

Additional file 3 Overlapping synthetic peptides of human SO protein chain

	Peptide	Position (aa)	Sequence
SO I	1	1-25	MGTLLGLGAVLAYQDHR CRAAQEST
	2	18-43	CRAAQEST HIYTKEEVSSHTSPETG
	3	35-59	SHTSPETG IWVTLGSEVFDVTEFVD
	4	52-76	FDVTEFVD LH*PGGPSKL MLAAGGPL
	5	69-93	MLAAGGPL EPFWALYAVH*NQSHVRE
	6	86-110	H*NQSHVRE LLAQYKIGELNPEDKVA
SO II	7	103-127	LNPEDKV APTNETSDPY ADDPVRHP
	8	120-144	ADDPVRHP ALKVNSQRPFNAEPPPE
	9	137-161	FNAEPPPE LLTENYITPNPIFFTRN
	10	154-178	NPIFFTRN HLPVNLDPD TYRLHV
	11	171-195	DTYRLHV VGAPGGQSL SLDDLHN
	12	188-212	LSLDDLHN FPRYEITVTL QC**AGNRR
	13	205-229	LQC**AGNRR SEMTQVKEV KGLEWRTG
	14	222-246	KGLEWRTG AISTARWAGAR LCDVLA
	15	239-263	ARLCDVLA QAGHQ LCETE AHVC**FEG
	16	256-280	EAHVC**FEG LSDPTGTAY GASIPLA
	17	273-297	YGASIPLA RAMDPEAEVLLAYEMNG
	SO III	18	290-314
19		307-331	PVRVVPG VVGARHV KWLGRVSVQP
20		324-348	LGRVSVQP EESYSHWQRRDY KGFSP
21		341-365	RDYKGFSP SDWETVDF DSAPSIQE
22		358-382	DSAPSIQE LPVQSAITEPRD GETVE
23		375-399	PRDGETVE SGEVTIKGYAW SGGGRA
24		392-416	AWSGGGRA VIRVDVSLD GGLTWQVA
25		409-433	GGLTWQVA KLDGEEQRPR KAWAWRL
26		426-450	RKAWAWRL WQLKAPVPAG QKELNIV
27		443-467	GQKELNIV CKAVDDGYN VQPD TVAP
28		460-484	VQPD TVAPIWNL RGVLSNAWHRVHV
29		464-488	TVAPIWNL RGVLSNAWHRVHVYVSP

The overlapping amino acids are marked by bold letters.

*: binding sites for iron as heme axial ligand in position aa 61 and aa 86.

** : binding sites for molybdenum pterin in position aa 207 and aa 260.

