Supporting Information

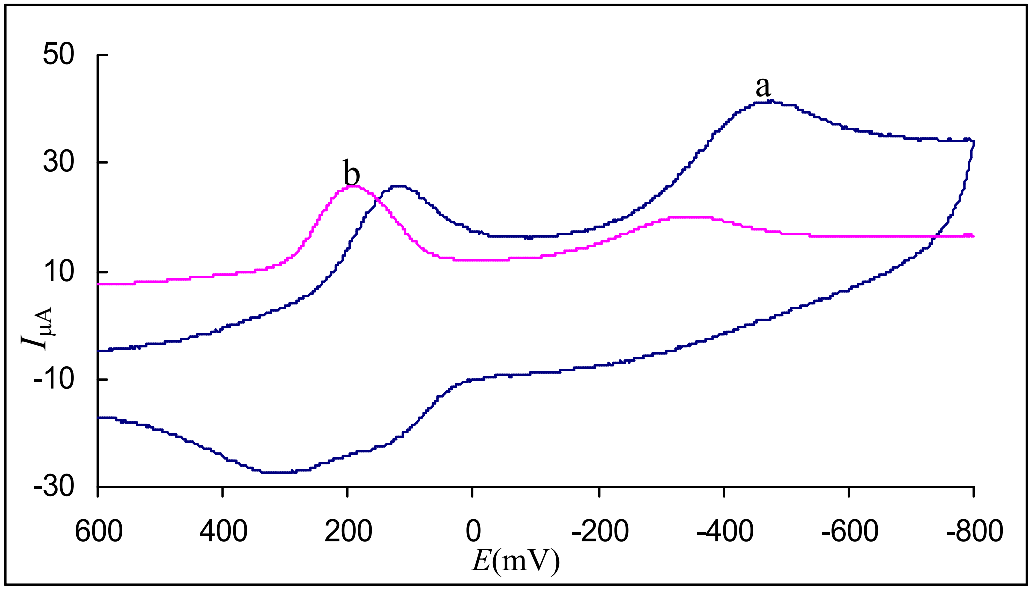

Figure S1. Cyclic voltammogram (a) (scan rate 50 mV s^{-1}) and Differential pulse voltammogram (b) (scan rate 5 mV s^{-1}) of 1 mM [Fe(L3)Cl_3] in aqueous CTAB micellar solution at 25 °C. Supporting electrolyte: 0.1 M NaCl

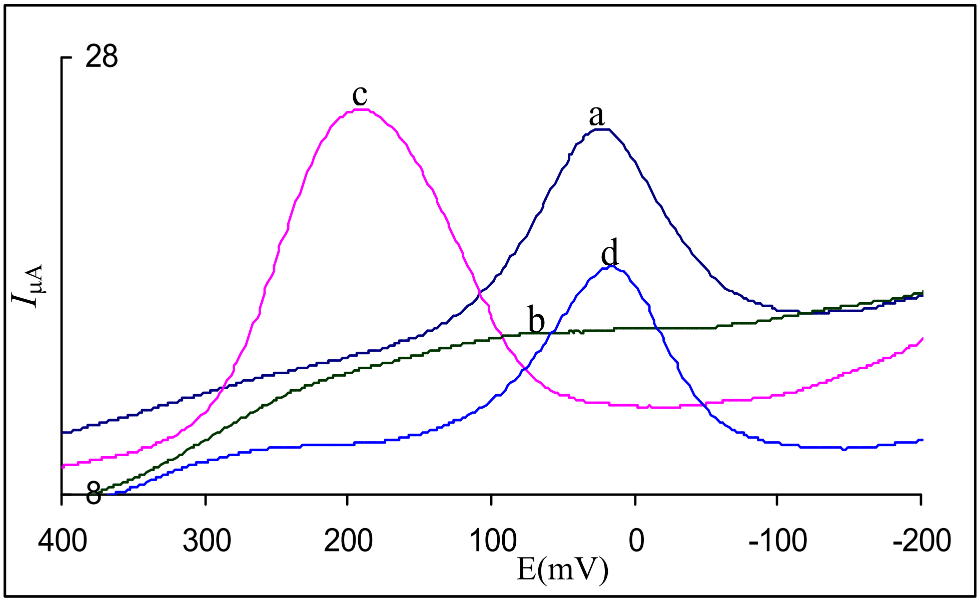

Figure S2. Differential pulse voltammograms of 1mM $[Fe(L4)(DBC)^{2-}]^{+}$ in Aqueous solution (a), CTAB (b), SDS (c) and TX-100 (d) micellar solution at 25 °C. Supporting electrolyte: 0.1 M NaCl, Scan rate 5 mV s^{-1}

