

		.10	.20	.30	.40	.50	.60	.70	.80																														
YCK1	1	.....	YKIGKKI	IGESF	GVLF	FE	GTNMIN	.....	.....	23																										
YCK2	1	.....	YKIGKKI	IGESF	GVLF	FE	GTNMIN	.....	.....	23																										
YCK3	1	.....	YAVGPKI	IGESF	GVIF	FE	GENILHSCQAQTGSKRDSS	.....	I	37																											
HRR25	1	.....	FRIGRKI	IGSGF	GD	YH	GTNLIS	.....	.....	23																										
PRK1	1	.....	HHAKI	IKYLT	SGG	FAQ	VY	TA	ISPPD	26																												
ARK1	1	.....	HQVEI	IKYLT	SGG	FAQ	VY	SALINPPD	.....	26																											
YBR059C	1	.....	VEVVNYL	LAEGG	FAQ	IY	VVKF	LEYLNEFDNTASV	.....	33																											
FUS3	1	.....	FQLKSL	LGE	GAY	GV	CS	ATHKPTG	.....	24																											
HOG1	1	.....	YNDLNP	VC	MGAF	GLV	CS	ATDTLTS	.....	24																											
SLT2	1	.....	FQLIKE	I	GHG	AY	GI	VSARFAEAAE	.....	25																											
YKL161C	1	.....	FHLTG	KIG	R	SG	SHSL	CS	STYTESNE	25																												
CDC28	1	.....	YKRLE	KV	CE	GT	YGV	VYKALDLRPGQ	.....	25																											
PHO85	1	.....	FKQLE	KLG	NGT	YAT	VY	KLNTTG	.....	24																											
KIN28	1	.....	YTKKK	V	GE	GT	YAV	VYLG	CQHSTG	24																												
CTK1	1	.....	YLRIM	QV	GE	GT	Y	GK	VYKAK	19																												
SSN3	1	.....	YEVIG	YIA	AGT	Y	GK	VYKAKRQINS	SGTNSANGSSSLNGTNAKIPQFDSTQPKSSSSMDMQANTNALRRNLLKDE	72																												
MRK1	1	YPTTE	VV	GH	GS	F	GV	VTVT	VIET	23																												
RIM11	1	YPTTE	VV	GH	GS	F	GV	V	FATVIQET	23																												
YOL128C	1	VREGK	RIGH	GS	F	GT	V	Q	SILSSNSI	25																												
FUN31	1	FVSLQ	KM	GE	GAY	GK	V	NLCI	HKK	22																												
YOL045W	1	FTILQ	VM	CE	GAY	GK	V	NLCI	HN	22																												
PAK1	1	YEI	KEL	GH	G	Q	H	GK	V	LARDIL	22																											
YGL179C	1	FEI	LAT	L	G	N	Q	Y	GK	V	LARDLG	22																										
SCH9	1	FEVLR	LL	L	K	G	T	F	G	Q	V	YQVKKKD	22																									
YPK2	1	FDLLK	V	I	G	K	S	F	G	K	V	MQVRKKD	22																									
CBK1	1	EDF	H	T	V	K	V	I	G	K	G	A	F	G	E	V	R	L	V	Q	K	D	24															
YNR047W	1	FEKIR	LL	C	Q	D	V	G	K	V	F	L	V	R	E	K	K	22																		
SRA3	1	FQILR	T	L	G	T	G	S	F	G	R	V	H	L	R	S	R	H	22																	
TPK3	1	SDF	Q	I	L	R	T	L	G	T	G	S	F	G	R	V	H	L	R	S	N	H	24													
PKA3	1	HDF	Q	I	M	R	T	L	G	T	G	S	F	G	R	V	H	L	R	S	V	H	24													
PCK1	1	DNF	V	L	L	K	V	L	G	K	N	F	G	K	V	L	S	K	S	K	N	24														
YBR028C	1	FKPVR	V	L	G	Q	G	A	Y	G	K	V	L	L	V	K	D	V	N	22																
DBF2	1	FEMIT	Q	V	C	Q	G	G	Y	G	Q	V	L	A	R	K	K	D	22																	
DBF20	1	FQILT	Q	V	C	Q	G	G	Y	G	Q	V	L	A	R	K	K	D	22																	
PKH1	1	KDF	K	F	G	E	Q	L	G	D	S	Y	S	S	V	L	A	T	A	R	D	24														
PKH2	1	KDF	K	F	G	S	V	I	C	D	G	A	Y	S	T	V	M	L	A	T	S	I	D	24												
YDR466W	1	HDF	I	F	K	E	E	L	G	H	G	S	Y	S	T	V	F	K	A	L	D	K	K	24												
IPL1	1	FEL	G	K	K	L	G	K	G	F	G	K	V	Y	C	V	R	H	R	S	22															
YCL024W	1	WKL	G	E	T	L	C	F	G	S	T	G	K	V	Q	L	A	Q	H	E	R	22														
GIN4	1	WKL	G	E	T	L	G	L	G	S	T	G	K	V	Q	L	A	R	N	G	S	22														
HSL1	1	GPW	K	L	G	K	T	L	G	K	G	S	S	R	V	L	A	K	N	M	E	24														
KIN4	1	YIIG	S	T	L	C	E	G	E	F	G	K	V	K	L	G	W	T	K	21																
YPL141C	1	GPY	I	L	G	S	T	L	C	E	G	E	F	G	K	V	K	L	G	W	P	K	N	24												
KIN1	1	EFV	E	T	V	G	A	G	S	M	G	K	V	L	A	K	H	R	20																	
KIN2	1	WEF	L	E	T	V	C	A	G	S	M	G	K	V	K	L	V	K	H	R	21															
APG1	1	YTA	E	K	E	I	G	K	S	F	A	T	V	Y	R	G	H	L	T	S	22															
CDC5	1	YHR	G	H	F	L	G	E	G	G	F	A	R	C	F	Q	IKD	20																	
CMK1	1	YVFG	K	T	L	C	A	G	T	F	G	V	V	R	Q	A	K	N	T	E	22															
CMK2	1	YIF	G	R	T	L	C	A	G	S	F	G	V	V	R	Q	A	R	K	L	S	22														
MEK1	1	EIT	N	R	I	V	G	N	G	T	F	G	H	V	L	T	H	N	S	K	22															
DUN1	1	YLL	G	K	E	L	C	A	G	H	Y	A	L	V	K	E	A	K	N	K	K	22														
RCK1	1	YKLL	N	K	I	G	E	G	A	F	S	R	V	F	K	A	V	G	I	N	22															
RCK2	1	YKL	I	N	K	I	G	E	G	A	F	S	K	V	F	R	A	I	P	A	K	N	S	S	N	E	F	L	29							
RAD53	1	SIID	E	V	V	C	Q	A	F	A	T	V	K	K	A	I	E	R	T	22																
KIN3	1	YQV	L	E	E	I	G	R	G	S	F	G	S	V	R	K	V	I	H	I	P	T	K	24												
CDC15	1	YHL	K	Q	V	I	G	R	G	S	Y	G	V	Y	K	A	I	N	K	H	T	D	24													
STE7	1	LVQL	G	K	I	C	A	G	N	S	G	T	V	K	A	L	H	V	P	D	S	24														
PBS2	1	LEFL	D	E	L	G	H	G	N	Y	G	N	V	S	K	V	L	H	K	P	T	N	24													
MKK1	1	IET	L	G	I	L	C	E	G	A	G	S	V	S	K	C	K	L	N	G	S	24														
MKK2	1	ITT	L	G	I	L	C	E	G	A	G	S	V	A	K	C	R	L	N	G	K	24														
SPS1	1	YSIQ	S	C	I	G	R	N	F	G	D	V	Y	K	A	V	D	R	V	T	Q	24														
NRK1	1	FKR	T	E	V	I	G	R	G	K	F	G	V	Y	K	G	Y	N	V	K	T	G	24													
CLA4	1	FKV	I	E	K	A	C	Q	G	A	S	G	S	V	Y	L	A	E	R	T	H	I	P	T	E	S	N	M	I	E	L	I	N	N	D	36
SKM1	1	FQL	V	E	K	A	G	Q	G	A	S	G	A	V	L	S	K	R	I	K	L	P	Q	E	N	D	P	R	F	L	K	S	34			
STE20	1	YAN	L	V	K	I	G	Q	G	A	S	G	Y	T	A	E	I	G	T	N	VS	26													
SSK22	1	WQK	R	S	F	I	C	G	G	T	F	G	Q	V	Y	S	A	I	N	L	E	N	G	24												
SSK2	1	WQK	R	N	F	I	G	G	T	F	G	R	V	Y	S	A	V	D	L	D	N	G	24													
BCK1	1	WMK	G	E	M	I	G	K	S	F	G	A	V	L	C	L	N	V	T	T	G	24														
STE11	1	WLK	G	A	C	I	C	S	G	S	F	G	S	V	Y	L	G	M	N	A	H	T	G	24												
HAL5	1	GKS	I	G	V	V	G	A	G	A	Y	G	V	V	I	C	A	R	C	T	A	K	D	V	L	P	Y	S	T	S	34					
YKL168C	1	GHP	V	G	L	V	G	A	G	A	Y	G	E	V	K	L	C	A	R	L	R	N	E	K	D	S	P	P	F	E	T	Y	H	34		
NPR1	1	IKT	G	A	D	L	C	A	G	A	G	S	V	K	L	A	Q	R	I	S	D	N	K	25												
YDL214C	1	KYR	D	L	D	V	V	L	G	E	G	S	G	K	V	L	V	Q	R	V	L	D	N	K	27											
YDL025C	1	KYG	I	P	G	R	K	L	G	E	G	A	S	G	S	V	S	V	E	R	TDGK	26													
YOR267C	1	KYG	K	L	G	K	L	L	C	S	G	A	G	S	V	K	V	L	V	R	P	T	D	G	A	27										
PTK2	1	DTD	N	K	P	I	G	S	G	S	S	E	V	R	K	V	K	S	S	Y	R	Q	K	D	26											
PTK1	1	DDEN	K	T	I	G	W	G	G	S	C	E	V	R	K	I	R	S	K	Y	R	K	K	D	26											
SKS1	1	FRIT	A	Q	I	C	S	G	A	Y	G	L	V	F	H	V	D	I	L	T	S	R	E	Y	A	V	K	T	V	F	K	34				
YDR247W	1	NNY	L	I	T	S	Q	I	G	E	G	A	Y	G	L	V	R	A	L	D	I	R	T	D	R	Q	Y	A	I	K	A	V	V	Q	36	
ELM1	1	YTL	G	V	S	A	G	S	G	Q	F	G	Y	V	R	K	A	Y	S	S	T	L	G	24												
CHK1	1	KDV	V	L	G	D	T	V	C	Q	A	F	A	C	V	K	N	A	H	L	Q	M	D	P	26											
YAK1	1	YLV	D	I	L	G	Q	T	F	G	Q	V	K	C	Q	N	L	L	T	23																
SKY1	1	YIL	V	R	K	L	G	W	H	F	S	T	W	L	A	K	D	M	V	N	23															
KNS1	1	FVV	K	D	L	L	C	Q	T	F	G	K	V	L	K	C	I	D	N	K	Y	E	P	25												
YMR291W	1	YVT	N	H	N	S	L	G	D	N	F	S	V	K	E	C	M	N	I	H	T	24														
MPS1	1	YEK	I	E	L	L	G	R	G	S	S	R	V	Y	K	V	K	G	S	G	22															
KSP1	1	YQK	I	E	D	I	S	E	G	S	Y	G	V	S	L	A	K	D	V	R	E	23														
IME2	1	YQL	I	E	K	L	G	A	G	S	F	G	C	V	T	L	A	Q	F	P	L	S	N	26												
YKL171W	1	YRL	G	K	I	I	G	F	G	A	W	G	I	T	R	E	C	F	D	I	E	T	G	24												
YGR052W	1	YTK	L	R	S	I	Q	S	G	T	F	S	T	V	Y	K	A	W	S	T	T	H	N	24												

