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Supporting Information (SI)

Impact of surfactant on the electroactivity of proteins at an aqueous-organogel microinterface array

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Abstract:

The repeated cyclic voltammetry of myoglobin, haemoglobin and cyctochrome *c* (aqueous phase) in the presence of 10 mM NaAOT (organic phase) is shown. Myoglobin, Figure S-1, shows very high reproducibility in peak currents as compared to cytochrome *c* (Figure S-3). Haemoglobin, Figure S-2, shows a small increase in peak current with increasing scan number, albeit to a far less extent than cytochrome *c*. This indicates that a complex relationship between the protein and surfactant may cause unique voltammetric responses for individual proteins.

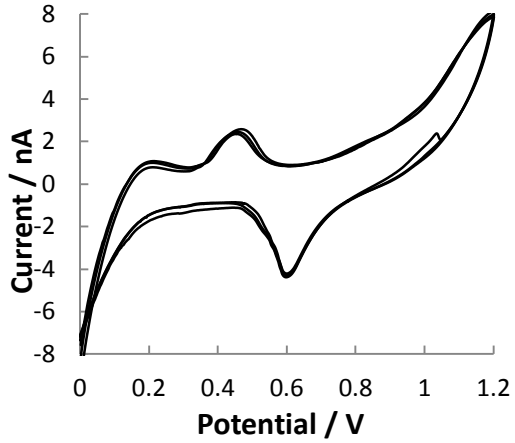

Figure S-1. CVs of 6 µM Mb in the presence of 10 mM organic-phase surfactant, NaAOT. Scan rate 5 mV s^{-1}. Other conditions as described in the Experimental section. Overlay of three consecutive CVs shown.

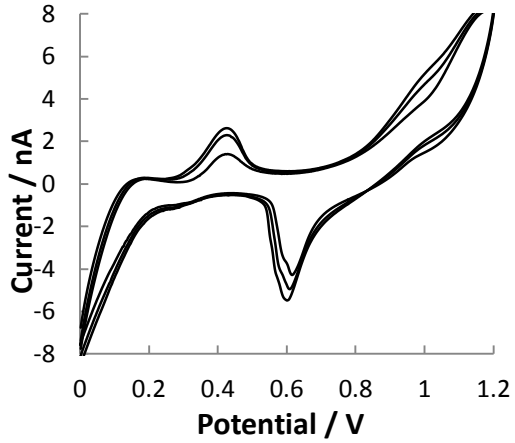

Figure S-2. CVs of 6 µM Hb in the presence of 10 mM organic-phase surfactant, NaAOT. Scan rate 5 mV s^{-1}. Other conditions as described in the Experimental section. Overlay of three consecutive CVs shown.

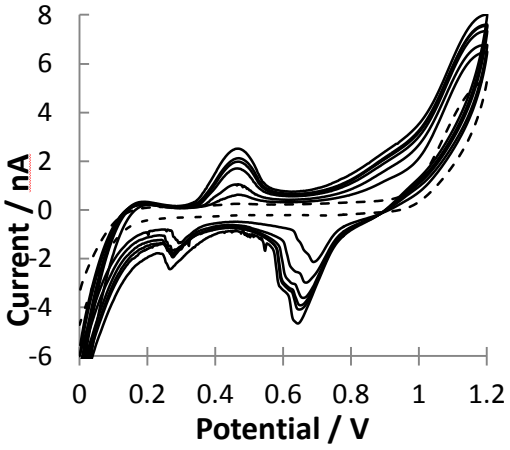

Figure S-3: CVs of 6 µM Cyt *c*, scan rate 5 mV s^{-1}. Dashed line represents the blank scan. The organic phase contained 10 mM NaAOT. Other conditions as described in the Experimental section. Overlay of seven consecutive CVs shown.