Supplemental Table S4

A mys	β βPS AA Change	C β3 AA	D Domain	E Relative TWOW-1 Binding		G	H WT vs Mut	I	J Relative No Mn/Mn	K	L	M
											Relative	
								Relative		PS2 Integri		in
								No Mn/Mn			Level	
allele	-											
				Median	S.E.	Z score	p=	Z score	Median	S.E.	Median	S.E.
β PS L	ong Range disulfide m	nutant					F					
	CC(46&505)AA	C13 &C435	PSI	2.18	0.19	11.9	0.000	9.88	2.49	0.21	0.87	0.03
β PS S	SyMBS Mutants											
	D231>A	D158	SyMBS	-0.07	0.09	-13.4	0.000	-19.21	-1.33	2.67	0.31	0.08
	N283>A	N215	SyMBS	0.08	0.04	-11.7	0.000	-5.80	0.43	0.16	0.28	0.07
pps /	DMIDAS Mutants											
b67	D200N	D127	ADMIDAS	2.15	0.11	11.6	0.000	1.5	1.39	0.04	0.25	0.06
	D200K	D127	ADMIDAS	2.86	0.18	19.6	0.000		1.85	0.05	0.34	0.05
	D200A	D127	ADMIDAS	1.47	0.16	3.9	0.004	3.02	1.59	0.17	0.37	0.07
	D200S	D127	ADMIDAS	1.23	0.09	1.2	0.214	-1.59	0.99	0.02	0.32	0.02
	D199A*	D126	ADMIDAS	1.55	0.16	4.8	0.002		0.95	0.05	0.23	0.03
	D199S*	D126	ADMIDAS	1.65	0.18	5.9	0.000	-0.6	1.07	0.11	0.20	0.05
βPSC	Deadbolt Mutants											
	delQ758-H762	deID672-K676	β-TD	3.96	1.31	31.8	0.000	5.69	1.94	0.17	0.11	0.02
	R717A	R633A	β-TD	1.28	0.04	1.8	0.275	-2.67	0.84	0.04	0.45	0.11
	delQ758-H762+R717A	delD672-K676 +R633A	β-TD	4.2	0.5	34.8	0.000	14.07	2.38	0.19	0.14	0.02
β PS 1	ransmembrane (TM) ar	nd Cytoplasmic	(Cyto) Mu	tants								
b1*	G792D	G708	TM	1.44	0.07	3.5	0.001	-0.9	1.08	0.04	0.50	0.06
b70*	S836T, P841T	S752,1757	Cyto	1.02	0.14	-1.1	0.390	0.3	1.24	0.11	0.61	0.23
	D807R**	D723	Cyto	1.28	0.07	1.8	0.375	-0.37	1.09	0.09	0.49	0.09
G1	T825>	T741>	Cyto	0.96	0.12	-1.9	0.503	1.46	1.39	0.07	0.68	0.10
	Trunc	T741>	Cyto	0.96	0.07	-1.9	0.212	-1.10	1.05	0.07	0.44	0.06
α PS2	Cytoplasmic Mutants											
	CGFFNR>CGFFNA**		Cyto	1.24	0.04	1.3	0.178	0.84	1.20	0.05	0.93	0.03
	CGFFNR>CGFANA		Cyto	3.24	0.06	23.8	0.000		2.83	0.31	0.77	0.09
	CGFFNR>VGFFNR*		Cyto	0.51	0.04	-6.8	0.000		0.77	0.05	0.42	0.07

<u>Table S4.</u> TWOW-1 binding of site-directed mutations. Columns and shading is the same as in Table S2. As in Table S2 shading in Column A is according to TWOW-1 binding ability (Column G); red, z scores less than -10; dark pink, z scores between -5 and -10; no fill, z scores between -2.9 and 2.9; light green, z scores between 3 and 5; blue, z scores greater than 10. * multiple independent cell lines were tested. ** cell lines with and without the myc-tag were tested and gave similar results that were combined.