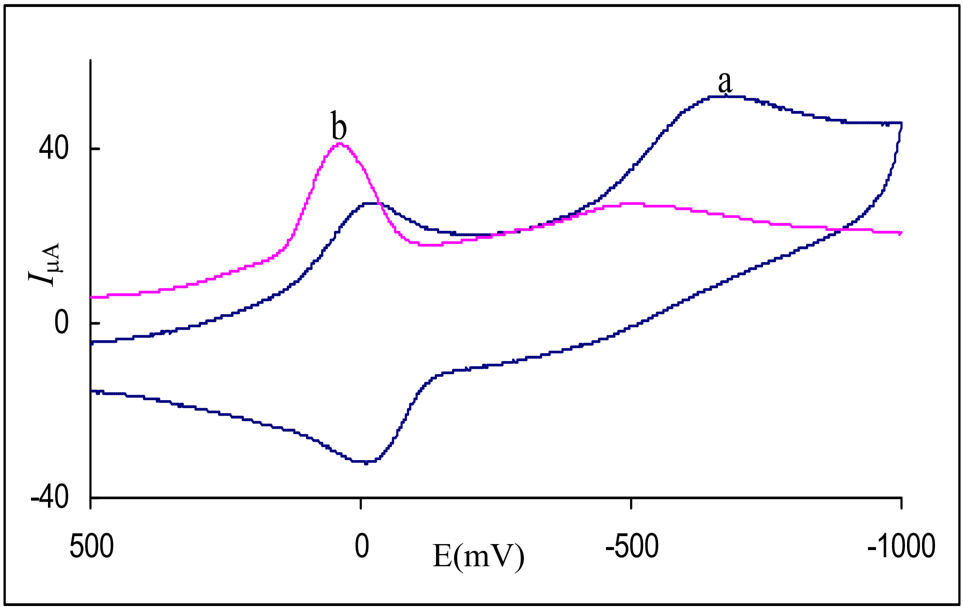

Figure S3. Cyclic voltammogram (a) (scan rate 50 mV s-1) and Differential pulse voltammogram (b) (scan rate 5 mV s-1) of 1 mM [Fe(L3)Cl_3] in aqueous solution at 25 °C. Supporting electrolyte: 0.1 M NaCl

Table S1 Electronic spectral data (λ_{max} in nm, ε_{max} in $M^{-1}cm^{-1}$ in parenthesis) for iron(III) complexes[a] in water and micellar media[b]

Complex	Water	SDS	CTAB	TX-100
[Fe(L1)Cl_3]	383(1840)	389(1985)	369(17650)	370(1540)
	295(1265)	286(1260)	285(4120)	284(1770)
	255(1430)	256(1500)	255(5040)	270(1740)
[Fe(L2)Cl_3]	388(1650)	379(1590)	362(580)	342 (1460)
	286(1350)	296(4550)	295(7950)	283(4720)
	255(1550)	256(5120)	256(1075)	267(6030)
[Fe(L3)Cl_3]	358(1680)	375(1620)	347(1795)	377(1315)
	287(1280)	292(1280)	298(1540)	293(1970)
	253(1520)	253(1520)	258(1630)	269(2110)
[Fe(L4)Cl_3]	363(1580)	389(1510)	383(1480)	372(1390)
	287(1530)	297(1660)	296(1450)	289(1660)
	256(1630)	257(1700)	256(1730)	257(1700)

[a] Concentration of iron(III) complexes, 2×10^{-4} M.

