Supplementary Material for PCCP

SUPPLEMENTARY INFORMATION

Redox properties and catalytic activity of surface-bound human sulfite oxidase studied by a combined surface enhanced resonance Raman spectroscopic and electrochemical approach.

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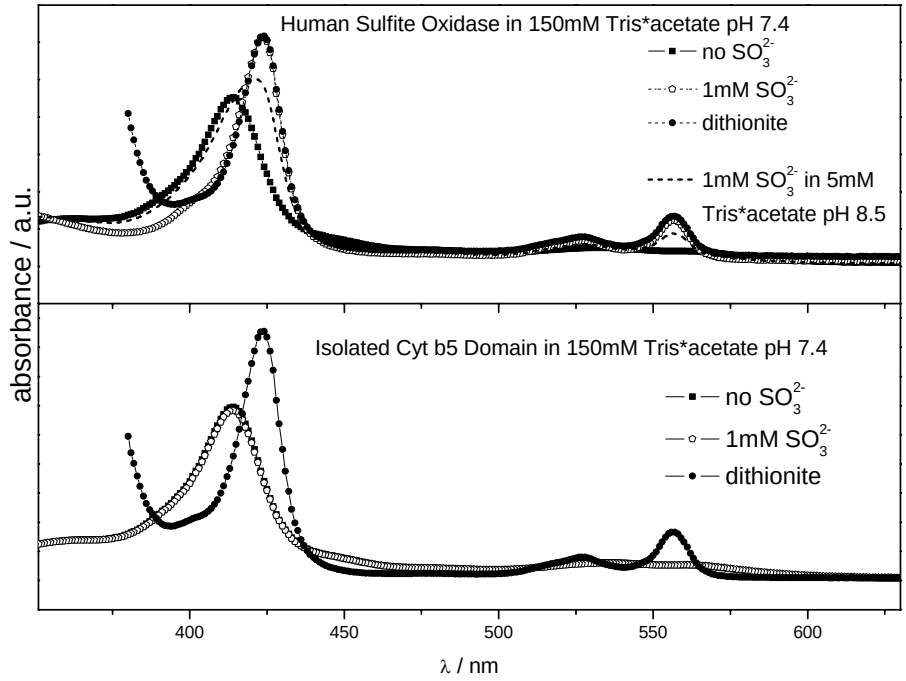

Figure S1: UV-Vis Absorption spectra of Human Sulfite Oxidase (up) and isolated cytochrome b5 domain in the absence and presence of sulfite.

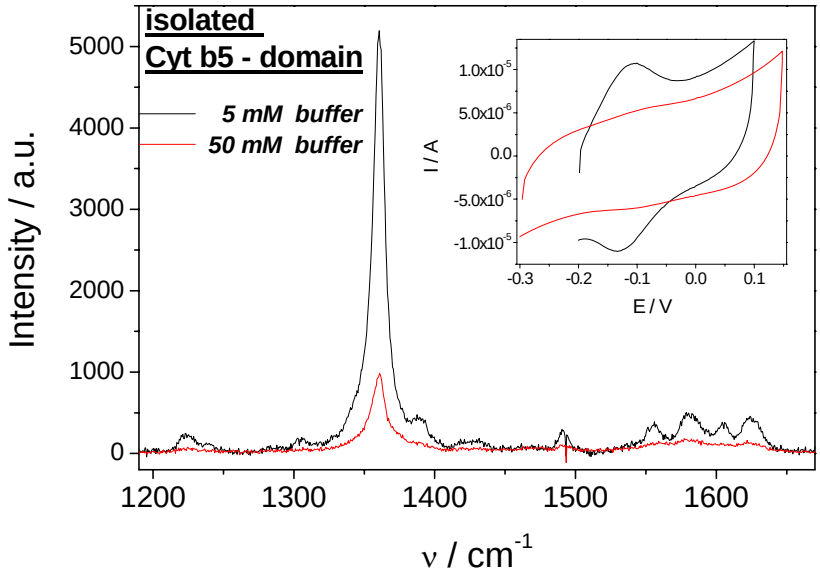

Figure S2: Desorption of the isolated Cyt b5 domain in 50 mM Tris-acetate buffer at pH 7.4 indicated by an irreversible decrease of the SERR- and CV-signal (inset).

