

**Table S3.** Biological and technical repeats for Swe1 kinase. The QSpec method was used to analyze reproducibility of interactions recovered both within the same tag and between the HA and FLAG tags; values are expressed as odds. Values highlighted in green indicate tag influence on recovery of interaction partner.

Protein	Length	Odds of differential abundance			HA						FLAG					
		Between tags	HA	FLAG	HA	HA	HA	HA	HA	HA	HA	FLAG	FLAG	FLAG	FLAG	FLAG
ACT1	376	2.84	0.84	0.94	1	2	1	0	0	1	0	0	0	1	0	0
ADH1	348	1.49	1.05	1.66	0	1	0	0	0	0	0	2	0	0	0	2
AFG2	781	1.36	1.00	1.00	1	0	0	0	0	0	0	0	0	0	0	0
AGE2	299	2.57	0.93	1.09	0	1	0	1	1	0	0	0	0	0	0	0
ASI1	624	0.85	1.07	1.10	0	1	0	0	0	0	0	0	0	0	1	0
BBP1	386	0.89	0.98	1.09	0	0	0	0	0	0	0	0	0	0	0	1
BOI1	981	1.38	1.11	1.05	0	0	0	1	0	0	0	0	0	0	0	0
BUD14	707	0.70	0.67	1.44	3	4	3	2	2	4	3	5	5	2	8	6
CDC14	551	0.76	0.51	0.49	8	9	12	8	9	11	7	8	8	6	9	7
CDC19	500	1.72	0.98	1.33	0	0	0	0	0	0	0	1	0	0	0	1
CDC28	299	317.17	1.04	0.59	0	1	0	1	0	0	5	4	5	5	5	7
CDC31	161	2.23	2.30	0.82	0	0	0	0	1	2	1	1	3	1	2	2
CKA1	373	1.31	1.01	0.95	1	0	0	0	0	0	0	0	0	0	0	0
CKA2	340	59.17	0.54	1.00	3	4	3	3	4	3	0	1	0	0	1	0
CKB1	278	5.29	0.61	0.93	1	2	2	1	0	3	0	1	0	0	0	0
CKB2	258	0.90	1.62	1.10	0	0	0	0	1	1	1	0	0	0	0	0
CKS1	151	14.69	0.94	0.84	0	0	0	0	0	0	1	1	1	2	2	1
CLB1	471	3.73	1.09	0.90	0	0	0	0	0	0	2	0	0	1	1	0
CLB2	491	18523.23	1.09	0.53	0	0	0	0	0	0	5	5	7	4	5	7
CMD1	147	0.65	0.81	1.17	0	1	0	1	0	2	0	1	0	0	0	1
CPR1	163	0.91	1.01	1.02	0	0	0	0	0	1	1	0	0	0	1	0
CSM1	191	0.78	1.25	1.51	0	0	0	1	1	1	0	0	0	0	1	1
DBP3	523	2.81	1.09	1.00	1	1	0	1	0	0	0	0	0	0	0	0
DED1	605	9.28	1.31	0.91	0	1	2	1	1	3	0	0	0	0	0	0
DFM1	341	0.78	0.85	1.02	0	0	0	0	0	0	0	0	1	0	0	0
ECM10	645	0.69	1.39	1.06	3	0	0	0	0	0	2	0	0	0	0	1
EFT2	843	0.83	1.05	1.06	1	0	0	0	0	0	1	0	0	0	0	0
ELM1	640	0.96	0.98	0.99	0	0	0	0	0	0	1	0	0	0	0	0
ENO2	438	15.27	0.99	5.08	0	1	0	0	0	1	3	5	0	0	2	0
ERG24	439	1.22	1.11	1.01	0	0	0	0	0	1	0	0	0	0	0	0
EST1	699	1.20	1.04	0.94	0	0	1	0	0	0	0	0	0	0	0	0
FAS1	2052	0.81	1.01	1.06	0	0	0	0	0	0	0	0	0	0	0	1
FBA1	360	0.80	0.94	0.85	1	0	1	1	0	1	1	0	1	0	1	1
GLC7	312	1.04	1.15	3.50	1	0	0	1	0	3	0	2	4	3	5	5
GPM1	248	1.97	0.99	1.34	0	0	0	0	0	0	0	1	1	1	0	0