CKA1	1	.....YEIENKVGRGKYSEVFQGVK LDS.....	23
CDC7	1	.....YKLIDKIGEGTFSSVYKAKDITGKITKKFASHFWN.....	35
YKL116C	1	.....WKKVRPIGSGNFSTVLLYELMDQSN.....	25
IRE1	1	.....VVSEKILCYGSSGTVVFQGSFQ.....	22
SWE1	1	.....FTNVHSIGKGQFSTVYQVTFQATN.....	24
IKS1	1	.....FKILSLLGNARGSVYKVVHTIGN.....	24
VPS15	1	.....VHYVSQLNSSRFLKTKALDPN.....	22
CAK1	1	.....MKLDSIDITHCQLVKSTRTARIYR.....	24
BUB1	1	.....YCIRGELGEGGYATVYLAESSQ.....	22
YGR262C	1	.....MTQEFIDKVSSYLTDPVDIAPISQG.....	25
SLN1	1	.....QYGGTGLGLSICRQLAN.....	17
CTK2	1	.....MPSTFESQLFFSRPFLSKRQIQRAQKNTISDYRN.....	34
CTK3	1	.....MDSLEARLQFIQVLKNLQKTLHKTR.....	25
YGL059W	1	MSKYQINCIRYRHF LRTSNISQIPDFTKYCIGPVNEELAPYIMETMKAYPSNSEYINPQHYYHN.....RTVLVEN.	71
YIL042C	1	.....MWKIMRSWKCGGMRWAHRQRPHELLSLSQSFQHYKIRSN.....	40
MEC1	1	.....EDVRQDNQYMQFATTMDFLLSKDIASR.....	27
DBF4	1	.....YMKVWSYEKAARFLKNLDVLDLHLS.....	25
MRK1	1	.....YPTTEVVGHGSFGVVTTVIIET.....	23
RIM11	1	.....YPTTEVVGHGSFGVVFATVIQET.....	23
YOL128C	1	.....VREGKRIGHGSFGTVTQSSILSSNSI.....	25
FUN31	1	.....FVSLQKMGEAYGKVNLCIHKK.....	22
YOL045W	1	.....FTILQVMCEGAYGKVNLCIHNH.....	22
PAK1	1	.....YEIIKELGHGQHGKVKLARDIL.....	22
YGL179C	1	.....FEILATLGNQYGVKVLARDLG.....	22
SCH9	1	.....FEVLRLLCGKTFGQVYQVKKKD.....	22
YPK2	1	.....FDLLKVIKGGSFGKVMQVRKKD.....	22
CBK1	1	.....EDFHTVKVIGKGAFFGEVRLVQKKD.....	24
YNR047W	1	.....FEKIRLLCGQDVGKVLVREKK.....	22
SRA3	1	.....FQILRTLGTGSFGRVHLIRSRH.....	22
TPK3	1	.....SDFQILRTLGTGSFGRVHLIRSNH.....	24
PKA3	1	.....HDFQIMRTLGTGSFGRVHLVRSVH.....	24
PCK1	1	.....DNFVLLKVLGKGNFGKVLKSKSN.....	24
YBR028C	1	.....FKPVRVLGGGAYGKVLVVDVN.....	22
DBF2	1	.....FEMITQVCGGGYGVYLAARKD.....	22
DBF20	1	.....FQILTQVCGGGYGVYLAARKD.....	22
PKH1	1	.....KDFKFGQLGDSYSSVVLATARD.....	24
PKH2	1	.....KDFKFGSVICDGAYSTVMLATSID.....	24
YDR466W	1	.....HDFIKPEELGHGSYSTVFKALDKK.....	24
IPL1	1	.....FELGKKLKGKFGKVCVRHRS.....	22
YCL024W	1	.....WKLGETLCFGSTGKVQLAQHER.....	22
GIN4	1	.....WKLGETLGLGSTGKVQLARNGS.....	22
HSL1	1	.....GPWKLGKTLGKGSSGRVRLAKNME.....	24
KIN4	1	.....YIIGSTLCEGEFGKVKLGWTK.....	21
YPL141C	1	.....GPYILGSTLGEFEFGKVKLGWPKN.....	24
KIN1	1	.....EFVETVVGAGSMGKVKLAKHR.....	20
KIN2	1	.....WEFLETVCAGSMGKVKLVKHR.....	21
APG1	1	.....YTAKEIKGGSFATVYRGHLTS.....	22
CDC5	1	.....YHRGHFLGEGGFARCFQ..IKD.....	20
CMK1	1	.....YVFGKTLGAGTFGVVRQAKNTE.....	22
CMK2	1	.....YIFGRTLGAAGSFGVVRQARKLS.....	22
MEK1	1	.....EITNRIVGNGTFGHVLITHNSK.....	22
DUN1	1	.....YLLGKELCAGHYALVKEAKNKK.....	22
RCK1	1	.....YKLLNKIGEGAFSRVFKAVGIN.....	22
RCK2	1	.....YKLINKIGEGAFSKVFRAIPAKNSSNEFL.....	29
RAD53	1	.....SIIDEVVCQGAFAFATVKKAIERT.....	22
KIN3	1	.....YQVLEEIGRGSFGSVRKVIHIPTK.....	24
CDC15	1	.....YHLKQVIGRGSYGVYKAINKHTD.....	24
STE7	1	.....LVQLGKICAGNSGTVVKALHVPDS.....	24
PBS2	1	.....LEFLDELGHGNYGNVSKVLHKPTN.....	24
MKK1	1	.....IETLGILGEGAGGSVSKCKLKNGS.....	24
MKK2	1	.....ITTGLILGEGAGGSVAKCRLKNGK.....	24
SPS1	1	.....YSIQSCIGRGNFGDVYKAVDRVTO.....	24
NRK1	1	.....FKRTEVIGRGKFGVYKGYNVKGTG.....	24
CLA4	1	.....FKVIEKACQAGSGSVYLAERTHIPTESNMIELINND.....	36
SKM1	1	.....FQIVEKAGQAGSAYVLSKRIKLQPENDPRLKS.....	34
STE20	1	.....YANLVKIGQGASGGVYTAIEIGTN.....VS.....	26
SSK22	1	.....WQKRSFIGGTFGQVYSAINLENG.....	24
SSK2	1	.....WQKRNFIGGTFGRVYSADVLDNG.....	24
BCK1	1	.....WMKGEMIGKGSFGAVYLCNLVTTG.....	24
STE11	1	.....WLKGACICSGSFGSVYLGMAHTG.....	24
HAL5	1	.....GKSIGVVGAGAYGVVKICARCKTAKDVLPTSTYS.....	34
YKL168C	1	.....GHPVGLVGAGAYGEVKLCARLRNEKDSPPFETYH.....	34
NPR1	1	.....IKTGADLCAGAGGSVKLAQRISDNK.....	25
YDL214C	1	.....KYRDLDVVLGEGSGKVLVQVRVLDNK.....	27
YDL025C	1	.....KYGIPGRKLGEGASGSVSVVER.TDGG.....	26
YOR267C	1	.....KYGKLGKLLGSGAGGSVKVLVRPTDGA.....	27
PTK2	1	.....DTDNKPISGGSSEVRKVSSYRQKD.....	26
PTK1	1	.....DDENKTIWGGSCEVRKIRSKYRKKD.....	26
SKS1	1	.....FRITAQICSGAYGLVFHVVDILTSREYAVKTVFK.....	34
YDR247W	1	.....NNYLLITSQIGEGAYGLVYRALDIRTDROYAIAKVQ.....	36
ELM1	1	.....YTLGVSAGSGQFGYVRKAYSSTLG.....	24
CHK1	1	.....KDVVLGDTVCGGAFACVKNALQMDP.....	26
YAK1	1	.....YLVLDILGQGTFGQVVKCQNLTT.....	23
SKY1	1	.....YILVRKLGWGHFSTVWLAKDMVN.....	23
KNS1	1	.....FVVKDLLCGQTFGKVLKCIDNKYEP.....	25
YMR291W	1	.....YVTNHNSLGDGNFSVKECMNIHT.....	24
MPS1	1	.....YEKIELLGRGGSSRVYKVGSG.....	22
KSP1	1	.....YQKIEDISEGSYGYVSLAKDVRE.....	23
IME2	1	.....YQLIEKLGAAGSFGCVTLAKAQFPPLSN.....	26
YKL171W	1	.....HRLGKIIGFGAWGITRECFDIETG.....	24
YGR052W	1	.....YTKLRSIQSGTFSTVYKAWSTTHN.....	24

			. . . . .90100110120130140150160	23
YCK1	23		. . . . .GVPVATKKFEPRKTE	37
YCK2	23		. . . . .GLPVATKKFEPRKTE	37
YCK3	37		. . . . .IMANEPVATKKFEPRHSD	54
HRR25	23		. . . . .GEEVATKKLESIRSR	37
PRK1	26		. . . . .PYSNANIACTKRVIVPHKQG	46
ARK1	26		. . . . .PHSNSSVACLRVIVPDKPS	46
YBR059C	33		. . . . .PLKIGDVACLRVILVQDENG	53
FUS3	24		. . . . .EIVATKKIEPFDKPLF	40
HOG1	24		. . . . .QPVATKKIMKPFSTAVL	41
SLT2	25		. . . . .DTTVATKKVTNVFSKTLL	43
YKL161C	25		. . . . .ETHVATKKIPNAFGNKLS	43
CDC28	25		. . . . .GQRVVALKKIRLESEDEGV	44
PHO85	24		. . . . .VYVALKEVKLDSE . EGT	40
KIN28	24		. . . . .RKIATKEIKTSEFKDGL	41
CTK1	19		. . . . .NTNTEKLVAKKLRLQGEREGF	41
SSN3	73		GVTGPRIRTTREDVSPHYNSQKQTLTKKPLTVFYAIKKFKTEKDGVEQLHYTGI	126
MRK1	23		. . . . .NQKVATKKVLQD	35
RIM11	23		. . . . .NEKVATKKVLQD	35
YOL128C	25		. . . . .EWLGPYATKRVVKS	39
FUN31	22		. . . . .NRYIVVTKMIFKERILVDTWVRDRK	47
YOL045W	22		. . . . .EHYIVVTKMIFKERILVDTWVRDRK	47
PAK1	22		. . . . .SKQLVATKIVDRHEKKQRKFFTFIKSSKISE	53
YGL179C	22		. . . . .TGALVATKILNRFEKRSGYSLQLKVE	48
SCH9	22		. . . . .T.QRIYAMKVLISKKVIVKKNE	42
YPK2	22		. . . . .T.QKIYALKALRKAYIVSKCE	42
CBK1	24		. . . . .T.GKIYAMKTLKSEMYKKDQ	44
YNR047W	22		. . . . .T.NRVYALKVLISKDEMIKRNK	42
SRA3	22		. . . . .N.GRYYAMKVLKKEIVVRLKQ	42
TPK3	24		. . . . .N.GRFYATKTLKKHTIVKLKQ	44
PKA3	24		. . . . .N.GRYYATKVLKKQQVVKMKQ	44
PCK1	24		. . . . .T.DRLCATKVLKKDNIIQNHD	44
YBR028C	22		. . . . .T.SKLYAMKQLRKAELLISQT	42
DBF2	22		. . . . .T.KEVCALKILNKKLLFKLNE	42
DBF20	22		. . . . .S.DEICALKILNKKLLFKLNE	42
PKH1	24		. . . . .S.GKKYAVKVLISKEYLLRQKK	44
PKH2	24		. . . . .T.KKRYAAKVLNKEYLLRQKK	44
YDR466W	24		. . . . .SPNKIYATKVCSEKHIIKEAK	45
IPL1	22		. . . . .T.GYICATKVMKEEELIKYNL	42
YCL024W	22		. . . . .T.GHRTAVKVISKSIFNNNGNHSNDDSVL	50
GIN4	22		. . . . .TGQEAAVKVISKAVFNTGNVSGTSIVGSTPDAL	56
HSL1	24		. . . . .TGQLAATKIVPKKKAFFVHCSNNGTVPNSYSSSMVTSNVSSPSIASREHSNHSQTN	79
KIN4	21		. . . . .ASSSNEVPKQVAIKLIRR . DTIKKDADK	48
YPL141C	24		. . . . .FSNSNSSTDFPPKQVAIKLIRR . DSISNDYRK	55
KIN1	20		. . . . .YTNEVCATKIVNRATKAFLHKEQMLPPPKNEQDVLERQKKLEKEISAR	67
KIN2	21		. . . . .QTKEICVTKIVNRASKAYLHKQHSLPSPKNESEILERQKRLEKEIAR	68
APG1	22		. . . . .DKSQHVATKEVSRAKLKNKKL	43
CDC5	20		. . . . .DSGEIFAATKVAKASIKSEKT	41
CMK1	22		. . . . .TGEDVAVKILIKKALKGNKVQL	44
CMK2	22		. . . . .TNEDVATKILLKKALQGNVQL	44
MEK1	22		. . . . .ERDEDEVCHPENYAVKIIKLP	44
DUN1	22		. . . . .TGQQVAVKIFHAQQNDQKKN	43
RCK1	22		. . . . .TDDQAPVATKATIKKGISSDAILKGNDRIQSS	55
RCK2	29		. . . . .TKNYKAVATKVIKKADLSSINGDHRKKDKGKDSSTKTSS	67
RAD53	22		. . . . .TG.KTFVATKIISSKRKVIGN	40
KIN3	24		. . . . .KLLVRKDIKYGHMNSKE	41
CDC15	24		. . . . .QVVATKEVVYENDEE	39
STE7	24		. . . . .KIVAKKTIPVEQNNSTI	41
PBS2	24		. . . . .VIMATKEVRLELDEAKF	41
MKK1	24		. . . . .KIFATKVVINTLNTDPEY	41
MKK2	24		. . . . .KVFAKKTINTMTDPEY	41
SPS1	24		. . . . .EIVATKVVNLE.HSDED	40
NRK1	24		. . . . .RVVATKVLNLD.SDSDE	40
CLA4	36		. . . . .IDEPHVGDKVATKQMVLS.KQPR	58
SKM1	34		. . . . .HCHRVVGERVATKQIRLS.EQPK	56
STE20	26		. . . . .VATKQMNLE.KQPK	39
SSK22	24		. . . . .EILAVKEIKIHDTTTMKKI	43
SSK2	24		. . . . .EILAVKEINIQDSKSMQKI	43
BCK1	24		. . . . .EMMAVKQVEVPKYSSQNEAILST	47
STE11	24		. . . . .ELMAVKQVEIKNNNIGVPTDNNKQANSDENNEQEEQKEKIEDVGAVSHPKTNQNIHRKM	83
HAL5	34		. . . . .NGKKLFFAVKELKPKPGDQIDKF	57
YKL168C	34		. . . . .DSKYIYYAVKELKPKPDSDLEKF	57
NPR1	25		. . . . .IFAVKEFRTKFENESKRDY	44
YDL214C	27		. . . . .VPALKEYSKKKRESERKY	46
YDL025C	26		. . . . .LFAKCMFRKPHLNNEGT.NQSQLANY	51
YOR267C	27		. . . . .TFAVKEFRPRKPN.ESVKEY	46
PTK2	26		. . . . .VYALKKLNMIYHESPEKF	44
PTK1	26		. . . . .VFAKKKLNMIYNETPEKF	44
SKS1	34		. . . . .SSS . MDEFYNKGNLNNNSQVA.RTTLQTQ	62
YDR247W	36		. . . . .SYGVSKADMGNDKIHK.NSVKLQKK	61
ELM1	24		. . . . .KVAVVKIIPKKPWNAAQQYSVNQVMRQIQLWKSXGKITTNMNSGNEAMRLMN	74
CHK1	26		. . . . .SIILAVKFHIVPTCKKMGLS	46
YAK1	23		. . . . .KEILAVKVKSRTEY	38
SKY1	23		. . . . .NTHVAMKIVRGDKVY	38
KNS1	25		. . . . .NYVAVKVIRAVDRY	39
YMR291W	24		. . . . .KDLVAMKLIKQTVKNK	41
MPS1	22		. . . . .NRVYATKRVSFDAFDDSS	40
KSP1	23		. . . . .KRLVAVKYIFLKLEDDGQYDGPQDDENDCDSSDCDDDEDTKVDTDRHENENGNASSNNGSS	83
IME2	26		. . . . .ILGKQDITRGTLMDQPKNGHQNYITKTQGVVA	58
YKL171W	24		. . . . .VGRVIKIVKFKGHQNI	40
YGR052W	24		. . . . .RYVALKITPKYKTS	38

