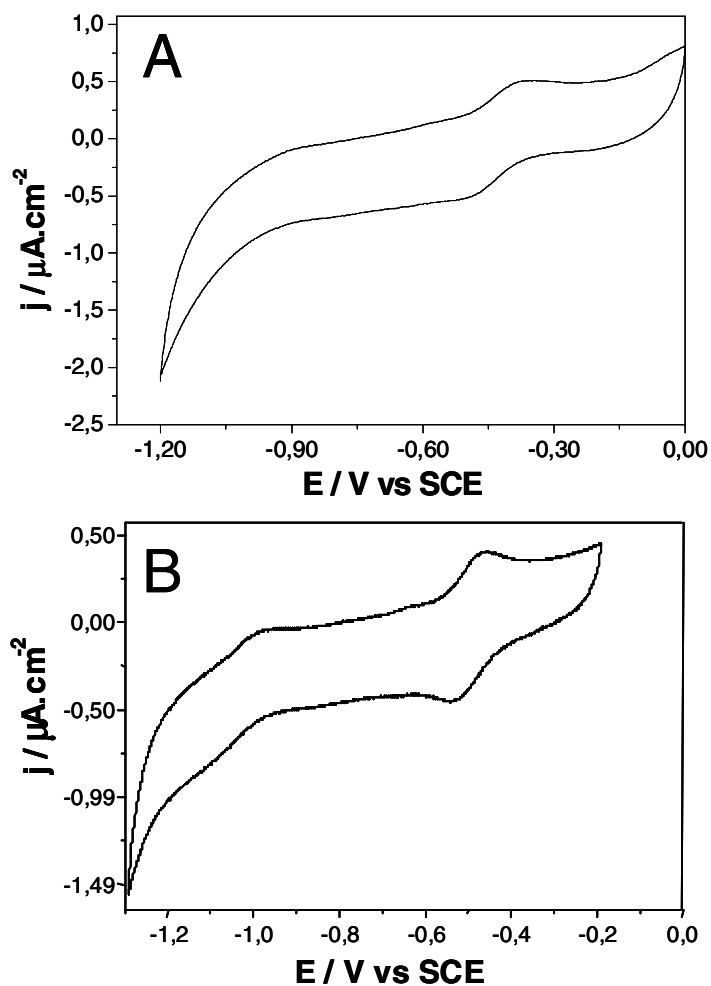


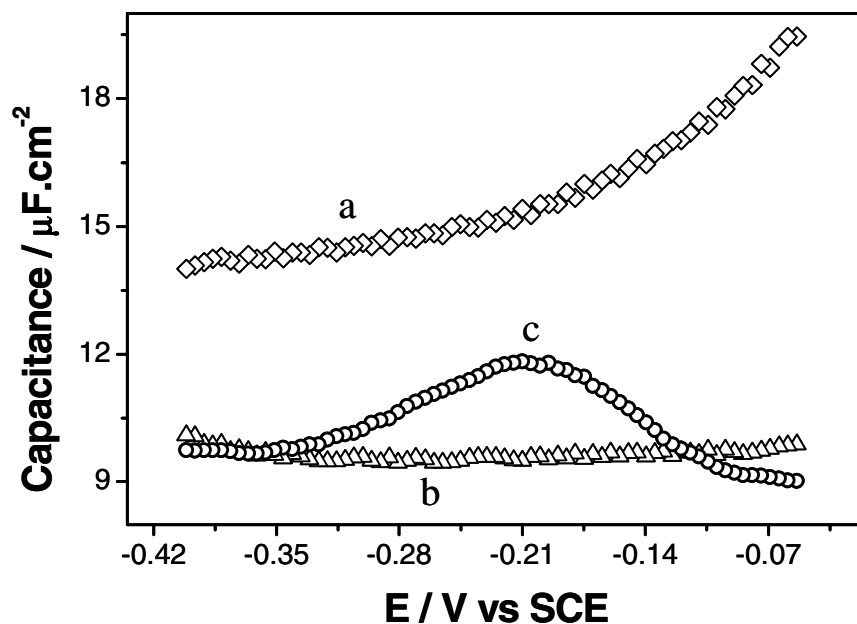
## Supporting information

Figure S1, cyclic voltammograms of the Neomycin-*Pf*Fd complex and the Neomycin-*Pf* Fd-Cysteine complex in phosphate buffer; and Figure S2, potential-dependent capacitance curves of bare Au(111) electrode, the MPA/Au(111) electrode, and the *Pf* Fd-MPA/Au(111) electrode in phosphate buffer.



**Figure S1.** Cyclic voltammograms of (A) the Neomycin-*Pf* Fd complex and (B) the Neomycin-*Pf* Fd-Cysteine complex in 5 mM phosphate buffer (pH 7.9) obtained at the EPG electrodes.

Scan rate:  $5 \text{ mV}\cdot\text{s}^{-1}$ . The concentration of the complex is ca  $35 \mu\text{M}$ .



**Figure S2.** Potential-dependent capacitance curves of the bare Au(111) electrode (**curve a**), the MPA/Au(111) electrode (**curve b**) and the *Pf* Fd-MPA/Au(111) electrode (**curve c**) in 5 mM phosphate buffer (pH 7.9) with a frequency of 100 Hz and an amplitude of 5 mV. The capacitance at bare Au(111) is largely constant at ca. 15  $\mu\text{F}.\text{cm}^{-2}$  over the potential range -0.5 to -0.1 V (vs SCE). The presence of a MPA monolayer lowers the capacitance to 9  $\mu\text{F}.\text{cm}^{-2}$ . The further presence of *Pf* Fd on the MPA adlayer does not change the base line much, but a hump with maximum capacitance is observed at ca -0.21 V. The position of the hump is almost the same as the formal redox potential of adsorbed *Pf* Fd. The hump is, thus, most likely caused by the contribution of the charge from the redox center of [3Fe4S] in *Pf* Fd.