HRR25	495	1.34	1.15	1.02	0	0	0	0	0	1	0	0	0	0	0	0
HSL1	1519	0.91	1.01	1.13	0	0	0	0	0	0	0	0	0	1	0	0
HSL7	827	3.04	0.72	0.84	8	6	8	7	8	11	13	13	11	15	11	11
HSP12	110	1.05	0.93	0.98	0	0	0	0	0	0	1	0	0	0	0	0
HXK1	485	0.87	1.13	1.20	0	1	0	0	0	0	0	2	0	0	0	0
KAR2	683	1.64	0.49	0.74	4	5	4	5	3	7	3	2	2	4	3	2
KEL1	1164	1.48	0.42	0.56	27	29	32	28	25	37	36	39	30	31	35	36
KEL2	882	2.46	3.65	0.55	1	5	8	8	7	9	4	11	5	10	12	9
KIC1	1080	1.44	1.02	0.99	1	0	0	0	0	0	0	0	0	0	0	0
KIN1	1064	3.85	3.21	3.35	0	1	0	0	1	3	4	2	0	1	5	2
KIN2	1147	1.13	1.06	7.98	0	0	0	0	0	1	0	0	0	1	5	1
LRS4	348	1.22	1.14	1.01	0	0	0	0	0	1	0	0	0	0	0	0
LSP1	341	10429.61	4.02	0.93	5	6	2	3	0	2	0	0	0	0	0	0
MDN1	4911	1.49	1.11	1.04	0	0	0	1	0	0	0	0	0	0	0	0
MET7	548	1.33	1.14	1.06	0	0	0	1	0	0	0	0	0	0	0	0
MLC1	149	5.29	0.87	0.93	1	1	1	1	0	1	0	0	0	0	0	0
MSN1	382	1.17	1.05	0.94	0	0	0	0	0	1	0	0	0	0	0	0
MTF2	441	2.44	1.44	1.04	0	1	1	1	0	0	0	0	0	0	0	0
MYO2	1575	2.23	1.17	0.92	1	1	0	0	0	0	0	0	0	0	0	0
NCA2	617	0.93	1.07	1.11	0	0	0	0	0	0	0	0	0	0	1	0
NHP2	156	1.05	0.99	1.14	0	0	0	0	0	0	0	0	0	1	0	0
NOP1	328	1.64	0.98	0.96	0	1	0	0	0	1	0	0	0	0	0	0
NOP58	511	1.78	0.61	0.77	5	4	3	3	3	4	2	2	3	3	3	3
NSR1	414	0.96	1.41	1.10	0	1	1	2	3	2	1	0	1	0	0	3
NUD1	851	1.28	1.06	0.92	0	0	0	0	0	1	0	0	0	0	0	0
NUM1	2748	0.94	1.13	1.15	0	0	0	0	0	0	0	0	0	0	1	0
PDC1	564	1.86	1.48	0.89	0	2	2	3	0	2	1	0	0	0	1	0
PEA2	420	0.83	1.38	0.83	0	0	1	1	0	0	1	0	0	1	1	0
PEP8	380	0.80	4.07	1.55	0	0	2	2	3	4	1	1	1	1	4	2
PET309	965	1.33	1.06	0.98	0	0	0	0	0	1	0	0	0	0	0	0
PGK1	417	68.94	1.01	2.28	0	0	0	0	0	0	3	3	0	0	3	0
PHO85	306	1.14	1.00	1.68	0	0	0	0	0	0	0	0	0	0	1	1
PIL1	340	305840.87	62.28	0.72	7	9	2	0	1	2	0	0	0	0	0	0
PMA1	918	1.38	1.13	1.02	0	0	0	1	0	0	0	0	0	0	0	0
PPS1	807	1.33	1.10	1.00	0	0	0	0	0	1	0	0	0	0	0	0
PPZ2	710	1.31	0.98	0.93	0	1	0	0	0	0	0	0	0	0	0	0
PRB1	636	2.66	0.82	0.99	0	0	0	0	0	0	2	0	0	0	1	1
PRP6	900	3.39	1.02	0.84	0	0	0	0	0	0	1	1	0	1	1	0
PSK1	1357	0.91	1.07	1.02	0	1	0	1	0	0	1	0	0	0	0	0
PTP2	750	0.85	0.95	1.15	0	0	0	0	0	0	0	0	0	0	0	1
RFM1	310	1.72	1.07	1.04	1	0	0	1	0	0	0	0	0	0	0	0
RPL10	221	0.96	1.02	1.15	0	0	0	0	0	0	0	0	0	0	0	1
RPL11B	175	9.19	0.98	0.87	0	0	0	0	0	0	2	1	0	1	1	0
RPL13A	199	1.20	0.98	0.84	1	0	0	0	1	0	1	1	1	1	1	0
RPL15A	205	1.22	1.14	1.00	0	0	0	0	0	1	0	0	0	0	0	0