CKA1	23	..KVKIVLKM	LPVKKKKIKR	..EIKILTDLSNEKVPPTTLPFQKD	65
CDC7	35	..YGSNYVALKKI	YVTS.S	..	51
YKL116C	25	..PKLKQVAVKRL	KYPEELSN	..VEQINTSLRYKETLSRL	61
IRE1	22	..GRPVAVKRL	MLID	..F	35
SWE1	24	..KKYATKAIKPN	KYN	..S	39
IKS1	24	..TELGVFAKKI	PIG.N	..DMEW	43
VPS15	22	..GEIVLKVF	IKPKDQ	..YS	38
CAK1	24	..SDTYALCKL	ALDFDIP	..	40
BUB1	22	..GHLRALCK	VEKPAS	..VW	37
YGR262C	25	..AEAIVFTTT	THPYLPR	..	41
SLN1	17	..MMHGTMK	LES	..	27
CTK2	34	..YNQKKLAVFK	FLSDLCVQKFPR	..KTLETAVYFYQRYHL	72
CTK3	25	..DSITSSST	TTTPSS	..	39
YGL059W	71	..YLKRSNPVSL	TQLAQYYDDSTKLTR	..TKIINSGKFKVEEL	111
YIL042C	40	..IELLIQDYAS	KPIAPLNYEYFLQYR	..PPLTKKKEEYMLTIKTINLL	84
MEC1	27	..KRSLGINI	YS	..	37
DBF4	25	..KTKSASLAP	TLNLLHNEKLYG	..PT	50
MRK1	23	..NQKVATKK		..VLQD	35
RIM11	23	..NEKVATKK		..VLQD	35
YOL128C	25	..EWLGPYATK	R	..VVK	39
FUN31	22	..NRYIVVTKM	IFKERILV	..DTWVRDRK	47
YOL045W	22	..EHYIVVTKM	IFKERILV	..DTWVRDRK	47
PAK1	22	..SKQLVATK	IVDRHEKKQ	..RKFFTFIKSSKISE	53
YGL179C	22	..TGALVATK	ILNRFEKRS	..GYSLQLK...VE	48
SCH9	22	..T.QRIYAMK	VLSK	..KVIVKKNE	42
YPK2	22	..T.QKIYATK	ALRK	..AYIVSKCE	42
CBK1	24	..T.GKIYAMK	TLLK	..SEMYKKDQ	44
YNR047W	22	..T.NRVYATK	VLSK	..DEMIKRNK	42
SRA3	22	..N.GRYYAMK	VLSK	..EIVVRLKQ	42
TPK3	24	..N.GRFYATK	TLLK	..HTIVKLKQ	44
PKA3	24	..N.GRYYATK	VLSK	..QQVVKMKQ	44
PCK1	24	..T.DRLCATK	VLSK	..DNIIQNHD	44
YBR028C	22	..T.SKLYAMK	QLRK	..AELLISQT	42
DBF2	22	..T.KEVCATK	ILNK	..KLLFKLNE	42
DBF20	22	..S.DEICATK	ILNK	..KLLFKLNE	42
PKH1	24	..S.GKKYAVK	VLSK	..EYLIRQKK	44
PKH2	24	..T.KKRYAAK	VLSK	..EYLIRQKK	44
YDR466W	24	..SPNKIYATK	VCSK	..KHIIKEAK	45
IPL1	22	..T.GYICATK	VMEK	..EEIIKYNL	42
YCL024W	22	..T.GHRTAVK	VISK	..HSNDDSVL	50
GIN4	22	..TGQEAAYK	VISK	..AVFNTGNVSGTSIV...GSTPDAL	56
HSL1	24	..TGQLAATK	IVPKKKA	FAVHCSNNGTVPNSYSSSMVTSNVSSPSIASREHSNHSQTN	79
KIN4	21	..ASSSNEVPK		..QVAIKLIR.D...TIKKDADK	48
YPL141C	24	..FSNSNSTF	DFPK	..QVAIKLIR.D...SISNDYRK	55
KIN1	20	..YTNEVCV	KIVNR	..ATKAFLHKEQMLPPPKNQDVLERQKKLEKEISAR	67
KIN2	21	..QTKEICV	KIVNR	..ASKAYLHKQHSLPSPKNESEILERQKRLEKEIAR	68
APG1	22	..DKSQHVATK	EVSRALKNKK	..L	43
CDC5	20	..DSGEIFA	AKTVAKASIKSEK	..T	41
CMK1	22	..TGEDVAVK	ILIKKALKGNKVQL	..	44
CMK2	22	..TNEDVATK	ILKKALQGNVQL	..	44
MEK1	22	..ERDEDEV	CYHPENYAVKIIKLP	..	44
DUN1	22	..TGQQVAVK	IFHAQQNDQKKN	..	43
RCK1	22	..TDDQAPVATK	AIKKGISSD	..AILKGNDRIQGSS	55
RCK2	29	..TKNYKAVATK	VIKKADLSSINGDHR	..KKDKGKDSKTSS	67
RAD53	22	..TG.KTFVATK	ILSKRKVIGN	..	40
KIN3	24	..KLLVRK	DIKYGHMNSKE	..	41
CDC15	24	..QVVAKE	VVY..ENDEE	..	39
STE7	24	..KIVAKKT	IPVEQNNSTI	..	41
PBS2	24	..VIMATKE	VRLELDEAKF	..	41
MKK1	24	..KIFATK	VINTLNTDPEY	..	41
MKK2	24	..KVFATK	TINTMTDPEY	..	41
SPS1	24	..EIVATK	VVNLE.HSDED	..	40
NRK1	24	..RVYATK	VNLND.SDSDE	..	40
CLA4	36	..IDEPHVGD	KVATKQMVLS.KQPR	..	58
SKM1	34	..HCHRVVGER	VATKQIRLS.EQPK	..	56
STE20	26	..VATK	QMNLE.KQPK	..	39
SSK22	24	..EILAVKE	IKIHDTT	..MKKI	43
SSK2	24	..EILAVKE	INIQDSKS	..MQKI	43
BCK1	24	..EMMAVK	QVEVPKYSS	..QNEAILST	47
STE11	24	..ELMAVK	QVEIKNNIGVPTDNNKQANSDENNEQEEQKEKIEDVGAVSHPKTNQNIHRKM	83	
HAL5	34	..NGKKLFFAV	KELPKPGD	..QIDKF	57
YKL168C	34	..DSKYIYYAV	KELPKPDS	..DLEKF	57
NPR1	25	..IFAVKE	FRTKFENES	..KRDY	44
YDL214C	27	..VFAKKE	YRSKKKRES	..ERKY	46
YDL025C	26	..LFAK	KMFRKPHLNNEG	..T.NQSQLANY	51
YOR267C	27	..TFAVKE	FRPRKPN.E	..S..VKEY	46
PTK2	26	..VYALKK	LNMIYHE	..SPEKF	44
PTK1	26	..VFAK	KKLNMIYNE	..TPEKF	44
SKS1	34	..SSS..MDE	FYNKGNLNNNSQV	..A.RTTLQTQ	62
YDR247W	36	..S...YGV	SKEADMGNDKIH	..K.NSVKLQKK	61
ELM1	24	..KVVAVK	ILPKKPWNAQQYSVN	..QVMRQIQWLWKS	74
CHK1	26	..SIILAVK	FIHVPTCKKMG	..LS	46
YAK1	23	..KEILAVK	VVKSR	..TEY	38
SKY1	23	..NTHVAMK	IVRGD...K	..VY	38
KNS1	25	..NYVAVK	VIRAVDR	..Y	39
YMR291W	24	..KDLVAMK	LIKQTVKN	..K	41
MPS1	22	..NRVYATK	RVSFDAFDDSS	..	40
KSP1	23	..KRLVAVK	YLFKLEDGQYDGPQDDENDCDSSDCDDDEDTKVDTDRHENENGNASSNNGSS	83	
IME2	26	..ILGKQD	IRGTLMDQPKN	..GHQNYITKTQGVVA	58
YKL171W	24	..VGRV	IKIVKFKGHQN	..I	40
YGR052W	24	..RYVALK	ITPKYKTS	..	38

		170	180	190	200	210	220	230	240	65
YCK1	38	APQLRD	EYTKYKILNG			TPNIPYAYYF	GQEGL		HNILV	73
YCK2	38	APQLKD	EYRTYKILAG			TPGIPQEYYF	GQEGL		HNILV	73
YCK3	55	APQLRDE	FRAYRI	NG		CVGIPHAYYF	GQEGM		HNILV	90
HRR25	38	HPQLDY	ESRYRYLSG			GVGIPFIRWF	GREGE		YNAMV	73
PRK1	47	LNTLRA	EVDAMKLLRN			NKHVVSYIDS	HAARSV	NG	IAYEVFVL	88
ARK1	47	LNTLRA	EVDAMRLKLN			NRYVVSYSIDS	HAAKAM	LHN	GSYEVFVL	89
YBR059C	54	LNEMRN	EVVVMKKLKG			APNIVQYFDS	NASRRR	DGV	QGFEVLLL	96
FUS3	41	ALRTLRL	EIKLLKHFK			HENITITIFNI	QRPDSF	EN	FNEVYII	80
HOG1	42	AKRTYR	ELKLLKHLR			HENLICLQDI	FLSP		LEDIYFV	77
SLT2	44	CKRSLR	ELKLLRHFRG			HNKITCLYDM	DIVFYP		DGSINGLYLY	85
YKL161C	44	CKRSLR	ELKLLRHFRG			HPNIVWLFDI	DIVFYP		NGALNGVYLY	85
CDC28	45	PSTAIR	EISLLKELK			DDNIVRLYDI	VHSDA		HKLYLV	80
PHO85	41	PSTAIR	EISLMKKELK			HENIVRLYDV	IHTEN		KLTLY	75
KIN28	42	DMSAIR	EVKYLQEMQ			HPNVIELIDI	FMAYD		NLNLV	76
CTK1	42	PITSIR	EIKLLQSF			HPNVSTIKEI	MVESQ		KTIVYMI	77
SSN3	127	SQSACR	EMALCRELH			NKHLTTLVEI	FLER		KCVHVMV	161
MRK1	36	RRYKNR	ELETMMKMLC			HPNTVGLQYY	FYE		KDEEDEVYLNVL	75
RIM11	36	KRFKNR	ELETMMKMLC			HINTIDLKYYF	FYE		RDSQDEIYLNLI	75
YOL128C	40	PKVQSL	ELETLQNIR			HPNLVTLFFF	FESHCT		TKDGGHLYQKNFV	83
FUN31	48	LGTIPS	EIQIMATLNKK			PHENTLRLD	FEDDD		YVYI	84
YOL045W	48	LGTIPS	EIQIMATLNKN			SQENILKLLDF	FEDDD		YVYI	84
PAK1	54	NDKIKR	EIAIMKKCHHK			HVVQLIEVLDD	LKSRK		IYLV	90
YGL179C	49	NPRVNO	EIEVMKRCHHE			NVVELYEILND	PESTK		VYLV	85
SCH9	43	IAHTIG	ERNILVTTASK			SSPFIIVGLKFS	FQTPT		DLYLV	80
YPK2	43	VHTTLA	ERTVLRVD			CPFIVPLKFS	FQSP		KLYLV	77
CBK1	45	LAHVKA	ERDVLAGSD			SPWVVSLYYS	FQDAQ		YLYLI	79
YNR047W	43	IKRVLT	EQEILATSN			HPFIIVTLYHS	FQSED		YLYLC	77
SRA3	43	VEHTND	ERLMLSVT			HPFIIRMWGT	FQDAQ		QIFMI	77
TPK3	45	VEHTND	ERRMLSVS			HPFIIRMWGT	FQDSQ		QVFMV	79
PKA3	45	VEHTND	ERRMLKLV			HPFIIRMWGT	FQDAR		NIFMV	79
PCK1	45	IESARA	EKKVFLLATKT			KHPFLTNWLYCS	FQTEN		RIYFA	82
YBR028C	43	ATDSKR	EDEDKNDGNNDNDNDGLSKRLERTFAERSILSEI	HPNIVKLFYS		FHDNS			KLYLL	103
DBF2	43	TKHVLT	ERDILTTTR			SEWLVKLLYA	FQDLQ		SLYLA	77
DBF20	43	TNHVLT	ERDILTTTR			SDWLKLLYA	FQDPE		SLYLA	77
PKH1	45	VKYVTI	EKLALQKLLNG			TKGIFKLF	FQDEA		SLYFL	80
PKH2	45	VKYVSI	EKTALQKLLN			SPSVVRLFS	FQDES		SLYFL	80
YDR466W	46	VKYVTI	EKNMTNLLAQK			HHAGITKLYYT	FHDEE		NLYFV	83
IPL1	43	QKQFRR	EVEITQSLN			HPNLTKSYGY	FHDEK		RVYLL	77
YCL024W	51	PYNIER	EIVIMKLLS			HPNVLSLYDV	WETNN		NLYLI	85
GIN4	57	PYGIER	EIIIMKLLN			HPNVRLYDV	WETNT		DLYLV	91
HSL1	80	PYGIER	EIVIMKLLS			HTNVMLFEV	WENKS		ELYLV	114
KIN4	49	EIKIYR	EINALKHLT			HPNTIYLEEV	LQNSK		YIGIV	83
YPL141C	56	EVKIYR	EINALKHLT			HPNVKLEEV	LQNSR		YIGIV	90
KIN1	68	DKRTIR	EASLGQILY			HPHICRLFEM	CTLSN		HFYML	102
KIN2	69	DKRTVR	EASLGQILY			HPHICRLFEM	CTMSN		HFYML	103
APG1	44	LENLEI	EIALTKKIK			HPHIVGLIDC	ERTST		DFYLI	78
CDC5	42	RKKLLS	EIQTHKSMS			HPNIVQFIDC	FEDDS		NVYIL	76
CMK1	44	EALYDE	ELDILQRLH			HPNIVAFKDW	FESKD		KFYII	78
CMK2	44	QMLYE	ELSLQKLS			HPNIVSFKDW	FESKD		KFYIV	78
MEK1	44	NKFDE	EARILLRLD			HPNIIKVYHT	FCDRNN		HLYIF	79
DUN1	43	KQFRE	ETNILMRVQ			HPNIVNLLDS	FVEPIS	K	SQIQKLYV	82
RCK1	56	RKKVLN	EVALHKLVSKN			NPHCTKFI	QESAN		YYLV	92
RCK2	68	RDQVLK	EVALHKTVSAG			CSQIVAFIDF	QETDS		YYVYI	104
RAD53	41	MDGVTR	ELEVQKLN			HPRIVRLKGF	YEDTE		SYVMV	75
KIN3	42	RQQLIA	ECSTLSQLK			HENIVEFYFNW	DFDE		QKEVLYLY	78
CDC15	40	LNDIMA	EISLLKLN			HNNIVKYH	GFIR		KSYELYIL	74
STE7	42	INQLVR	ELSIKVNKP			HENITFYGA	YYNQH		INNEIIL	80
PBS2	42	RQILME	ELVHLKCN			SPYIVDFYGA	FF		IEGAVYMC	75
MKK1	42	QKQIFR	ELQFNRSFQ			SEYIVRYGGM	FTDD		ENSSIIYA	78
MKK2	42	QKQIFR	ELQFNKSF			SDYIVQYGM	FTDE		QSSIIYA	78
SPS1	41	IELLAQ	EIFFLAELK			SP	LITNYIA		DVSMVIV	75
NRK1	41	VEDVQR	EIQFLASLK			QISNITRYYG	SYLK		DTSLWII	76
CLA4	59	KELIVN	EILVMKDSR			HKNIVNFLEA	YLRT		DDDLWV	94
SKM1	57	KQLIMN	ELLVMNDSR			QENIVNFLEA	YIID		DEELWVI	92
STE20	40	KELIIN	EILVMKGSK			HPNIVNFIDS	YVLK		GDLWVI	74
SSK22	44	FPLIKE	EMTVLEMLN			HPNIVQYGV	EVHR		DKVNIF	78
SSK2	44	FPLIKE	EMSVLEILN			HPNIVSYGV	EVHR		DKVNIF	78
BCK1	48	VEALRS	EVSTLKDL			HLNIVQYLG	ENKN		NIYSLF	82
STE11	84	VDALQH	EMNLLKELH			HENIVTYGA	SQEG		GNLNI	118
HAL5	58	CTRLTS	EFITGHSLSHPHFEANAMIAGN	VSRTTPPKHVF	NAPNILKILD		MEYS		NSFVEV	117
YKL168C	58	CTKITS	EFITGHSLSHYHKNG	KKP	APNILNVFDI		LEDS		SSFIEV	101
NPR1	45	VKKITS	EYCI GTTLN		PNLIETIEI		VYEN		DRILQV	79
YDL214C	47	IKNIIS	EYCTASTLKN		PNICETLEI		LYEK		GKIFQI	81
YDL025C	52	SKKVTT	EFICIGSTLHH		ENIVETLDM		LTEG		DTYLLV	86
YOR267C	47	AKKCTA	EFICIGSTLHH		PNVLETVDV		FSDSK		QNKYEV	83
PTK2	45	YKRCSK	EFITAKHLSHN		VHITNTFYL		LKVPTT		TYTTRGWGFI	86
PTK1	45	YNAAPK	EFITAKQLSHH		VHITNTFLL		VKVPTT		VYTTRGWGFI	86
SKS1	63	LYHFFKS	EFQKLLF	LPSVDLDSILQLTENELNRLPHYREIA	QLRVQSHGNI		VKIHQV		LESSIATFIV	129
YDR247W	62	LAKLFK	ESKNVVR	PSIDLESIEENMSEEDFKKLPHYKEISLHLR	VHHKNI		VTIHEV		LQSAVCTFIV	128
ELM1	75	IEKCRW	EIFAASRLRN		NVHIVRLIEC		LDSPFS		ESIWI	112
CHK1	47	DKDITK	EVVQLSKCS		KHPNVLRLIDC		NVSK		EYMWII	82
YAK1	39	LQTSIT	EAKTLELNLQKIDPTN		KHHFLRMYS		FVHKN		HCLV	80
SKY1	39	TEAAED	EIKLLQRVNDADNTKEDSMG		ANHQLKLLDH		FNHKGP		NGVHVVMV	88
KNS1	40	REAAKT	ELRILQTLNNDPQG		QFQCLLLREC		FDYKN		HICLV	80
YMR291W	42	IQLIQR	EFDLRSISEKIRDMEKKNEHSLDIFEG		HHHILQLFDY		FETADN		IVLI	95
MPS1	41	IDGFKG	EIELLEKLD		QKRVIQLLDY		EMGDG		LLYLI	76
KSP1	84	REKKHNL	YKHKKS	LISSKVKSRLSN		ICLEAMYEDIQTK	IGRHQN		IAALLDFFDSYII	142
IME2	59	IKTMMTKLHT	LQDYTRVREIKFILAIP		ANDHLIQIFEV		FIDSE		NYQLHIV	108
YKL171W	41	KKHVLR	EVALWRTLK		HNRLPLLDW		KLDDN		YAMYCL	76
YGR052W	39	EANMKN	EYDVMMKILSSCN		PHPNICSMILDF		YTDDS		YIMV	77

