

Supporting Information

Effects of Large Scale Amino Acid Substitution in the Polypeptide Tether Connecting the Heme and Molybdenum Domains on Catalysis in Human Sulfite Oxidase.

Kayunta Johnson-Winters, Anna R. Nordstrom, Amanda C. Davis, Gordon Tollin* and John H. Enemark*

* Department of Chemistry and Biochemistry, The University of Arizona, 1306 E.

University Blvd., Tucson, Arizona 85721

* *Phone: 520-621-2245, Fax: 520-626-8065, E mail: jenemark@u.arizona.edu*

* *Phone: 520-621-3447, Fax: 520-626-8065, E mail: gtollin@u.arizona.edu*

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Table S1 Iron to Molybdenum Ratios Determined using Inductively Coupled

Plasma

HSO Mutant	Iron to Molybdenum Ratio
HSO Chimera	0.70 ± 0.03

Table S2 pH Dependence of Laser Flash Photolysis Results for HSO Chimera

		pH 6.8	pH 7.0	pH 7.4	pH 7.61
HSO Chimera	k_{et} (s^{-1})	139 ± 11	146 ± 8	156 ± 14	94 ± 4
	k_{f} (s^{-1})	38 ± 3	43 ± 2	44 ± 5	33 ± 1
	k_{r} (s^{-1})	102 ± 12	103 ± 8	111 ± 9	61 ± 4
	K_{eq}	0.372 ± 0.01	0.42 ± 0.04	0.40 ± 0.02	0.55 ± 0.01

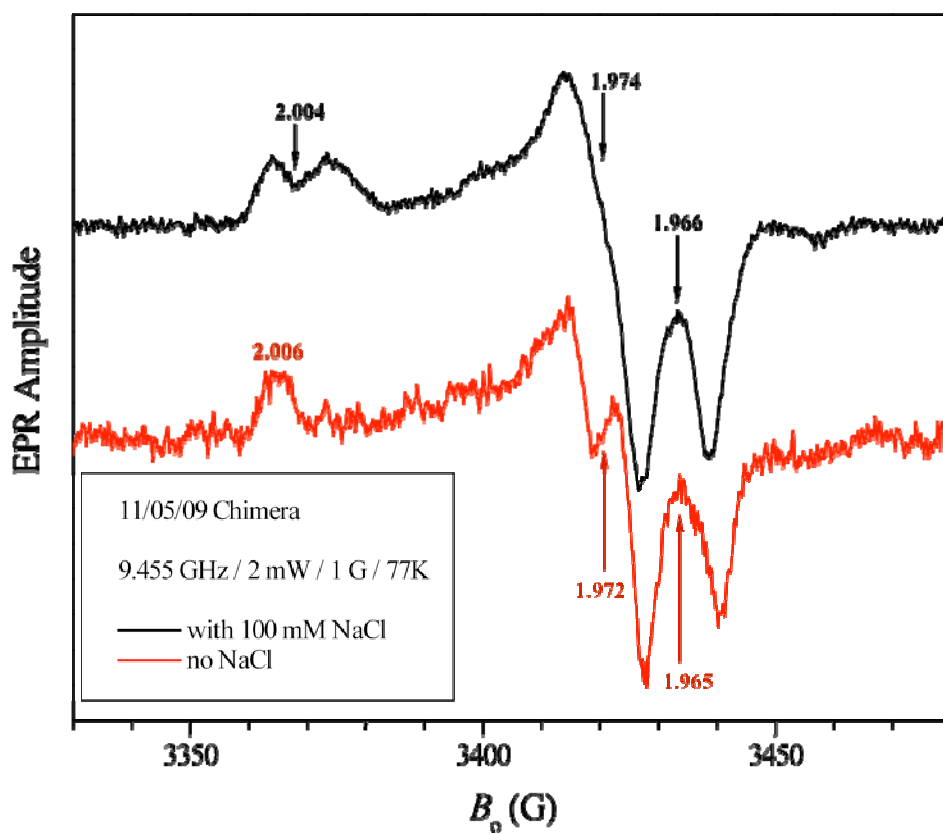


Figure FS1 CW EPR spectra of HSO chimera at pH 5.8.