[b] Surfactant concentration: SDS, 13.0×10^{-3} M; CTAB, 6.0×10^{-3} M and TX-100, 12.5×10^{-3} M.

Table S2 Electrochemical data[a] of [Fe(L1)Cl_3] complexes and its DBC^{2-} adducts in aqueous and aqueous micellar[b] (SDS, CTAB, TX-100) solutions at 25 ± 0.2° C at a scan rate of 50 mV/s

Complex	*E*pc	*E*pa	Δ*E*	*E*$_{1/2}$ (V)		Redox process
	(V)	(V)	(mV)	CV	DPV[d]	
Water						
[Fe(L1)Cl_3]	-0.046	-	-	-	0.042	$Fe^{III} \rightarrow Fe^{II}$
	-	-	-	-	-0.082	LR
[Fe(L1)Cl_3]+DBC^{2-}	0.094	0.302	0.210	0.199	0.190	DBSQ → DBC^{2-}
	-0.672	-	-	-0.512	-0.608	$Fe^{III} \rightarrow Fe^{II}$ + LR
SDS						
[Fe(L1)Cl_3]	-0.096	-	-	-	0.062	$Fe^{III} \rightarrow Fe^{II}$
	-0.624	-	-	-	-0.572	LR
[Fe(L1)Cl_3]+DBC^{2-}	-0.112	-0.008	0.104	0.060	0.028	DBSQ → DBC^{2-}
	-0.702	-	-	-	-0.566	$Fe^{III} \rightarrow Fe^{II}$ + LR
CTAB						
[Fe(L1)Cl_3]	-0.023	-	-	-	0.150	$Fe^{III} \rightarrow Fe^{II}$
	-0.466		-	-	-0.342	LR
[Fe(L1)Cl_3]+DBC^{2-}	-0.004	0.062	0.058	0.033	0.054	DBSQ → DBC^{2-}
	-0.502	-	-	-	-0.350	$Fe^{III} \rightarrow Fe^{II}$ + LR
TX-100						
[Fe(L1)Cl_3]	-0.112	-	-	-	0.004	$Fe^{III} \rightarrow Fe^{II}$
	-0.596	-	-	-	-0.456	LR
[Fe(L1)Cl_3]+DBC^{2-}	-0.104	-0.012	0.092	-0.058	-0.046	DBSQ → DBC^{2-}
	-0.684	-	-	-	-0.576	$Fe^{III} \rightarrow Fe^{II}$ + LR

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[a] Potential measured (± 0. 002 V) vs Calomel electrode (0.01 M, 0.1 M NaCl). Add 0.244 V to convert to NHE. [b] Surfactant concentration: SDS, 8.2×10^{-3} M., CTAB, 1.2×10^{-3} M and TX-100, 3.1×10^{-3} M.
[c] Reduction of some dissociated species, LR = Ligand Reduction,
[d] Differential pulse voltammetry scan rate, 5 mV/s

Table S3 Electrochemical data[a] of [Fe(L2)Cl$_3$] complexes and its DBC^{2-} adducts in aqueous and aqueous micellar[b] (SDS, CTAB, TX-100) solutions at 25 ± 0.2 °C at a scan rate of 50 mV/s

Complex	*E*pc	*E*pa	Δ*E*	*E*$_{1/2}$ (V)		Redox process
	(V)	(V)	(mV)	CV	DPV[d]	
Water						
[Fe(L2)Cl$_3$]	0.178	-	-	-	0.126	c
	-0.078	-	-	-	0.024	Fe^{III} → Fe^{II}
	-0.592	-	-	-	-0.452	LR
[Fe(L2)Cl$_3$]+DBC^{2-}	-0.062	-0.024	38	0.043	0.031	DBSQ → DBC^{2-}
	-	-	-	-	-0.048	c
	-0.632	-	-	-	-0.566	Fe^{III} → Fe^{II} + LR
SDS						
[Fe(L2)Cl$_3$]	0.167	-	-	-	0.140	Fe^{III} → Fe^{II}
	-0.680	-	-	-	-0.532	LR
[Fe(L2)Cl$_3$]+DBC^{2-}	-0.020	-0.008	-	0.039	0.032	DBSQ → DBC^{2-}
	-0.674	-	-	-	-0.500	Fe^{III} → Fe^{II} + LR
CTAB						
[Fe(L2)Cl$_3$]	-0.153	-	-	-	0.144	Fe^{III} → Fe^{II}
	-0.450	-	-	-	-0.318	LR
[Fe(L2)Cl$_3$]+DBC^{2-}	0.192	0.302	110	0.247	0.120	DBSQ → DBC^{2-}
	-0.346	0.158	188	0.252	-0.474	Fe^{III} → Fe^{II} + LR
TX-100						
[Fe(L2)Cl$_3$]	0.174	-	-	-	0.180	Fe^{III} → Fe^{II}
	-0.666	-	-	-	-0.506	LR
[Fe(L2)Cl$_3$]+DBC^{2-}	-0.012	-0.182	194	0.097	0.092	DBSQ → DBC^{2-}
	-0.700	-	-	-	-0.578	Fe^{III} → Fe^{II} + LR