CKA1	66	QYYTNQKEDVLKFI	IRPYIFDQPHNG	HANT	IHLFDI	IKDPIS	KTPALV	112
CDC7	52	PQRIYNELNLLY	IMTG	SSRV	APLCDA	KRVR	DQVI	87
YKL116C	62	ENSLTR	ELQVLKSLN	HPCT	IVKLLGINNP	IFVTSK	KPLCDLI	115
IRE1	36	CDIALMEIKLL	TESDD	HPN	VI	RYCS	ETDR	71
SWE1	40	LKRILL	EIKLLNEVTN	QITMD	QEGKEY	ITYISS	SYIIM	83
IKS1	44	FNKCIR	EVKALSSLT	THKSANLITYN	HVW	LEMDSSVGV	FRSIDGSQSDSQE	101
VPS15	39	LRPFLQ	RIRAQSF	KLG	QLPH	VLNYSKL	IETNR	75
CAK1	41	PHNAKF	EVSILLNK	LGN	KCKH	LP	PLESKATD	95
BUB1	38	EYYIMS	QVEFLRKS		TILK	SIINASALH	FLD	74
YGR262C	42	AKDSHQ	KYI	KYRPPKR	YRHPQ	DQALT	KHRTLNESR	86
SLN1	28	KVGVS	KFTFTLP	LN	QTKE	ISFADME	FPFDEFNP	69
CTK7	73	FNRFET	VCYTVAT	SCLTGL	CKEVET	KKTNDICT	LSLR	122
CTK3	40	QOKLNN	PIQFYLRN		YRHHYED	FHQCLFD	TTMKMDP	80
YGL059W	112	VIRIAH	KLNQL	QLLPFN	VVMNFH	VQVYESY	NIFESFR	155
YIL042C	85	LSLTCK	RNLNAT	QRLPYN	AVINPH	ERTNSLYL	KSLQTL	143
MEC1	38	VLSLRED	CGILEMVP		NVVT	LRSLSTK	YESLKIKYS	80
DBF4	51	DRDPRT	KRDDI	HYFKYP	HVYL	YDLWQ	TWAPI	101
MRK1	36	RRYKNR	ELET	MKMLC	HPNT	VGLQY	FYE	75
RIM11	36	KRFKNR	ELET	MKMLC	HINT	IDLKYF	FYE	75
YOL128C	40	PKVQSL	ELET	LNIR	HPN	LV	TEFF	83
FUN31	48	LGTIPS	EIQ	IMATLNKK	PHENT	LR	LLDF	84
YOL045W	48	LGTIPS	EIQ	IMATLNKN	SHENT	LR	LLDF	84
PAK1	54	NDKIKR	EIA	IMKKCHHK	HVVQ	L	IEVLDD	90
YGL179C	49	NPRVNO	EIEV	MKRCHHE	NVVEL	YEILND	PESTK	85
SCH9	43	IAHTIG	ERNIL	VTTASK	SSPFI	V	GLKFS	80
YPK2	43	VHTTLA	ERTV	LARVD	CPFIV	PLKFS	FQSP	77
CBK1	45	LAHVKA	ERDV	LASD	SPWV	V	SLYS	79
YNR047W	43	IKRVLT	E	ELATSN	HPFI	V	TLYS	77
SRA3	43	VEHTND	ERLM	SIVT	HPFI	I	RMWGT	77
TPK3	45	VEHTND	ERRML	SIVS	HPFI	I	RMWGT	79
PKA3	45	VEHTND	ERRML	KLVE	HPFI	I	RMWGT	79
PCK1	45	IESARA	EKKV	FLLATKT	KHPFL	T	NLYCS	82
YBR028C	43	ATDSKR	EDED	KNDGNNDND	DGLSKRLERT	F	AERSILSEI	103
DBF2	43	TKHVLT	ERDIL	TTR	SEWL	V	KL	77
DBF20	43	TNHVLT	ERDIL	TTR	SDWL	V	KL	77
PKH1	45	VKYVT	EKLAL	QKLNG	TKG	I	FKLFT	80
PKH2	45	VKYVSI	EKTAL	QKLNN	SPS	V	VL	80
YDR466W	46	VKYVTI	EKN	TMLLAQK	HHAG	I	KL	83
IPL1	43	QKQFRR	EVEI	QTSLN	HPNL	T	KSYGY	77
YCL024W	51	PYNIER	EIV	IMKLLS	HPNV	L	SLYDV	85
GIN4	57	PYGIER	EII	IMKLLN	HPNV	L	SLYDV	91
HSL1	80	PYGIER	EIV	IMKLLS	HTNV	M	ALFEV	114
KIN4	49	EIKIYR	EIN	ALKHLT	HPNI	I	LEEV	83
YPL141C	56	EVKIYR	EIN	ALKHLS	HPNI	V	KEEV	90
KIN1	68	DKRTIR	EAS	LGOILY	HPHI	C	RLFEM	102
KIN2	69	DKRTVR	EAS	LGOILY	HPHI	C	RLFEM	103
APG1	44	LENLEI	EATL	LKKIK	HPHI	V	GLIDC	78
CDC5	42	RKKLLS	EIQ	THKSMS	HPNI	V	QFIDC	76
CMK1	44	EALYDE	LDIL	QRLH	HPNI	V	AFKDW	78
CMK2	44	QMLYE	ELS	ILQKLS	HPNI	V	SFKDW	78
MEK1	44	NKFDE	EARIL	LLRLD	HPNI	I	KVYHT	79
DUN1	43	KQFRE	ETN	ILMRVQ	HPNI	V	NLLDS	82
RCK1	56	RKKVLN	EVA	THKLVSKN	NPHCT	K	FI	92
RCK2	68	RDQVLK	EVAL	HKTVSAG	CSQT	V	AFIDF	104
RAD53	41	MDGVTR	ELEV	LQKLN	HPRI	V	RLKGF	75
KIN3	42	RQQLIA	EC	SILSQLK	HENI	V	EFLYNW	78
CDC15	40	LNDIMA	EIS	LKLN	HNNI	V	KYH	74
STE7	42	INQLVR	ELS	IVKNVKP	HENI	V	TFYGA	80
PBS2	42	RQILME	LEV	LHKCN	SPYI	V	DFYGA	75
MKK1	42	QKQIFR	ELQ	FNRSFO	SEYI	V	RYGGM	78
MKK2	42	QKQIFR	ELQ	FNKSFK	SDYI	V	QYGM	78
SPS1	41	IELLAQ	EIFF	LAELK	SP	L	ITNYIA	75
NRK1	41	VEDVQR	EIQ	FASLK	QISN	I	TRYYG	76
CLA4	59	KELIVN	EIL	VMKDSR	HKN	V	NFLEA	94
SKM1	57	KQLIMN	ELL	VMDSR	QENI	V	NFLEA	92
STE20	40	KELIIN	EIL	VMGSK	HPNI	V	NFIDS	74
SSK22	44	FPLIKE	EMT	VLEMLN	HPNI	V	QYGV	78
SSK2	44	FPLIKE	EM	SVEILN	HPNI	V	SYGV	78
BCK1	48	VEALRS	EV	STLKDLD	HLNI	V	QYLG	82
STE11	84	VDALQH	EMN	LLKELH	HENI	V	TYGA	118
HAL5	58	CTRLTS	EFIT	GHSLS	HPHFEANAM	IAGN	VSRTTPPKHVF	117
YKL168C	58	CTKITS	EFIT	GHSLS	SHYHKN	G	KKP	101
NPR1	45	VKKITS	EYCI	GTTLNH	PN	I	ETIEI	79
YDL214C	47	IKNIIS	EYCT	ASTLKN	PN	I	CETLEI	81
YDL025C	52	SKKVTT	EFCI	GSTLHH	ENI	V	ETLDM	86
YOR267C	47	AKKCTA	EFCI	GSTLHH	PN	V	ETVDV	83
PTK2	45	YKRCSK	EFT	AKHLSH	VH	I	TNTFYL	86
PTK1	45	YNAAPK	EFT	AKQLSH	VH	I	TNTFLL	86
SKS1	63	LYHFFKS	FQKFL	LP	SVLDLSILQ	TENELN	RPHYREIA	129
YDR247W	62	LAKLFF	ESKN	V	VP	SIDLES	IENMSEEDFKKLP	128
ELM1	75	IEKCRW	EIFA	ASRLRN	NVH	I	RLIEC	112
CHK1	47	DKDITK	EVV	LQSKCS	KHPN	V	LR	82
YAK1	39	LTQSIT	EAK	LELLNQ	KIDPTN	KHH	FLRMYDS	80
SKY1	39	TEAAED	EIKLL	Q	RVNDADNTKEDSMG	ANH	QL	88
KNS1	40	REAAKT	ELRIL	Q	TLLNNDPQG	QFQ	CLL	80
YMR291W	42	IQLIQR	EPD	LLRS	ISEKIRDMEK	NEHSLDIFEG		95
MPS1	41	IDGFKG	EIL	LEKLD				76
KSP1	84	REKKHNL	YKHKKS	L	ISSKVSRLSN			142
IME2	59	IKTMMTK	LHT	LQDY	TRVREIKFILAIP	ANDH	L	108
YKL171W	41	KKHVLR	EVA	I	WRTLK			76
YGR052W	39	EANMKN	EYD	V	MKILSSCN			77