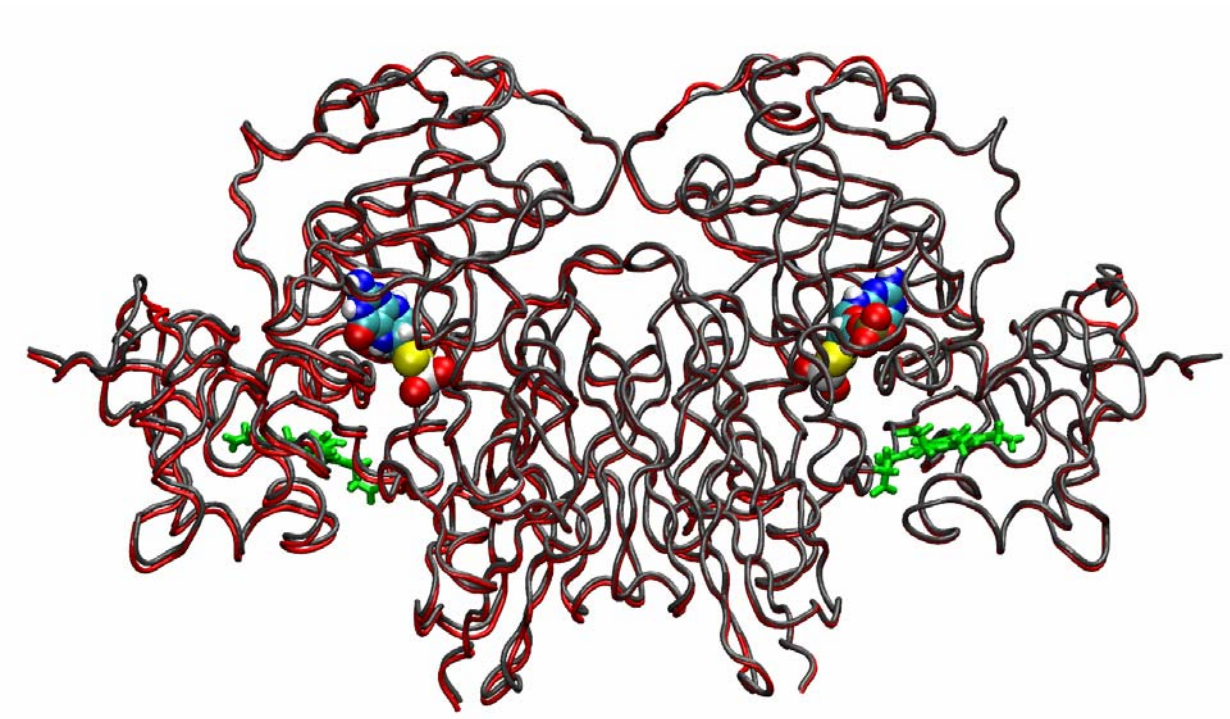

Figure S3: Superposition of crystal structure of chicken liver SO and homology model of hSO.