RPL16B	198	3.46	1.15	0.78	0	0	0	0	0	1	1	1	1	1	1	1
RPL17A	184	1.05	0.99	1.02	0	0	0	0	0	0	0	1	0	0	0	0
RPL17B	184	4.87	1.02	0.95	0	0	0	0	0	0	1	0	1	1	2	0
RPL18B	187	7.07	1.09	0.88	0	0	0	0	0	0	1	1	1	1	1	0
RPL19B	190	0.88	1.31	0.90	1	0	0	0	1	1	1	0	1	1	2	0
RPL1B	217	0.94	0.91	1.09	0	0	0	0	0	0	0	0	1	0	0	0
RPL20B	173	3.54	1.07	1.00	0	0	0	0	0	0	0	1	1	1	1	0
RPL21A	161	3.42	1.02	0.98	0	0	0	0	0	0	0	1	0	1	1	1
RPL25	142	1.94	1.09	0.94	0	0	0	0	0	1	0	1	1	1	1	1
RPL26A	127	0.83	1.36	1.01	0	1	0	0	0	1	1	0	1	1	0	1

RPL27B	137	7.67	1.18	0.95	0	0	0	0	0	0	0	2	0	1	1	1
RPL28	149	1.56	1.06	1.00	0	0	0	0	0	0	0	1	0	0	0	1
RPL2B	254	2.20	1.05	2.91	0	0	0	0	0	0	0	0	1	3	1	0
RPL3	388	1.21	1.00	0.96	0	1	0	0	0	0	1	0	1	1	1	0
RPL31A	114	1.14	1.20	0.98	0	0	0	0	0	1	0	0	0	0	0	0
RPL33A	108	1.58	0.96	1.01	0	0	0	0	0	0	1	0	0	1	0	0
RPL35A	121	0.81	1.05	0.95	0	0	0	0	0	1	0	1	0	0	0	0
RPL4A	362	3.17	1.06	1.02	0	1	0	0	0	1	2	2	0	1	3	0
RPL6B	176	9.37	0.91	0.77	0	0	0	0	0	0	1	1	1	1	1	1
RPL7A	245	6.86	1.38	0.93	0	0	0	0	1	1	2	2	2	2	2	0
RPL7B	245	0.92	0.94	1.10	0	0	0	0	0	0	0	0	0	0	0	1
RPL8B	257	0.89	0.96	1.13	0	0	0	0	0	0	0	0	0	0	1	0
RPL9A	192	1.34	0.99	0.99	0	0	0	0	0	0	0	0	0	1	1	0
RPN10	269	1.44	0.98	1.04	0	0	0	0	0	0	0	1	0	0	1	0
RPP0	312	7.07	1.02	0.80	0	0	0	0	0	1	1	2	2	1	2	0
RPP2A	106	5.75	1.09	1.60	0	0	0	0	0	0	0	2	0	0	2	1
RPP2B	110	70.70	1.07	0.61	0	0	0	0	0	0	2	2	1	2	2	1
RPS12	144	0.95	1.01	1.09	0	0	0	0	0	0	0	0	0	0	1	0
RPS13	152	3.24	1.06	0.85	0	0	0	0	0	0	0	1	1	0	1	1
RPS14B	138	1.05	0.65	0.84	2	2	2	2	2	2	1	1	1	2	2	2
RPS15	142	1.14	1.00	1.55	0	0	0	0	0	0	0	0	1	1	0	0
RPS16B	144	1.25	0.99	0.99	0	1	0	0	1	0	0	1	1	2	1	2
RPS18A	146	2.30	1.11	0.90	0	0	0	0	0	1	1	1	0	1	1	0
RPS1A	255	1.07	1.06	1.02	0	0	0	0	0	0	1	0	0	0	0	0
RPS22A	130	1.10	0.96	0.99	0	0	0	0	0	0	0	1	0	0	0	0
RPS25A	108	0.98	0.94	1.15	0	0	0	0	0	0	0	0	1	0	0	0
RPS26B	119	1.04	1.06	1.14	0	0	0	0	0	0	0	0	0	0	0	1
RPS29B	57	1.09	1.06	1.22	0	0	0	0	0	0	0	0	0	1	0	0
RPS6B	237	6.25	1.04	0.78	0	0	0	0	0	0	2	0	0	1	1	1
RPS8A	201	0.94	0.91	1.09	0	0	0	0	0	0	0	0	0	0	1	0
RPS9B	195	1.20	1.02	1.53	0	0	0	0	0	0	0	0	0	0	1	1
RRP15	250	1.22	1.18	1.04	0	0	0	0	0	1	0	0	0	0	0	0
RTS1	758	0.82	1.02	1.00	0	0	0	0	0	1	0	0	0	0	1	0
SEC8	1065	0.88	0.99	1.13	0	0	0	0	0	0	0	0	0	0	1	0