		250	260	270	280	290	300	310	320	112			
YCK1	74	IDLLGPSLEDLFDWCG				RKFSVKT	VQVAVQ	MITL	IEDLAHD	115			
YCK2	74	IDLLGPSLEDLFDWCG				RRFSVKT	VQVAVQ	MITL	IEDLAHD	115			
YCK3	91	IDLLGPSLEDLFEWCG				RKFSVKT	TCMVAKQ	MIDRVRA	IEDLHD	132			
HRR25	74	IDLLGPSLEDLFNYCH				RRFSFKT	VIMLALQ	MFCRI	QYIEGRS	115			
PRK1	89	MEFCERGGGLDFMNR				LQNR	LQSEILE	IMSQT	VQGITAM	HALQPP	134		
ARK1	90	MEYCEERGGGLDFMNR				LQNR	LHEFEIL	QIMSQT	VQGVAA	HALQPP	135		
YBR059C	97	MELCPNKSLLDYMNR				LSTKL	TEAEIVK	IMYDVAL	SISQMYL	LPVS	142		
FUS3	81	QELMQTDLHRVIST				QMLSD	DHDIQ	YFIYQT	LRAVK	VLEGSN	120		
HOG1	78	TELQGTDLHRLLTQ				RPLEK	QFVQY	FLYQ	ILRGL	KYVHSAG	117		
SLT2	86	EELMECDMHQIIKSG				QPLTD	AHYQS	FTYQ	ILCGL	KYIHSAD	126		
YKL161C	86	EELMECDLSQIIRSE				QRL	EDAHF	QSFYQ	ILCAL	KYIHSAN	126		
CDC28	81	FEFLDLDLKRYMEGIPKD				QPL	GADIVK	KFMQ	LCKG	GIAYCHSHR	124		
PHO85	76	FEFMDNDLKRYMDSRTVG		N		TPRGL	ELNLV	KYFQW	LLQGL	AFCHENK	122		
KIN28	77	LEFLPTDLEVVIKDKSIL					FTPAD	IKAWML	MTLR	GVYHCHRN	118		
CTK1	78	FEYADNDLSGLLN				KEVQ	I	SHSQCK	HLFKQ	LLLGMEY	LHDNK	119	
SSN3	162	YEYAEHDLQIIHFHSHP				EKRM	I	PPRMVRS	IMWQL	LDGVS	YIEHQN	207	
MRK1	76	LDYMPQSLYQRLRHVFNL				KMQM	P	RVREIK	FYAYQ	LFKAL	NLYLHNVPR	121	
RIM11	76	LEYMPQSLYQRLRHVFNL				RTPM	SRL	EIKYMF	Q	L	FKSLNLYLHNFAN	121	
YOL128C	84	MEYIPQTLSSSEIHEYFDN				GSKM	P	TKHIK	LYTFQ	ILRAL	LTIESMS	128	
FUN31	85	ETPVHGETGCIDLFDLIE		FKTN			MTEFE	AKLIF	KQV	VVAGI	KHLEDDQ	130	
YOL045W	85	ETPVHGETGSDILFDVIE		FKKD			MVEHE	AKLVF	KQV	VVASI	KHLEDDQ	130	
PAK1	91	LEYCSRGEVKKWCPDCE		SDAKG		PSL	S	FQETRE	ILRG	VVLGL	EYLEHYQ	140	
YGL179C	86	LEYCSRGPVKWCPEKNME		IKAVG		PSIL	T	FQQSR	KVVLD	VVSG	LEYLESQ	135	
SCH9	81	TDYMSGGELFWHLQ				KEGRF	S	EDRAK	FYIAEL	VLALE	HLHDND	122	
YPK2	78	LAFINGGELFYHLQ				HEGRF	S	LARSF	FYIAEL	LCALD	SLEKLD	119	
CBK1	80	MEFLPGGDLMTMLI				RWQL	F	TEDVTR	FRYMAE	CILAI	ETIEKLG	121	
YNR047W	78	MEYCMGGEFFRALQTR				KTKC	I	CEDDAR	FYASEV	TAALE	EYLEHLG	121	
SRA3	78	MDYIEGGELFSLLR				KSQRF	P	NPVAK	FYAAEV	VCLALE	EYLESKD	119	
TPK3	80	MDYIEGGELFSLLR				KSQRF	P	NPVAK	FYAAEV	VCLALE	EYLESKD	121	
PKA3	80	MDYIEGGELFSLLR				KSQRF	P	NPVAK	FYAAEV	VILALE	EYLAHAN	121	
PCK1	83	MEFIGGGDLMWHVQ				N	Q	RLSVRA	KFYAAEV	VLLALK	YFEDNG	123	
YBR028C	104	LQYIPGGELFYHLK				EHGT	L	DETTV	SFYAAE	I	SCALRFLTKG	145	
DBF2	78	MEFVPGGDFRLLIN				TRC	L	KSGHAR	FYISEM	FCAVNA	LEHDLG	119	
DBF20	78	MEFVPGGDFRLLIN				TRIL	K	SGHAR	FYISEM	FCAVNA	LEHDLG	119	
PKH1	81	LEYAPHGDFLGLIK				KYGS	L	NETCAR	YIASQ	I	DAVDSLEHIG	122	
PKH2	81	LEYAPNGDFLSLMK				KYGS	L	DETCAR	YIAAQ	I	DAIDYLEHNG	122	
YDR466W	84	LDFAPGGELLSLHL				KMGTF	N	DIWTR	HFTAQ	LIDALE	FLHSHG	125	
IPL1	78	MEYLVNGEMYKLLR				LHGPF	N	DILAS	DYIYQ	I	ANALDYMHKKN	119	
YCL024W	86	LEYAEKGELFNLLV				DHGP	L	PEREAIN	CFRQ	I	IIGISYCHALG	127	
GIN4	92	LEYAEKGELFNLLV				ERGP	L	PEHAIR	FRFRQ	I	IIGVSYCHALG	133	
HSL1	115	LEYVDGGELFDYLV				SKGKL	P	PEREAI	HYFKQ	I	VEGVSYCHSFN	156	
KIN4	84	LEFVSGGEFYKYIQ				RKRR	L	KESSAC	RLFAQ	LISGV	NMYHYKG	125	
YPL141C	91	LEYACGGEFYKYIQ				KRRR	L	KEMNAC	RLFSQ	LISGV	NHYHESKG	132	
KIN1	103	FEYVSGGQLLDYII				QHGS	I	REHQAR	KFARG	I	ASALIYLEHANN	144	
KIN2	104	FEYVSGGQLLDYII				QHGS	L	KEHHAR	KFARG	I	ASALOYLEHANN	145	
APG1	79	MEYCALGDLTFLKRRKE		LMENHP	LLRTV	FEKYP	PPSENHNG	L	HRAFV	LSYLQ	LALSKFLRSKN	144	
CDC5	77	LEICPNGLSMLLKKRK					V	LTEPE	VRFFTQ	I	CGAIKYMESRR	118	
CMK1	79	TQLAKGGELFDRLK				KGKFT	E	EDAVR	ILVEIL	S	AVKYMESQN	120	
CMK2	79	TQLATGGELFDRLS				RGKFT	E	DAVEI	IVQIL	GAVEY	MESKN	120	
MEK1	80	QDLIPGGDLFSYLAAGD				CLTSM	S	ETESL	LIVFQ	ILQAL	NLYLHDQD	124	
DUN1	83	LEKIDGELFERIVR				KTC	L	RQDES	KALFKQ	LLTGL	KYLEHEQN	124	
RCK1	93	TELVTGGELFDRIIVQ				LTCFS	E	DLARH	VITQ	VAIAI	KHMYMG	134	
RCK2	105	QELLTGGELFGEIVR				LTYFS	E	DLSRH	VIKQL	LALAV	KHMSLG	146	
RAD53	76	MEFVSGGDLMDFAVA				HGAV	G	EDAGRE	ISRQIL	TAIKYI	TESMG	117	
KIN3	79	MEYCSRGLDSQMIKH			YKQEH		KYI	PEKIV	WGILAQ	LLTAL	KYCHYGVLP	PTLTT	131
CDC15	75	LEYCANGSLRRLISR			SSTG		L	SENE	SKTYVTQ	TLLGL	KYLEH	115	
STE7	81	MEYSDCGSLDKILSVYKR		FVQ	RGT	VSSKK		TWFNE	L	TISKIAYG	VNLGDHLYRQY	135	
PBS2	76	MEYMDGGSLDKIY		DE		SSEI		GGI	DEPQ	LAFIAN	AVHGLKLEHQB	120	
MKK1	79	MEYMGGRSLDAIYKN		LLERG				GRISE	KVLG	KIAEAV	LRGLSYLHEK	123	
MKK2	79	MEYMGGSLEATYKN		LLKRG				GRI	S	ERVIGK	IAESVLRGLSYLHER	123	
SPS1	76	MEYCGGSCSDLLKR		SYVNG				L	PEEKV	SFIHEV	TLGLKYLEHQ	118	
NRK1	77	MEHCAGGSLRSLLRP		GKID				EKYI	G	VIMREL	LVALKCHLKD	116	
CLA4	95	MEFMEGSLTDIEN		SPTNDN				SHSP	L	TEPQIAY	IVRETQGLKFLHDK	142	
SKM1	93	MEYMEGGCLTDILDA		VARNTGE				HSSP	L	NENQ	MAYIVKETCQGLKFLHDK	142	
STE20	75	MEYMEGGSLTDVVT						HCIL	T	EGQIGAV	CRETLSGLEFLHDK	114	
SSK22	79	MEYCEGGSLASLLDHG						RIEDE	MV	TQVYTFELLE	GLAYLHDSG	120	
SSK2	79	MEYCEGGSALAALHGH						RIEDE	MV	TQVYTLQ	LLLEGLAYLHDSG	120	
BCK1	83	LEYVAGGSVGLIRMY						GRFDE	P	LKHLTTQ	VLKGLAYLHDSG	124	
STE11	119	LEYVPGGSVSSMLNNY						GFPEE	S	LITNFT	RQILIGVAYLEHKN	160	
HAL5	118	MEFCASGDLYSLTRNNI		SNESNN	GSSRLI		QTVKE	GSGSP	L	HLEADCF	FMKQLLNGVQYMHGH	181	
YKL168C	102	MEFCPAGDLYGMLVG				KSKLKG		RLH	P	LEADCF	FMKQLLHGKFMHGH	147	
NPR1	80	MEYCEYDLFAIVMSN						KMSY	E	EICCCF	KQILTGQYLEHSG	119	
YDL214C	82	LEYCEYDLFSLVMS						KMHY	E	EICCLF	KQLINGVKYLEHSG	121	
YDL025C	87	MEYAPYDFFNLVMSN						LMTQ	D	EVNCFY	KQLCHGVNYLEHSG	126	
YOR267C	84	MEYCPIDFFAVVMTG						KMSR	G	EINCC	LKQLTEGVKYLEHSG	123	
PTK2	87	MELGVKDLQFLMERT		G			WKNV	P	FNEKY	CLFKQ	VAAQGIKFLHDSG	129	
PTK1	87	MELGLRDLFAMIQKS		G			WRH	V	ALAEK	FCIFKQ	VACGVKFLHDSG	129	
SKS1	130	MDYYDRDLFTSIVDD						KHFV	NH	GILIKK	VFLQLCSALDHCHRLG	172	
YDR247W	129	MDYYPTDLFTSIVDN						RHFVT	N	GLLVKK	VFLQICSALNCHHGH	171	
ELM1	113	TNWCSSLGELQWKRDDDED				ILPQ	W	KKIVIS	NC	SVSTFAK	KILEDMTKGLEFLHSG	167	
CHK1	83	LEMADGGDLFDKLEP						DVG	V	SDVAQ	YFQQLVSAINLYLHVECG	125	
YAK1	81	FELLSNNLYLELLKQN						KFHGL	S	IQLIRT	FTTQILDSLCVLESK	123	
SKY1	89	FEVLGENLLALIKKY						EHRG	I	PLIYVK	QISKQLLLGLDYMHRRCG	132	
KNS1	81	TDLYGRSIYDFMCSNG						IARF	P	GSHIQAI	ARQLIRSVCFLEHSG	123	
YMR291W	96	TQLCQKGLDYKIVEN						QC	L	DETQVTSY	CACLVSVLEFLHSG	138	
MPS1	77	MECGDHDLSQILNQRS						GMPL	D	FNFRV	FYTKEMLLCIVVHDSG	119	
KSP1	143	MEYCSGSDLYEALIKAD						AVP	K	TKTSI	THITQIMDAIEYVHNKG	185	
IME2	109	MECMEQNLVQMMKHRR						RRVFS	I	PSLKS	SILSQILAGLKHLEHNN	151	
YKL171W	77	TERINDGTLYDLVISWDE		FK		RSK		IPFA	E	RCLTIF	LSLQLLSALKYMHESKT	127	
YGR052W	78	LEYCECGDLYDFLDIAKS		Q		GSP		SSPS	L	IQIDM	QKIILQLCSAISFAHSLG	127	

