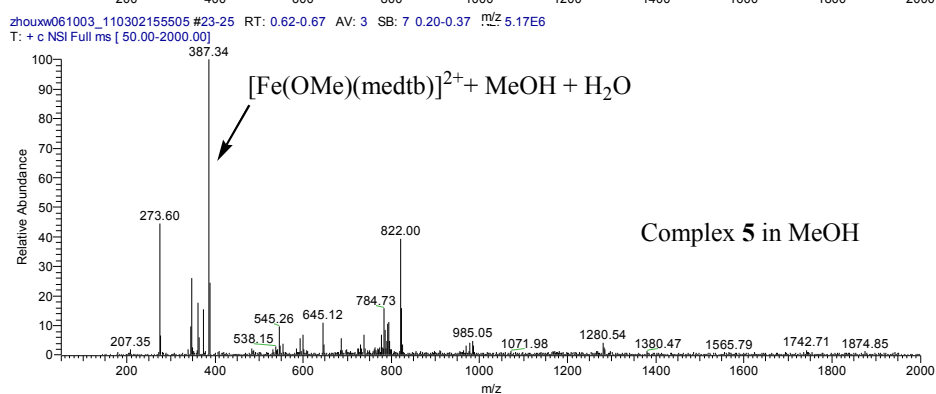
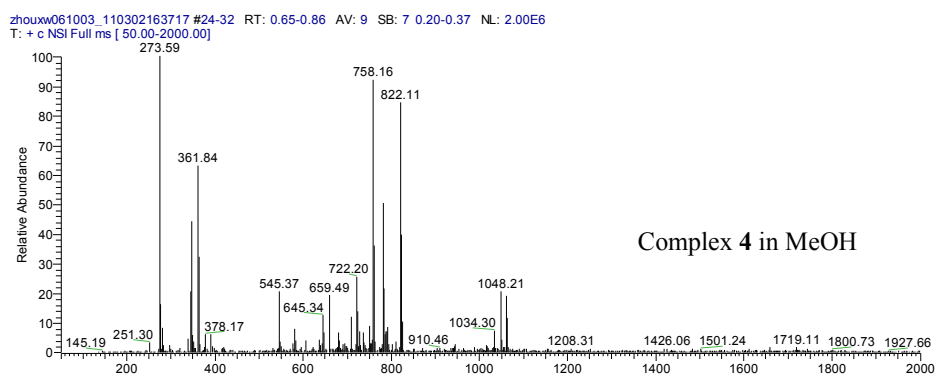
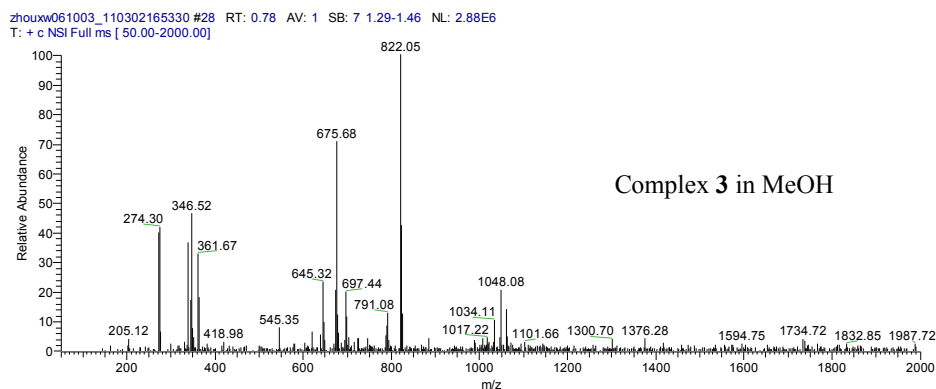
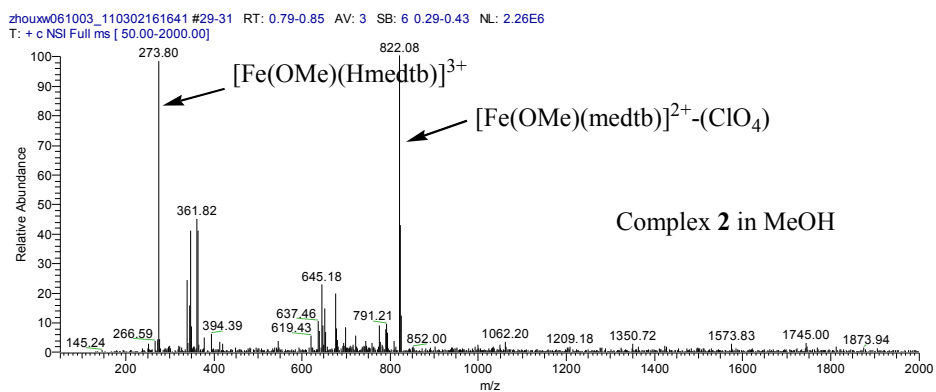


Fig. S4 ESI-MS spectra for complexes 2-5 with methanol as solvent.

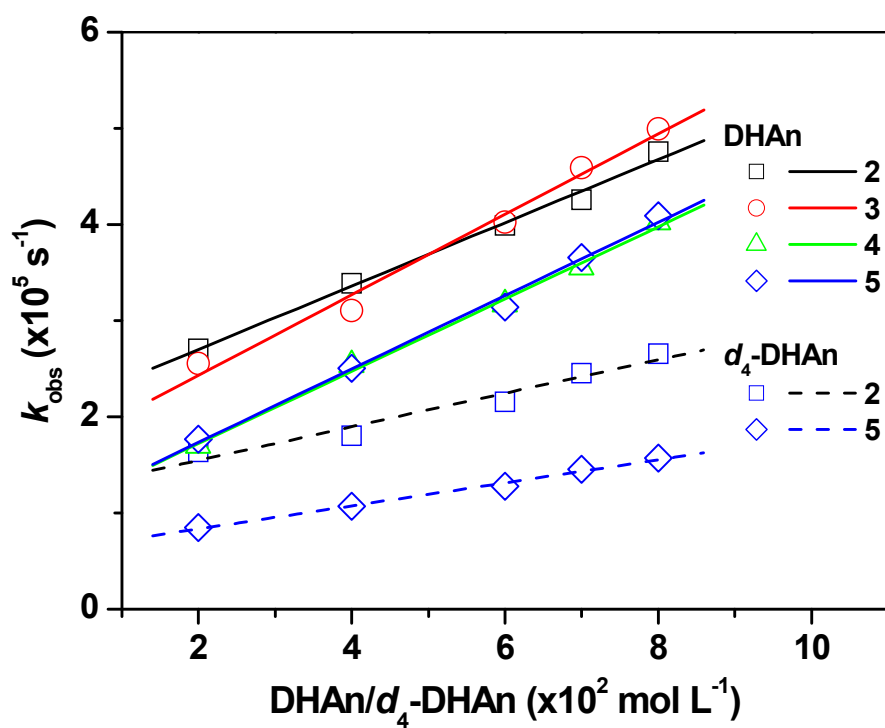


Fig. S5 First-order rate constants for the reduction of complexes 2-5 in the presence of 9,10-dihydroanthracene (DHAn) or d_4 -9,10-dihydroanthracene (d_4 -DHAn) in MeOH for 2, EtOH for 3, *n*-PrOH for 4 and *n*-BuOH for 5 at 333 K, respectively.