SIK1	505	15.12	0.88	0.66	6	4	3	2	3	6	1	1	1	2	1	2
SLM1	686	0.87	1.02	1.14	0	0	0	0	0	0	0	0	0	0	1	0
SLS1	644	1.00	0.99	1.02	0	0	0	0	0	0	1	0	0	0	0	0
SMC1	1226	0.93	1.00	0.98	0	0	0	0	0	0	1	0	0	0	0	0
SMC4	1419	1.36	1.13	1.02	0	0	0	0	1	0	0	0	0	0	0	0
SOV1	898	1.44	1.05	1.09	0	0	0	0	0	0	0	0	0	1	1	1
SPC110	945	1.80	4.20	0.72	0	0	3	3	4	3	2	3	2	4	3	2
SPC29	254	0.92	1.07	0.98	0	0	1	0	0	0	0	0	0	1	1	0
SPC42	363	0.89	2.15	1.14	0	0	2	2	0	2	0	0	1	0	1	1
SRO9	435	1.36	1.01	1.02	1	0	0	0	0	0	0	0	0	0	0	0
SRP1	542	1.22	1.13	0.98	0	0	1	0	0	0	0	0	0	0	0	0
SRP40	406	37.30	0.78	0.96	1	2	1	3	1	3	0	0	0	0	0	0
SSA1	642	5.19	0.55	0.58	17	15	13	13	16	16	9	10	10	9	13	11
SSA2	639	4.02	0.55	2.78	2	7	3	4	3	4	0	2	2	2	5	4
SSA3	649	1.99	1.09	1.00	1	0	0	0	1	0	0	0	0	0	0	0
SSB2	613	2.49	0.44	0.41	22	24	21	21	23	19	15	18	17	17	19	15
SSC1	654	2.78	0.66	0.79	0	7	5	3	5	6	0	2	3	2	5	0
SSD1	1251	2.41	1.18	1.01	0	0	1	0	1	1	0	0	0	0	0	0
SSE1	694	3.94	0.82	2.08	2	2	2	1	0	2	0	0	0	0	1	2
SSE2	694	1.27	1.11	0.98	0	0	0	0	1	0	0	0	0	0	0	0
SSF1	454	1.30	1.10	1.00	0	0	0	0	0	1	0	0	0	0	0	0
STM1	274	1.00	0.81	0.88	1	0	0	1	0	1	1	1	0	1	1	1
STR3	465	1.28	1.22	1.02	0	0	1	0	0	0	0	0	0	0	0	0
SWE1	819	0.78	0.48	0.56	26	31	29	28	28	29	29	26	24	28	26	25
TDH3	333	2.23	0.92	1.62	1	0	1	2	0	2	4	2	1	0	1	2
TEF2	459	0.78	0.82	1.14	1	1	1	0	0	2	2	0	0	1	0	0
TEL2	689	1.33	1.05	0.95	0	0	0	0	1	0	0	0	0	0	0	0
TMA19	167	3.07	0.93	1.20	0	0	0	0	0	0	2	1	0	0	0	0
TOR1	2471	1.39	1.06	0.94	0	0	0	0	0	1	0	0	0	0	0	0
TRX1	103	1.14	1.01	0.98	0	0	0	0	0	0	0	1	0	0	0	0
TSA1	197	1.60	1.02	1.04	0	0	0	0	0	0	0	2	0	0	0	0
URA3	267	1.53	1.80	1.02	0	0	1	1	0	0	0	0	0	0	0	0
UTP30	275	0.93	1.00	1.17	0	0	0	0	0	0	0	0	1	0	0	0
VMA2	517	1.33	1.00	1.00	1	0	0	0	0	0	0	0	0	0	0	0
VPS29	283	0.89	1.05	0.88	0	0	0	1	1	1	1	1	1	0	0	1
VPS35	945	0.80	1.74	0.67	2	2	3	5	3	8	2	4	3	4	5	4
YBR235W	1121	1.46	0.98	0.96	0	1	0	0	0	0	0	0	0	0	0	0
YGL036W	909	0.92	0.93	0.92	0	0	0	0	0	0	0	1	0	0	0	0
YGL194C-A	81	1.14	1.21	0.95	0	0	0	0	0	1	0	0	0	0	0	0
YLR342W-A	57	1.04	1.11	0.98	0	0	0	1	0	0	0	0	0	0	0	0
YRA2	203	0.79	0.96	1.05	0	0	1	0	0	1	0	0	0	0	0	1
ZEO1	114	1.90	0.96	1.01	0	0	0	0	0	0	1	1	0	0	0	0

\* protein interactions highlighted in green are dependent on the choice of tag