CKA1	113	FEYVDNVDFRILYP.....	KLTDLEIRFYMFELLKALDYCHSMG.....	151
CDC7	88	LPYPHPHEEFTFYR.....	DLPIKGIKKYIWELLRALKFVHSGK.....	126
YKL116C	116	MSYCPAGDLAAVEMAR.....	NGRLEAWLQIRIFTEVVLAVKYLHENS.....	158
IRE1	72	LELCNLNLQDLVESKNVS.....DE.....	NLKLQKEYNPISLLRQIASGVAHLSLK.....	119
SWE1	84	TELCENGLDGFLEQVI.....AK.....	KKRLEDWRWKIIVELSLALRFTDSCH.....	131
IKS1	102	QQYCSGGNLBDCILRKVFNRFSDESPEER.KKKFRTRKKNHGKSGEVGLSTEQLVSIIRDIAAGLHHELSIG.....	173	
VPS15	76	RQHLKNNLYDRLSLR.....	PYLQDIELKFIAFQLLNTLKDITLNLN.....	116
CAK1	96	RDRRKNPYDYDLNPSIP.....	IVADPPVQKYTNQLDVRYSLSFFRMVEGIAFLHKN.....	151
BUB1	75	LNYASQGTVLDLNLQRE.....	K.AIDGNGIMDEYLCMFITVELMKVLEKHEVG.....	124
YGR262C	87	PGLCVPLIACDPYNG.....	FIWLEFLGEDLPGGHGFSNLKNFLWMHDQD.....	132
SLN1	70	VKFSVAKSLKSRQS.....	TSSVATPATNRSSLTNDVLPVHSGK.....	109
CTK2	123	LENFKKRVPQIEIRILES.....	CSFDYRVNNYVHIDEYVIKIGRELSFDYKLCN.....	172
CTK3	81	VVIYYVRIIRNLYPHS.....	HSNTNVTKVLNEVLLMDIDLVEFELCP.....	123
YGL059W	156	RTLEDASQFADFLKNMLEGFNTLNLPHLIMGALECTILDLYPREKMDQLSDLLRARISRRLLIVEEHVYTYANTYSGKEE	235	
YIL042C	144	LLDDHEDAIVVLAKG.....	LQEIQSCYPKFQISQFLNFHLKERITMKLLVTEYLSLMAQNK	201
MEC1	81	WQHTAVDGKLEFYMEQ.....	VDKFPPILYQWFLENFPDPINWFNARN.....	123
DBF4	102	LKIGSGFRKCPFIGDRN.....	YDESSYKRVVKRYSRDKANKKYALQLR.....	144
MRK1	76	LDYMPQSLYQRLRHFFVNL.....	KMQMPRVEIKFYAYQLFKALNLYLNVPR.....	121
RIM11	76	LEYMPQSLYQRLRHFFVNL.....	RTPMRLEIKYMFQLFKSLNLYLHAFAN.....	121
YOL128C	84	MEYIPQTLSSSEIHEYFDN.....	GSKMPTKHILYTFQILRALLTESMS.....	128
FUN31	85	ETPVHGETGCIDLFDLIE.....FKTN.....	MTEFEAKLIFKQVVAGIKHLEDQG.....	130
YOL045W	85	ETPVHGETGSIDLFDVIE.....FKKD.....	MVEHEAKLVFKQVVASIKHLEDQG.....	130
PAK1	91	LEYCSRGEVWKCPDCME.....SDAKG.....	PSLSFQETREILRGVVLGLEYLHYQG.....	140
YGL179C	86	LEYCSRGPVKWCPEKNME.....IKAVG.....	PSILTFQQRKVVLDVVSGLYLEHSGQ.....	135
SCH9	81	TDYMSGGELFWHLQ.....	KEGRFSEDRAKFYIAELVLALEHLEDND.....	122
YPK2	78	LAFINGGELFYHLQ.....	HEGRFSLARSFYIAELLCALDSLEKLD.....	119
CBK1	80	MEFLPGGDLMTMLI.....	RWQLFTEDVTRFYMAECILAIETHEKLG.....	121
YNR047W	78	MEYCMGGEFFRALQTR.....	KTKICEDDARFYASEVTAALLEYLHLG.....	121
SRA3	78	MDYIEGGELFSLLR.....	KSQRFNPVAKFYAAEVCLALEYHESKD.....	119
TPK3	80	MDYIEGGELFSLLR.....	KSQRFNPVAKFYAAEVCLALEYHESKD.....	121
PKA3	80	MDYIEGGELFSLLR.....	KSQRFNPVAKFYAAEVCLALEYHESKD.....	121
PCK1	83	MEFIGGGDLMWHVQ.....	N.QRLSVRAKFYAAEVLLALKYFEDNG.....	123
YBR028C	104	LQYIPGGELFYHLK.....	EHGTLDETTSFYAAEISCALRFLTKG.....	145
DBF2	78	MEFVPGGDFRLLIN.....	TRCLKSGHARFYISEMFCAVNALHDLG.....	119
DBF20	78	MEFVPGGDFRLLIN.....	TRCLKSGHARFYISEMFCAVNALHDLG.....	119
PKH1	81	LEYAPHGDFLGLIK.....	KYGSLNETCARYYASQIIDAVDSLEHIG.....	122
PKH2	81	LEYAPNGDFLSLMK.....	KYGSLEDTCARYYAAQIIDADYLSHNG.....	122
YDR466W	84	LDFAPGGELLSLH.....	KMGTFNDIWRHFTAQLIDALEFTHSHG.....	125
IPL1	78	MEYLVNGEMYKLLR.....	LHGPFNDILASDYIYQIANALDYMHKKN.....	119
YCL024W	86	LEYAEKGELFNLLV.....	DHGPLPEREAINCFRQIIIGISYCHALG.....	127
GIN4	92	LEYAEKGELFNLLV.....	ERGPLPEHEAIRFRFQIIIGVSYCHALG.....	133
HSL1	115	LEYVDGGELFDYLV.....	SKGKLPEREAIHYFKQIVEGVSYCHSFN.....	156
KIN4	84	LEFVSGGEFYKYIQ.....	RKRRLKESSACRLFAQLISGVNYMHYKG.....	125
YPL141C	91	LEYACGGEFYKYIQ.....	RKRRLKEMNACRLFSLISGVNYMHYKG.....	132
KIN1	103	FEYVSGGQLLDYII.....	QHGSIREHQARKFARGIASALYILHANN.....	144
KIN2	104	FEYVSGGQLLDYII.....	QHGSIRKEHARKFARGIASALQYHANN.....	145
APG1	79	MEYCALGDLTFLKRRKE.....LMENHP.LLRTVFEKYPSPSENHNGLHRAFLVLSYLQQLASALFKLSKN.....	144	
CDC5	77	LEICPNGLSMLLKKRK.....	VLTEPEVRFFTTQICGAIKYMSRR.....	118
CMK1	79	TQLAKGGELFDRLK.....	KGKFTEEDAVRILVEILSAVKYMSQN.....	120
CMK2	79	TQLATGGELFDRLS.....	RGKFTEVDAVEIIVQILGAVEYMSKN.....	120
MEK1	80	QDLIPGGDLFSYLAKGD.....	CLTSMSETESLLIVFQILQALNLYHDDQD.....	124
DUN1	83	LEKIDGELFERIVR.....	KTCLRQDESKALFKQLLTGLKYLEHQN.....	124
RCK1	93	TELVTTGGELFDRIVQ.....	LTCFSEDLARHVITQVAIAIKHMYMG.....	134
RCK2	105	QELLTTGGELFGEIVR.....	LTYFSEDLRHRVIKQLALAVKHMISLG.....	146
RAD53	76	MEFVSGGDLMDFAVA.....	HGAVGEDAGREISQILTAIKYCHSMG.....	117
KIN3	79	MEYCSRGLDSQMIKH.....YKQEH.....	KYIPEKIVWGILAQLLTALYKCHYGVLPPTLT	131
CDC15	75	LEYCANGSLRRLISR.....SSTG.....	LSENESKTYVTQTLGLKYLEG.....	115
STE7	81	MEYSDCGSLDKILSVYKR.....FVQRGTVSSKK.....	TWFNLTISKIAYGVNLGDHLYROY.....	135
PBS2	76	MEYMDGGSLDKIY.....DE.....SS.EI.....	GGIDEPQLAFIANAVHGLKYLEHQN.....	120
MKK1	79	MEYMGGRSLDAIYKN.....LLERG.....	GRISEKVLGKIAEAVLRGLSYLHEK.....	123
MKK2	79	MEYMGKSLLEATYKN.....LLKRG.....	GRISERVIGKIAESVLRGLSYLHEK.....	123
SPS1	76	MEYCGGSCSDLLKR.....SYVNG.....	LPEEKVSFIHEVTGLKYLEHEQ.....	118
NRK1	77	MEHCAGGSLRSLLRP.....GKID.....	EKYIGVIMRELLVALKCHLKD.....	116
CLA4	95	MEFMGGSLTDITEN.....SPTNDN.....	SHSPLTEPQIAYIVRETQGLKFLHDK.....	142
SKM1	93	MEYMEGGCLTDILDA.....VARSENTGE.....	HSSPLNENQMAYIVKETCQGLKFLHKN.....	142
STE20	75	MEYMEGGSLTDVVT.....	HCILTEGQIGAVCRETLSGLEFLHSG.....	114
SSK22	79	MEYCEGGSLASLLDHG.....	RIEDEMVTQVYTFELLEGLAYLHSG.....	120
SSK2	79	MEYCEGGSALAALHGH.....	RIEDEMVTQVYTLQLEGLAYLHESG.....	120
BCK1	83	LEYVAGGSVGLIRMY.....GRFDEPLIKHLTTQVLKGLAYLHSG.....	124	
STE11	119	LEYVPGGSVSSMLNNY.....	GFPEESLITNFTRQILIGVAYLHKKN.....	160
HAL5	118	MEFCASGDLYSLTRNNI.....SNESNN.GSSRLI.....QTVKEGSGSLHPLLEADCFMKQLLNGVQYMHDHG.....	181	
YKL168C	102	MEFCPAGDLYGMLVG.....KSKLKG.....	RLHPLLEADCFMKQLLHGKVFMDHGH.....	147
NPR1	80	MEYCEYDLFAIVMSN.....	KMSYEEICCCFKQILTGQYLEHSG.....	119
YDL214C	82	LEYCEYDLFSLVMSE.....	KMHYEEICCLFKQLINGVQYLEDIG.....	121
YDL025C	87	MEYAPYDFFNLVMSN.....LMTQDEVNCFYFKQLCHGVNLYHSMG.....	126	
YOR267C	84	MEYCPIDFFAVVMTG.....	KMSRGEINCCCLKQLTEGVKYLEHSG.....	123
PTK2	87	MELGVKDLFQLMERT.....G.....	WKNVPFNEKYCLFKQVAQGIKCHDNG.....	129
PTK1	87	MELGLRDLFAMIQKS.....G.....	WHFVALAEKFCIFKQVACGVKCHDQD.....	129
SKS1	130	MDYYDRDLFTSIVDD.....	KHFVNHGILIKKVFLQLCSALDHCHRLG.....	172
YDR247W	129	MDYYPTDLFTSIVDN.....	RHFVTNGLLVKKVFLQICSALNCHHEHG.....	171
ELM1	113	TNWCSSLGELQWKRDDDED.....ILPQWKKIVISNCVSTFAKKILEDMTKGLEHSG.....	167	
CHK1	83	LEMADGGDLFDKLEP.....	DVGVDSDVAQFYFQQLVSAINLYHVECG.....	125
YAK1	81	FELLSNNLYELLKQN.....KFHGLSIQLRTFTTQILDSLCVLESK.....	123	
SKY1	89	FEVLGENLLALIKKY.....EHRGILPIYVKQISKQLLLGLDYMERRCG.....	132	
KNS1	81	TDLYGRSIYDFMCSNG.....IARFPGSHIQAIARQLIRSVCFLEDLG.....	123	
YMR291W	96	TQLCQKGLDYEKIVEN.....	QCLEDLETQVTSYCACLVSVLEFLHSG.....	138
MPS1	77	MECGDHDLSQLNQRS.....GMPLDFNFVRFYTKEMLLCIKVVDAG.....	119	
KSP1	143	MEYCSGGDLYEAKAD.....	AVPKTKSITHIITQIMDAIEYVHNGK.....	185
IME2	109	MECMEQNLVQMMKHRR.....RRVFSIPSLKSILSQILAGLKHHEHN.....	151	
YKL171W	77	TERINDGTLYDLVISWDE.....FK.....RSK.....	IPFAERCRLTIFLSLQLLSALKYMHSTK.....	127
YGR052W	78	LEYCECGDLYDFLDIAKS.....Q.....GSP.....	SSPSLIQIDMQKIILQLCSAISFAHSLG.....	127

		330	340	350	360	370	380	390	400	151
YCK1	115	LIYRDI	KPDNFI	IGR						130
YCK2	115	LIYRDI	KPDNFI	IGR						130
YCK3	132	LIYRDI	KPDNFI	TSQYQRI						151
HRR25	115	FIHRDI	KPDNFI	MGVG						131
PRK1	134	LIHRDI	KIENVLI	SHDG						151
ARK1	135	LIHRDI	KIENVLI	SANN						152
YBR059C	142	LIHRDI	KIENVLI	DAKN						159
FUS3	120	VIHRDL	KPSNLI	INSNC						137
HOG1	117	VIHRDL	KPSNLI	TNENC						134
SLT2	126	VLHRDL	KPGNLI	VNADC						143
YKL161C	126	VLHCDL	KPKNLI	VNSDC						143
CDC28	124	ILHRDL	KPONLI	LNKDG						141
PHO85	122	ILHRDL	KPONLI	LNKRG						139
KIN28	118	ILHRDL	KPNNLI	FSPDG						135
CTK1	119	ILHRDV	KGSNLI	LDNQG						136
SSN3	207	VLHRDL	KPANTM	VITDG						224
MRK1	121	ICHARDI	KPONLI	VDPTTF						139
RIM11	121	VCHARDI	KPONLI	VDPETW						139
YOL128C	128	ICHGDL	KPSNLI	LIPSSG						146
FUN31	130	IVHRDI	KDENVI	VDSKG						147
YOL045W	130	IVHRDI	KDENVI	VDSHG						147
PAK1	140	IIHRDI	KPANDL	ISGDG						157
YGL179C	135	ITHARDI	KPSNLI	ISSNG						152
SCH9	122	IVYRDL	KPENLI	LLDANGN						140
YPK2	119	VIYRDL	KPENLI	LDYQGH						137
CBK1	121	FIHRDI	KPDNLI	DIRGH						139
YNR047W	121	FIYRDL	KPENLI	LLHQSGH						139
SRA3	119	IIYRDL	KPENLI	LLDKNGH						137
TPK3	121	IIYRDL	KPENLI	LLDKNGH						139
PKA3	121	IIYRDL	KPENLI	LLDRNGH						139
PCK1	123	VIYRDL	KLENLI	LLTPEGH						141
YBR028C	145	VVYRDL	KPENLI	LLNQRGH						163
DBF2	119	YTHRDL	KPENLI	LLDAKGH						137
DBF20	119	YTHRDL	KPENLI	LLDATGH						137
PKH1	122	IIHRDI	KPENLI	LLDKNMK						140
PKH2	122	IIHRDI	KPENLI	LLDGEMK						140
YDR466W	125	IIHRDL	KPENLI	LLDRDGR						143
IPL1	119	IIHRDI	KPENLI	LLGFNNV						137
YCL024W	127	IVHRDL	KPENLI	LLDSFYN						145
GIN4	133	IVHRDL	KPENLI	LLDHKYN						151
HSL1	156	ICHARDI	KPENLI	LLDKKNRR						175
KIN4	125	LVHRDL	KLENLI	LLDKHEN						143
YPL141C	132	LVHRDL	KLENLI	LLDKNEN						150
KIN1	144	IVHRDL	KIENLI	LLSDSSE						162
KIN2	145	IVHRDL	KIENLI	LLSSSSE						163
APG1	144	LVHRDI	KPONLI	LLSTPLI						162
CDC5	118	VIHRDL	KLGNI	FFDS						133
CMK1	120	IVHRDL	KFENLI	LYID						135
CMK2	120	VVHRDL	KPENLI	LYVD						135
MEK1	124	IVHRDL	KLDNLI	LLCT						139
DUN1	124	IIHRDI	KFENLI	LLNI						139
RCK1	134	IVHRDV	KPENLI	LLFPIPFY						153
RCK2	146	VVHRDI	KPENLI	LLFPIEFT						165
RAD53	117	ISHRDL	KPDNLI	LLTE						131
KIN3	132	IYDRMKPPVKGN	VIHRDL	KPGNI	FLSYDDSD					164
CDC15	115	EG	VIHRDI	KAANLI	LLSADN					134
STE7	135	KIIHRDI	KFSNLI	LLINS.KG						153
PBS2	120	NIIHRDV	KPTNLI	LLCSANQG						139
MKK1	123	KVIHRDI	KPONLI	LLNE.NG						141
MKK2	123	KVIHRDI	KPONLI	LLNE.KG						141
SPS1	118	RKIIHRDI	KAANLI	LLNEEGM						137
NRK1	116	NVIHRDI	KAANLI	LLITNEGN						135
CLA4	142	HIIHRDI	KSDNLI	LLDTRAR						161
SKM1	142	KIIHRDI	KSDNLI	LLNSQGL						161
STE20	114	GVLRDI	KSDNLI	LLSMEGD						133
SSK22	120	VVHRDI	KFENLI	LLDFNG						137
SSK2	120	IVHRDV	KPENLI	LLDFNG						137
BCK1	124	ILHRDM	KADNLI	LLDQDG						141
STE11	160	IIHRDI	KGANLI	LLDIKG						177
HAL5	181	IAHCDL	KPENLI	LLFQPNGL						199
YKL168C	147	IAHCDL	KPENLI	LLFYPHGL						165
NPR1	119	LAHRDL	KLDNLI	LLCVINEKGI						137
YDL214C	121	LSHRDL	KLDNLI	LLCVVTRRGI						139
YDL025C	126	LAHRDL	KLDNLI	LLCVVTKDGI						144
YOR267C	123	LAHRDL	KLDNLI	LLCVMTSQGI						141
PTK2	129	IAHRDL	KPENLI	LLISKEGI						147
PTK1	129	IAHRDL	KPENLI	LLSPDGV						147
SKS1	172	IYHCDI	KPENLI	LLDRNDN						190
YDR247W	171	IYHCDI	KPENLI	LLDTEDN						189
ELM1	167	CIHRDI	KPSNLI	LLDEEEK						185
CHK1	125	VAHRDI	KPENLI	LLDKNGN						143
YAK1	123	LIHCDL	KPENLI	LLCAPDK						141
SKY1	132	IIHTDI	KPENLI	LLMEIGDVEGIVQMVEALDKQKREAKRLQRHVSRRSSDITANDSSDEKWAECQTSMP						198
KNS1	123	IIHTDL	KPENLI	LLCDETHIAQKLPKTVQSL						155
YMR291W	138	IVHRDL	KAENLI	FLRLRVNENEKNLQ						164
MPS1	119	IVHSDI	KPANLI	LLVVGK						135
KSP1	185	IYHRDI	KPENLI	LLSGIDWT						204
IME2	151	FFHRDL	KPENLI	LLTPSTQYFEKEYMNQIG						180
YKL171W	127	IYHGD	KLENLI	LLQKEGKSDWKVFLCDFG						157
YGR052W	127	IAHRDI	KPENLI	LLTING						144