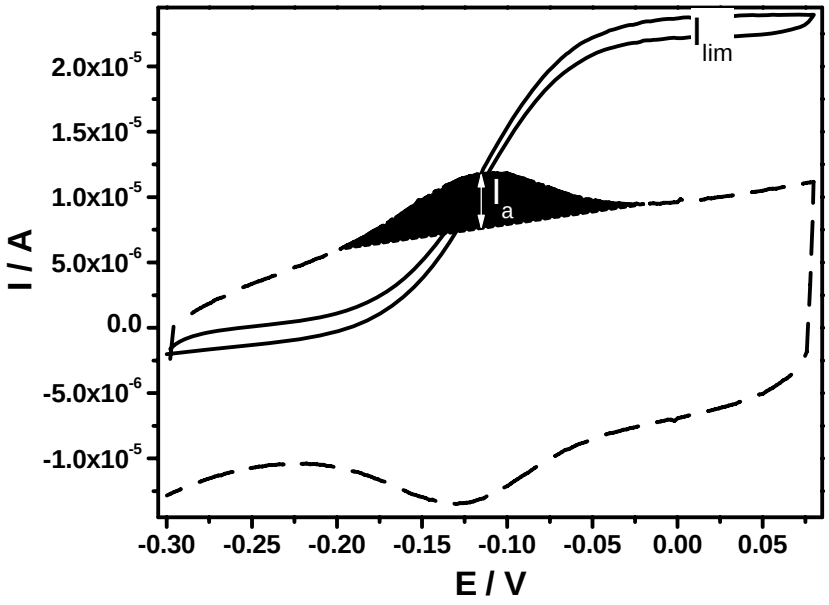

Figure S4: CV of hSO immobilized on an Ag electrode with 1:3 (M/M) C8(NH_2)/C6(OH) – SAM in 750 mM Tris-acetate at pH 7.4. Dashed line, non-turnover signal at a scan rate of 100 mV/s; solid line, in the presence of 200 µM substrate at a scan rate of 2 mV/s.

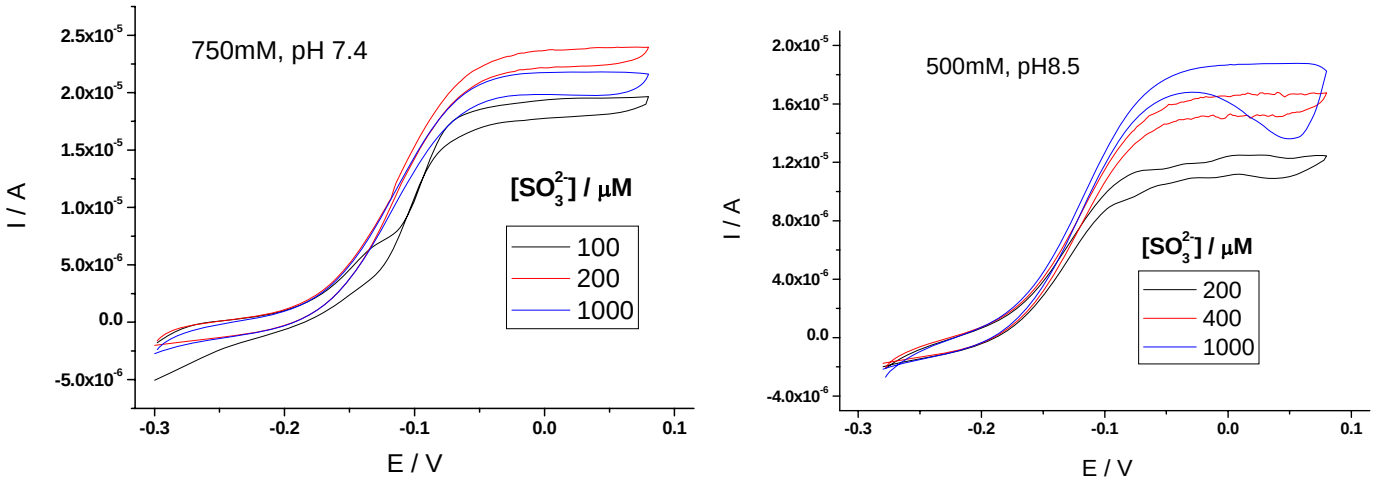

Figure S5: Cyclic voltammograms of human Sulfite Oxidase immobilized on 1:3 C8(NH2) / C6(OH) – SAM, rotation of the electrode at 480 rpm and different buffer conditions and substrate concentrations, respectively.