

Table S2

strain_ID	mutation	status	P-value KL-divergence difference from wt	multiple testing correction (17 tests)	Median of KL-divergence - between mutant and wild-type	Median of KL-divergence - between mutant and model	Replicates (n)
YBS117	Opy2 Δ 233-45	known	5.72E-05	0.001	0.070	0.064	6
YBS146	Ste20 Δ 469-80	known	0.955	1	0.013	0.060	5
YBS105	Hot1 Δ 373-85	known	5.85E-07	9.95E-06	1.526	0.153	11
YBS92	Pbs2 Δ 91-100	known	n/d	n/d			
YBS91	Wild-type	na			0.012	0.053	38
YBS95	Sho1 Δ 217-31	novel	0.023	0.394	0.018	0.055	7
YBS144	Ste20 Δ 66-71	novel	0.925	1	0.018	0.108	5
YBS138	Pbs2 Δ 249-55	novel	0.532	1	0.014	0.080	5
YBS140	Pbs2 Δ 281-5	novel	0.116	1	0.038	0.091	5
YBS142	Pbs2 Δ 292-8	novel	0.191	1	0.014	0.105	5
YBS106	Nup133 Δ 8-13	novel	0.085	1	-0.650	0.388	8
YBS94	Ste50 Δ 341-6	novel	0.001	0.016	0.047	0.058	7
YBS121	Ste11 Δ 379-82	novel	2.51E-03	0.043	0.125	0.080	7
YBS118	Pbs2 Δ 180-8	novel	3.79E-04	0.006	0.121	0.104	6
YBS119	Pbs2 Δ 269-74	novel	3.33E-05	0.001	2.778	0.182	7
YBS120	Pbs2 Δ 661-8	novel	1.19E-03	0.020	0.050	0.046	7
YBS108	Sin3 Δ 541-8	novel	0.002	0.042	0.054	0.036	8
YBS148	Sch9 Δ 178-89	novel	1.04E-04	0.002	0.269	0.099	6