CKA1	151	..	IMHRDV	KPHN	VMID	HKNK	..	169
CDC7	126	..	IIHRDI	KPTN	FLFN	LELG	..	144
YKL116C	158	..	IIHRDL	KLENTL	LKYS	FDDIN	..	179
IRE1	119	..	IIHRDL	KPQNIL	VSTSS	RFTADQQTG	..	145
SWE1	131	..	IVHLDL	KPANVM	ITFEGN	..	149	
IKS1	173	..	LIHRDL	KPSNCL	LTPFKS	..	192	
VPS15	116	..	IVHGDIL	KTENIL	VTSWN	..	133	
CAK1	151	..	IIHRDL	KPQNIM	LTNNTST	VSP	..	173
BUB1	124	..	IIHGDIL	KPDNC	MIRLEK	PGEPLG	..	147
YGR262C	132	..	PYSDL	VATT	L	RKVGRQIG	..	150
SLN1	109	..	KHETK	DVGN	PNM	GREE	..	125
CTK2	172	..	LAWV	IAYDAL	KLETL	VIPQHS	..	194
CTK3	123	..	CQDWKS	L	TNQATCKEL	FLDLS	..	144
YGL059W	236	NTLVLG	..	DI	FQEC	SAKKY	LEASEES	260
YIL042C	202	DTNKRMIG	..	IIHRDL	LPIAQL	IKHVS	DYVN	229
MEC1	123	..	TYAR	SYAVMAMV	GHLGLG	..	142	
DBF4	144	..	ALFQY	HADT	LENTSSVN	..	161	
MRK1	121	..	ICHARDI	KPQNLL	VDPPTTF	..	139	
RIM11	121	..	VCHARDI	KPQNLL	VDPETW	..	139	
YOL128C	128	..	ICHGDL	KPSNILL	IIPSSG	..	146	
FUN31	130	..	IVHRDI	KDEN	VIVDSKG	..	147	
YOL045W	130	..	IVHRDI	KDEN	VIVDSHG	..	147	
PAK1	140	..	IIHRDI	KPANLL	ISGDG	..	157	
YGL179C	135	..	ITHARDI	KPSNLL	LISSNG	..	152	
SCH9	122	..	IVYRDL	KPENILL	LDANGN	..	140	
YPK2	119	..	VIYRDL	KPENILL	LDYQGH	..	137	
CBK1	121	..	FIHRDI	KPDNILL	IDIRGH	..	139	
YNR047W	121	..	FIYRDL	KPENILL	LHQSGH	..	139	
SRA3	119	..	IIYRDL	KPENILL	LDKNHG	..	137	
TPK3	121	..	IIYRDL	KPENILL	LDKNHG	..	139	
PKA3	121	..	IIYRDL	KPENILL	LDNRHG	..	139	
PCK1	123	..	VIYRDL	KLENTLL	LTPEGH	..	141	
YBR028C	145	..	VVYRDL	KPENCLLN	QRGH	..	163	
DBF2	119	..	YTHRDL	KPENFL	IDAKGH	..	137	
DBF20	119	..	YTHRDL	KPENFL	IDATGH	..	137	
PKH1	122	..	IIHRDI	KPENILL	LDKNMK	..	140	
PKH2	122	..	IIHRDI	KPENILL	LDGEMK	..	140	
YDR466W	125	..	IIHRDL	KPENVLL	DRDGR	..	143	
IPL1	119	..	IIHRDI	KPENILL	IGFNNV	..	137	
YCL024W	127	..	IVHRDI	KPENILL	LDSFYN	..	145	
GIN4	133	..	IVHRDL	KPENILL	LDHKYN	..	151	
HSL1	156	..	ICHARDI	KPENILL	LDKKNRR	..	175	
KIN4	125	..	LVHRDL	KLENTLL	LDKHEN	..	143	
YPL141C	132	..	LVHRDL	KLENTLL	LDKNEN	..	150	
KIN1	144	..	IVHRDI	KIENIM	ISDSSE	..	162	
KIN2	145	..	IVHRDI	KIENIM	ISSSGE	..	163	
APG1	144	..	LVHRDI	KPQNILL	LSTPLI	..	162	
CDC5	118	..	VIHRDL	KLGNI	FFDS	..	133	
CMK1	120	..	IVHRDL	KPENLL	LYID	..	135	
CMK2	120	..	VVHRDL	KPENVLYVD	..	135		
MEK1	124	..	IVHRDL	KLDNILL	LCT	..	139	
DUN1	124	..	IIHRDI	KPENILL	LNI	..	139	
RCK1	134	..	IVHRDV	KPENILL	FEPIPFY	..	153	
RCK2	146	..	VVHRDI	KPENILL	FEPIEFT	..	165	
RAD53	117	..	ISHRDL	KPDNILL	IE	..	131	
KIN3	132	IYDRMKPPVKGN	VIHRDL	KPGNIF	LSYDDSD	..	164	
CDC15	115	..EG	VIHRDI	KAA	NILLSADN	..	134	
STE7	135	..	KIIHRDI	KPSNVL	INS	KG	..	153
PBS2	120	..	NIIHRDV	KPTNILL	CSANQG	..	139	
MKK1	123	..	KVIHRDI	KPQNILL	LNE	NG	..	141
MKK2	123	..	KVIHRDI	KPQNILL	LNE	KG	..	141
SPS1	118	..	RKIHRDI	KAA	NILLNEEGM	..	137	
NRK1	116	..	NVIHRDI	KAA	NVLITNEGN	..	135	
CLA4	142	..	HIIHRDI	KSDNVL	LDTRAR	..	161	
SKM1	142	..	KIIHRDI	KSDNILL	LSQGL	..	161	
STE20	114	..	GVLHRDI	KSDNILL	LSMEGD	..	133	
SSK22	120	..	VVHRDI	KPENILL	LD	FNG	..	137
SSK2	120	..	IVHRDV	KPENILL	LD	FNG	..	137
BCK1	124	..	ILHRDM	KADNILL	LDQDG	..	141	
STE11	160	..	IIHRDI	KGANILL	LDIKG	..	177	
HAL5	181	..	IAHCDL	KPENILL	FQPNGL	..	199	
YKL168C	147	..	IAHCDL	KPENILL	FYPHGL	..	165	
NPR1	119	..	LAHRDL	KLDNC	VINEKGI	..	137	
YDL214C	121	..	LSHRDL	KLDNC	VVTRRGI	..	139	
YDL025C	126	..	LAHRDL	KLDNC	VVTKDGI	..	144	
YOR267C	123	..	LAHRDL	KLDNC	VMTSQGI	..	141	
PTK2	129	..	IAHRDL	KPENVL	ISKEGI	..	147	
PTK1	129	..	IAHRDL	KPENVLL	LSPDGV	..	147	
SKS1	172	..	IYHCDI	KPENVLL	LDNRDN	..	190	
YDR247W	171	..	IYHCDI	KPENLL	LD	TEDN	..	189
ELM1	167	..	CIHRDI	KPSNILL	LDEEEK	..	185	
CHK1	125	..	VAHRDI	KPENILL	LDKNGN	..	143	
YAK1	123	..	LIHCDL	KPENILL	L	CAPDK	..	141
SKY1	132	..	IIHTDI	KPENVL	MEIGDVEGIVQMVEALDKQKREAKRLQRHVS	RSSDITANDSSDEKWAECQTSMP	198	
KNS1	123	..	IIHTDL	KPENIL	ICDETHIAQKLPLKTVQSL	..	155	
YMR291W	138	..	IVHRDL	KAE	NVLFRLRVNENEKNLQ	..	164	
MPS1	119	..	IVHSDL	KPANFVL	VKG	..	135	
KSP1	185	..	IYHRDI	KPENILL	ISGIDWT	..	204	
IME2	151	..	FFHRDL	KPENILL	ITPSTQYFEKEYMNQIG	..	180	
YKL171W	127	..	IVHGDIL	KLENTLL	LQKEGK	KSDWKVFLCDFG	..	157
YGR052W	127	..	IAHRDI	KPENILL	TING	..	144	

		. . . 410 . . . 420 . . . 430 . . . 440 . . . 450 . . . 460 . . . 470 . . . 480	169
YCK1	130	.....	130
YCK2	130	.....	130
YCK3	151	.....S.....PEGKVIKS	160
HRR25	131	.....	131
PRK1	151	.....	151
ARK1	152	.....	152
YBR059C	159	.....	159
FUS3	137	.....	137
HOG1	134	.....	134
SLT2	143	.....	143
YKL161C	143	.....	143
CDC28	141	.....	141
PHO85	139	.....	139
KIN28	135	.....	135
CTK1	136	.....	136
SSN3	224	.....	224
MRK1	139	.....	139
RIM11	139	.....	139
YOL128C	146	.....	146
FUN31	147	.....	147
YOL045W	147	.....	147
PAK1	157	.....	157
YGL179C	152	.....	152
SCH9	140	.....	140
YPK2	137	.....	137
CBK1	139	.....	139
YNR047W	139	.....	139
SRA3	137	.....	137
TPK3	139	.....	139
PKA3	139	.....	139
PCK1	141	.....	141
YBR028C	163	.....	163
DBF2	137	.....	137
DBF20	137	.....	137
PKH1	140	.....	140
PKH2	140	.....	140
YDR466W	143	.....	143
IPL1	137	.....	137
YCL024W	145	.....	145
GIN4	151	.....	151
HSL1	175	.....	175
KIN4	143	.....	143
YPL141C	150	.....	150
KIN1	162	.....	162
KIN2	163	.....	163
APG1	162	.....GYHDSKSFHE..L	173
CDC5	133	.....N.YN.....	136
CMK1	135	.....KSDESP.....	141
CMK2	135	.....KSENSP.....	141
MEK1	139	.....PEPCTR.....	145
DUN1	139	.....TRENPSQV.QL	150
RCK1	153	.....G.....LDGDMQKEDE..F	165
RCK2	165	.....RSIKPKLR.....KSDDPQTKADEGIF	187
RAD53	131	.....QDDPVLVKITDFGL	145
KIN3	164	.....YNINEQVDGHEEVNSNYRDHRVNSGK	191
CDC15	134	.....	134
STE7	153	.....	153
PBS2	139	.....	139
MKK1	141	.....	141
MKK2	141	.....	141
SPS1	137	.....	137
NRK1	135	.....	135
CLA4	161	.....	161
SKM1	161	.....	161
STE20	133	.....	133
SSK22	137	.....	137
SSK2	137	.....	137
BCK1	141	.....	141
STE11	177	.....	177
HAL5	199	.....	199
YKL168C	165	.....	165
NPR1	137	.....	137
YDL214C	139	.....	139
YDL025C	144	.....	144
YOR267C	141	.....	141
PTK2	147	.....	147
PTK1	147	.....	147
SKS1	190	.....	190
YDR247W	189	.....	189
ELM1	185	.....	185
CHK1	143	.....	143
YAK1	141	CGSSSNSKRSIEKDLSKRCFRRPRRHTIITGSQPLSPISSSNFFEMRAHFCGSSHNSFSSVSGNRNIPSSINNNSINN	278
SKY1	199	.....KRR..REAS	162
KNS1	155	.....EHH	167
YMR291W	164	.....	135
MPS1	135	.....	204
KSP1	204	.....	180
IME2	180	.....	212
YKL171W	157	.....MSCHFDEKHVYRNDTFDENLSSGNSHRKRKSIEQTNLIKYPITTNFLPDDRTNDFD	212
YGR052W	144	.....	144

CKA1	169	.....	169
CDC7	144	.....	144
YKL116C	179	.....SF	181
IRE1	145	.....	145
SWE1	149	.....	149
IKS1	192	.....D	193
VPS15	133	.....	133
CAK1	173	.....	173
BUB1	147	.....AHYM	151
YGR262C	150	.....	150
SLN1	125	.....	125
CTK2	194	.....	194
CTK3	144	.....	144
YGL059W	260	.....	260
YIL042C	229	.....	229
MEC1	142	.....	142
DBF4	161	.....	161
MRK1	139	.....	139
RIM11	139	.....	139
YOL128C	146	.....	146
FUN31	147	.....	147
YOL045W	147	.....	147
PAK1	157	.....	157
YGL179C	152	.....	152
SCH9	140	.....	140
YPK2	137	.....	137
CBK1	139	.....	139
YNR047W	139	.....	139
SRA3	137	.....	137
TPK3	139	.....	139
PKA3	139	.....	139
PCK1	141	.....	141
YBR028C	163	.....	163
DBF2	137	.....	137
DBF20	137	.....	137
PKH1	140	.....	140
PKH2	140	.....	140
YDR466W	143	.....	143
IPL1	137	.....	137
YCL024W	145	.....	145
GIN4	151	.....	151
HSL1	175	.....	175
KIN4	143	.....	143
YPL141C	150	.....	150
KIN1	162	.....	162
KIN2	163	.....	163
APG1	162	.....GYHDSKSFHE..L	173
CDC5	133	.....N.YN	136
CMK1	135	.....KSDESP	141
CMK2	135	.....KSENSP	141
MEK1	139	.....PEPCTR	145
DUN1	139	.....TRRENPSQV..QL	150
RCK1	153	.....G.....LDGDMQKEDE..F	165
RCK2	165	.....RSIKPKLR.....KSDDPQTKADEGIF	187
RAD53	131	.....QDDPVLVKITDFGL	145
KIN3	164	.....YNINEQVDGHEEVNSNYIRDHRVNSGK	191
CDC15	134	.....	134
STE7	153	.....	153
PBS2	139	.....	139
MKK1	141	.....	141
MKK2	141	.....	141
SPS1	137	.....	137
NRK1	135	.....	135
CLA4	161	.....	161
SKM1	161	.....	161
STE20	133	.....	133
SSK22	137	.....	137
SSK2	137	.....	137
BCK1	141	.....	141
STE11	177	.....	177
HAL5	199	.....	199
YKL168C	165	.....	165
NPR1	137	.....	137
YDL214C	139	.....	139
YDL025C	144	.....	144
YOR267C	141	.....	141
PTK2	147	.....	147
PTK1	147	.....	147
SKS1	190	.....	190
YDR247W	189	.....	189
ELM1	185	.....	185
CHK1	143	.....	143
YAK1	141	.....	141
SKY1	199	CGSSSNSKSRSEKDLKRCFRRPRRHTIITGSQPLPSPISSSNFFEMRAHFCGSSHNSFSSVSGNRNIPSSINNNSINN	278
KNS1	155	.....KRR..REAS	162
YMR291W	164	.....EHH	167
MPS1	135	.....	135
KSP1	204	.....	204
IME2	180	.....	180
YKL171W	157	.....MSCHFDEKHVYRNDTFDENLSSGNSHRKRKSIEQTNLIKYPPTTNFLPDDRTNDFD	212
YGR052W	144	.....	144