[a] Potential measured (± 0. 002 V) vs Calomel electrode (0.01 M, 0.1 M NaCl). Add 0.244 V to convert to NHE.[b] Surfactant concentration: SDS, 8.2 × 10^{-3} M., CTAB, 1.2 × 10^{-3} M and TX-100, 3.1 × 10^{-3} M.

[c] Reduction of some dissociated species, LR = Ligand Reduction,

[d] Differential pulse voltammetry scan rate, 5 mV/s

Table S4 Electrochemical data[a] of [Fe(L4)Cl$_3$] complexes and its DBC^{2-}-adducts in aqueous and aqueous micellar[b] (SDS, CTAB, TX-100) solutions at 25 ± 2 °C at a scan rate of 50 mV/s

Complex	*E*pc	*E*pa	Δ*E*	$E_{1/2}$ (V)		Redox process
	(V)	(V)	(mV)	CV	DPV[d]	
Water						
[Fe(L4)Cl$_3$]	-0.078	-	-	-	0.024	Fe^{III} → Fe^{II}
	-0.576	-	-	-	-0.452	LR
[Fe(L4)Cl$_3$]+DBC^{2-}	-0.064	-0.028	0.036	-0.046	-0.048	DBSQ → DBC^{2-}
	-0.632	-	-	-	-0.566	Fe^{III} → Fe^{II} + LR
SDS						
[Fe(L4)Cl$_3$]	0.190	-	-	-	0.092	Fe^{III} → Fe^{II}
	-0.686	-	-	-	-0.532	LR
[Fe(L4)Cl$_3$]+DBC^{2-}	-0.020	-	-	-	-0.032	DBSQ → DBC^{2-}
	-0.674	-	-	-	-0.500	Fe^{III} → Fe^{II} + LR
CTAB						
[Fe(L4)Cl$_3$]	-0.168	-	-	-	0.168	Fe^{III} → Fe^{II}
	-0.450	-	-	-	-0.324	LR
[Fe(L4)Cl$_3$]+DBC^{2-}	0.124	0.306	0.166	0.213	0.192	DBSQ → DBC^{2-}
	-0.466	-	-	-	-0.346	Fe^{III} → Fe^{II} + LR
TX-100						
[Fe(L4)Cl$_3$]	0.174	-	-	-	0.121	Fe^{III} → Fe^{II}
	-0.070				-0.018	c
	-0.666				-0.506	LR
[Fe(L4)Cl$_3$]+DBC^{2-}	-0.012	0.182	0.194	0.097	0.092	DBSQ → DBC^{2-}
	-0.700	-	-	-	-0.578	Fe^{III} → Fe^{II} + LR

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[a]Potential measured (± 0. 002 V) vs Calomel electrode (0.01 M, 0.1 M NaCl). Add 0.244 V to convert to NHE.[b]Surfactant concentration: SDS, 13.0 × 10^{-3} M., CTAB, 6.0 × 10^{-3} M and TX-100, 12.5 × 10^{-3} M. [c]Reduction of some dissociated species, LR = Ligand Reduction, [d]Differential pulse voltammetry scan rate, 5 mV/s.