		490	500	510	520	530	540	550	560	169
YCK1	130	..PGQPDANN	IHLIDFGMAKQYRDPKTKQHIP							160
YCK2	130	..PGQPDANK	VHLIDFGMAKQYRDPKTKQHIP							160
YCK3	161	CASSSNNDPN	LIYMVDFGMAKQYRDPRTKQHIP							193
HRR25	131	.....RRGSTV	HVVIDFGLSKKYRDFNTHRHIP							158
PRK1	151	.....LYKVC	DFGVSQVIRPPRNTQE							173
ARK1	152	.....EYKLC	DFGSVCGIIRPPRNSQE							174
YBR059C	159	.....NFKLAD	FGSTSTCTCFIVTTHQD							181
FUS3	137	.....DLKVC	DFGLARIIDESAADNSEPT	..G	..QQ					164
HOG1	134	.....DLKIC	DFGLARIQDP							149
SLT2	143	.....QLKIC	DFGLARGYSENPVENS							164
YKL161C	143	.....QLKIC	NFGLSCSYSENHKVND							164
CDC28	141	.....NLKLG	DFGLARAFG	..VPLRAY						161
PHO85	139	.....QLKLG	DFGLARAFG	..IPVNTF						159
KIN28	135	.....QTKVAD	FGLARAIP	..APHEIL						155
CTK1	136	.....NLKIT	DFGLARKMN	..SRADYT						156
SSN3	224	.....CVKIG	DLGLARKFHNMLQTLTG							247
MRK1	139	.....SEKIC	DFGSAKCLKP	..DQPN						158
RIM11	139	.....SLKLC	DFGSAKQLKP	..TEPN						158
YOL128C	146	.....IAKVC	DFGSAQRLDD	..NTEL						165
FUN31	147	.....FVKII	DFGSAAYVKS	..G						163
YOL045W	147	.....FVKLI	DFGSAAYIKSG							163
PAK1	157	.....TVKIS	DFGVSLAASSTNSSDSSESDEL							185
YGL179C	152	.....TVKIS	DFGVAMST	..ATGSTNIQSSHEQL						179
SCH9	140	.....TALC	DFGLSKADLKDR							156
YPK2	137	.....TALC	DFGLCKLNMKDNDK							155
CBK1	139	.....TKLS	DFGLSTGFHKTHDSNYYKLLQQDEATNGISKPGTYNANTTDTANKRQTMVVD	SLTMSNRQOI	208					
YNR047W	139	.....TMLSD	FDLSIQAKDSKVPVVK	..G	..SAQSTLV	168				
SRA3	137	.....IKITD	FGFAKYVPDVT							153
TPK3	139	.....IKITD	FGFAKYVPDVT							155
PKA3	139	.....IKITD	FGFAKEVQTVT							155
PCK1	141	.....IKIAD	YGLCKDEMWYGN							158
YBR028C	163	.....LVITD	FGLSKKSANDSAVDEEDPENVN							190
DBF2	137	.....TKLTD	FGLAAGTISNERIESMKIRLEKIKDLEFPAPTEKSIE	..DRRKMY	185					
DBF20	137	.....TKLTD	FGLAAGTVSNERIESMKIRLEEKNLEFPATERISIE	..DRRKIY	185					
PKH1	140	.....VKLTD	FGTAKILPEEPSNTADGKPYFDLYAKSK							173
PKH2	140	.....TKLTD	FGTAKLLN	..PTNNSVSKPEYDLSTRSK						171
YDR466W	143	.....LMITD	FGAAATID	..PSLSGDSAKFNSDSNGSKD						175
IPL1	137	.....TKLTD	FGWSIINPPENRR							155
YCL024W	145	.....TKIAD	FGMA	..ALQTDADL						162
GIN4	151	.....TKIAD	FGMA	..ALETEGKL						168
HSL1	175	.....TKIAD	FGMA	..ALELPNKL						192
KIN4	143	.....LVITD	FGFVNEFFEDNEL							161
YPL141C	150	.....LVITD	FGFVNEFCSRNEL							168
KIN1	162	.....TKIID	FGLS	..NIFYDRKQ						179
KIN2	163	.....TKIID	FGLS	..NIFYDRKQ						180
APG1	174	G.FVGIYNLP	IKIADFGFARFLPN	..TSL						200
CDC5	136	.....LKIGD	FGLA AVLANESER							154
CMK1	141	.....LVVAD	FGIAKRLKSDEEL							159
CMK2	141	.....LVIAD	FGIAKQLKGEEDL							159
MEK1	145	.....TVLAD	FGIAKDLNSNKER							163
DUN1	151	GPWDEDEIDIQ	VKIADFGLAKFTG	..EMQF						178
RCK1	166	TLGVGGGGIGL	VKLMDFGLAKKLR	..NNT						192
RCK2	188	TPGVGGGGIGI	VKLADFGLSKQIF	..SKN						214
RAD53	146	AKVQNGSFMKTF	CGTLAYVAPEV	..IRG						172
KIN3	192	RGSPMDYSQVV	VKLGD	FGLAKSLETSIQ						219
CDC15	134	.....TVKLD	DFGVSTIVNS							149
STE7	153	.....QTKLC	DFGVSKKLINS							169
PBS2	139	.....TVKLC	DFGVSGNLVAS							155
MKK1	141	.....QVKLC	DFGVSGEAVNS							157
MKK2	141	.....ETKLC	DFGVSGEAVNS							157
SPS1	137	.....VKLGD	DFGVSGHIRST	..L						153
NRK1	135	.....VKLGD	FGVAAQVNQTS	..L						152
CLA4	161	.....VKITD	FGFCARLTDKRS							178
SKM1	161	.....VKITD	FGFCVELTEKRS							178
STE20	133	.....TKLTD	FGFCAQINELNL							150
SSK22	137	.....ITKYVD	FGTARTVVGSRTRTVRNAAVQDFG							167
SSK2	137	.....VITKYVD	FGAAKKIANNGTRLASMNKIENADGEHEDVTHVSDSK	..AVK						183
BCK1	141	.....ICKIS	DFGISRKS	KDIYS						159
STE11	177	.....CVKITD	FGISKKLSPLNKK							196
HAL5	199	.....LKICD	FGTSSVFQTAWK							217
YKL168C	165	.....LKICD	FGTSSVFQTAWK							183
NPR1	137	.....VKLID	FGAAVVSYPFSK							155
YDL214C	139	.....LKLID	FGASSVFHYPLSS							157
YDL025C	144	.....LKLID	FGSAVVFQYPYED							162
YOR267C	141	.....LKLID	FGSAVVFQYPYED							159
PTK2	147	.....CKLTD	FGISDWYHVI	PHD						165
PTK1	147	.....CKLTD	FGISDWYHHGSTR							165
SKS1	190	.....AYLGD	FGLSSTKSKYLAPN							208
YDR247W	189	.....VFLCD	FGLSSTSTYIKPN							207
ELM1	185	.....VAKLS	DFGSCIFTQSLPFS	DAN						208
CHK1	143	.....LKLAD	FGLASQFRRKDGT	TLR						163
YAK1	141	.....PELKI	IDFGSSCEAR							157
SKY1	279	GIGIKNSNSF	LNSVPHSVTRMF	INEDSNDNNNNNDNSKNKNNNNNNNSNNNNNEDIMNTPLHEEQ	LADSLSTFDISNISQS	358				
KNS1	163	KGKIKILKNP	ETKIIDFGSAIFHYEYHP							190
YMR291W	168	GDFKYDLLAHD	LVADFGLAAYNTSKVN							196
MPS1	135	.....IDKII	DFGIANAVPEHTVN							154
KSP1	204	.....TKLTD	WGLATTDKTS							219
IME2	180	.....YQDNYV	IKLADFGLARHVENKNP							203
YKL171W	213	ASENLKYQFENR	KHQPFTPKGMVSSSSSHSLKHLNQ	SSSSSSSNLFHKPASQPQPQHRSPFHGRHKTTDFSNLEPEPSKYI	292					
YGR052W	144	.....DKLAD	WGHAIQSPKSN							161

CKA1	169	.....KLRLLIDWGLAEFYHVNMEYN.....	189
CDC7	144	.....RGVLVDFGLAAEQMDYKSMISSQNDYDNYANTNHDGGYSMRNHEQFCPCIMRNQYSPNSHNQTPPMVTIQ	214
YKL116C	182	RDSPIYCKQNFTELADFGGLCKKIEENNE.....	208
IRE1	145	.....AENLRLLISDFGLCKKLDGQSS.....	168
SWE1	149	.....LKLGDGFGMATHLPLEDKS.....	167
IKS1	194	N.ENDNVYDREHNSDEFFPSIVIGDLGESQLEG.....	225
VPS15	133	.....WCILTDFAAFIKPVYLPEDNPGE.....	156
CAK1	173	.....KLYIIDFGISYDMANNSQTSAP.....	196
BUB1	152	RNGEDGWENKGIYLLIDFGFRSFDMTLLPPG.....	180
YGR262C	150	.....LLHWNDDYCHGDLTSSNIVLVR.....	171
SLN1	125	.....KNDNGGLEQLQEKNIKP.....	142
CTK2	194	.....LALAILKIAIYELLDNKNWSSKR.....	216
CTK3	144	.....KLIHYDATSVTHTPS.....	159
YGL059W	260	.....QKFIQDMYFKDIPMPEFIEGDTQLSFYFLPTHLYLLG.....	299
YIL042C	229	.....DICFVKENTQRTPVLIHPPS.....	249
MEC1	142	.....DRHCENILLDIQTGKVLHVDFDCLFE.....	168
DBF4	161	.....DQTKNLIFIPHTCNDSTKS.....	180
MRK1	139	.....SEKICDFGSAKCLKP.DQPN.....	158
RIM11	139	.....SLKLCDFGSAKQLKP.TEPN.....	158
YOL128C	146	.....IAKVCDFGSAQRLDD.NTEL.....	165
FUN31	147	.....FVKIIDFGSAAYVKS.....	163
YOL045W	147	.....FVKLIDFGSAAYIKSG.....	163
PAK1	157	.....TVKISDFGVSLAASSTNSSDSSESDEL.....	185
YGL179C	152	.....TVKISDFGVAMST.ATGSTNIQSSHEQL.....	179
SCH9	140	.....TALCDFGLSKADLKDR.....	156
YPK2	137	.....TALCDFGLCKLNMKDNDK.....	155
CBK1	139	.....IKLSDFGLSTGFHKTHDSNYKKLLQQDEATNGISKPGTYNANTTDTANKRQTMVVDISLTMSNRQOI	208
YNR047W	139	.....IMLSDFDLSIQAKDSKVPVVKG.....SAQSTLV	168
SRA3	137	.....IKITDFGFAKYVPDVT.....	153
TPK3	139	.....IKITDFGFAKYVPDVT.....	155
PKA3	139	.....IKITDFGFAKEVQTVT.....	155
PCK1	141	.....IKIADYGLCKDEMWYGN.....	158
YBR028C	163	.....LVLTDFGLSKKSANDSAVDEEDPENVN.....	190
DBF2	137	.....IKLTDFGLAAGTISNERIESMKIRLEKIKDLEFFAPTEKSIE.....	185
DBF20	137	.....IKLTDFGLAAGTISNERIESMKIRLEEVKNLEFFAPTERSIE.....	185
PKH1	140	.....VKLTDFGTAKILPEEPSNTADGKPYFDLYAKSK.....	173
PKH2	140	.....IKLTDFGTAKLLN..PTNNSVSKPEYDLSTRSK.....	171
YDR466W	143	.....LMITDFGAAATID..PSLSGDSAKFNSDSNGSKD.....	175
IPL1	137	.....IKLTDFGWSIINPPENRR.....	155
YCL024W	145	.....IKIADFGMA.ALQTDADL.....	162
GIN4	151	.....IKIADFGMA.ALETEGKL.....	168
HSL1	175	.....IKIADFGMA.ALELPNKL.....	192
KIN4	143	.....LVITDFGFVNEFFEDNEL.....	161
YPL141C	150	.....LVITDFGFVNEFCSRNEL.....	168
KIN1	162	.....IKIIDFGLS.NIYDSRKQ.....	179
KIN2	163	.....IKIIDFGLS.NIFDYRKQ.....	180
APG1	174	G.FVGIYNLPILIKIADFGFARFLPN.TSL.....	200
CDC5	136	.....LKIIGDFGLAAVLANESER.....	154
CMK1	141	.....LVVADFGIAKRLKSDEEL.....	159
CMK2	141	.....LVIADFGIAKQLKGEEDL.....	159
MEK1	145	.....LVLADFGIAKDLNSNKER.....	163
DUN1	151	GPWDEDEIDIQVKIADFGLAKFTG.EMQF.....	178
RCK1	166	TLGVGGGGIGLVKLMDFGLAKKLR..NNT.....	192
RCK2	188	TPGVGGGGIGIVKLLADFGLSKQIF..SKN.....	214
RAD53	146	AKVQNGSGFMKTFCGTLAYVAPEV..IRG.....	172
KIN3	192	RGSPMDYSQVVVKLGDFGLAKSLETSIQ.....	219
CDC15	134	.....TVKLLADFGVSTIVNS.....	149
STE7	153	.....QIKLCDFGVSKKLINS.....	169
PBS2	139	.....TVKLCDFGVSGNLVAS.....	155
MKK1	141	.....QVKLCDFGVSGEAVNS.....	157
MKK2	141	.....EIKLCDFGVSGEAVNS.....	157
SPS1	137	.....VKLGDFGVSGHIRST.L.....	153
NRK1	135	.....VKLCDFGVAAQVNTQSL.....	152
CLA4	161	.....VKITDFGFCAFLTDRS.....	178
SKM1	161	.....VKITDFGFCVELTEKRS.....	178
STE20	133	.....IKLTDFGFCAQINELNL.....	150
SSK22	137	.....IKKYVDFGTARTVVGSRTRTVRNAAVQDFG.....	167
SSK2	137	.....VIKYVDFGAACKIANNGTRLASMNKIENADGEHEDVTHVSDSK.....AVK.....	183
BCK1	141	.....ICKISDFGISRKSKEIYS.....	159
STE11	177	.....CVKITDFGISKKLSPLNKK.....	196
HAL5	199	.....LKICDFGTSSVFQTAWEK.....	217
YKL168C	165	.....LKICDFGTSSVFQTAWER.....	183
NPR1	137	.....VKLIDFGAAVVSYPFSK.....	155
YDL214C	139	.....LKLIDFGASSVFHYPLSS.....	157
YDL025C	144	.....LKLIDFGSAVVFQYPYED.....	162
YOR267C	141	.....LKLIDFGSAVVFYRPFED.....	159
PTK2	147	.....CKLTDFGISDWYHVIHPD.....	165
PTK1	147	.....CKLTDFGISDWYHHGSTR.....	165
SKS1	190	.....AYLCDFGLSTKSKYLAPN.....	208
YDR247W	189	.....VFLCDFGLSTTSTYIKPN.....	207
ELM1	185	.....VAKLSDFGSCIFTQSLPFSDAN.....	208
CHK1	143	.....LKLADFGLASQFRRKDGTLR.....	163
YAK1	141	.....PELKIIDFGSSCEAR.....	157
SKY1	279	GIGIKNSNSFLNSVPHSVTRMFINEDSNDNNNNNDNSKNKNNNNNNNSNNNNNEDIMNTPLHEEQADSLSTFDISNISQS	358
KNS1	163	KGKRIKILKNPETKIIDFGSAIFHYEYHP.....	190
YMR291W	168	GDFKYDLLAHDVLADFGLAAYNTSKVN.....	196
MPS1	135	.....ILKIIDFGIANAVPEHTVN.....	154
KSP1	204	.....IKLTDWGLATTDKTS.....	219
IME2	180	.....YQDNYVTKLADFGLARHVENKNP.....	203
YKL171W	213	ASENLKYQFENRKHQPFTPKGMVSSSSSHSLKHLNQPSSSSSSNLFHKPASQPQPQHRSPFHGRHKTTFDFSNLEPEPSKYI	292
YGR052W	144	.....DIKLLADWGHAIQSPKSN.....	161

		570	580	590	600	610	620	630	640	189
YCK1	160					YREKKSLSGTAR	YMSINTHLG			181
YCK2	160					YREKKSLSGTAR	YMSINTHLG			181
YCK3	193					YREKKSLSGTAR	YMSINTHFG			214
HRR25	158					YRENKSLTGTAR	YASVNTHLG			179
PRK1	173					FNYVQHDILTNTTAQ	YRSPEMIDLFR			199
ARK1	174					LSYVQDDILKNNTTAQ	YRSPEMIDTFR			200
YBR059C	181					IALLTQNIYVHTTPQ	YRSPEMIDLFR			207
FUS3	164					SGMTEYVATR	WYRAPEVMLT			184
HOG1	149					QMTGYVSTR	YRAPEIMLT			168
SLT2	164					QFLTEYVATR	WYRAPEIMLS			184
YKL161C	164					GFIKGYITSI	WYKAPEILLN			184
CDC28	161					THEIVTL	WYRAPEVLLG			178
PHO85	159					SSEVVTL	WYRAPDVLMG			176
KIN28	155					TSNVVTR	WYRAPELLFG			172
CTK1	156					NRVITL	WYRPELLLG			172
SSN3	247					DKVVVTI	WYRAPELLLG			264
MRK1	158					VSYICSR	YRAPELMFG			175
RIM11	158					VSYICSR	YRAPELIFG			175
YOL128C	165					KTYFCR	FYRAPELLLN			182
FUN31	163					PFDVFGTI	DYAAPEVLGGNPNYEGQ			188
YOL045W	163					PFDVFGTM	DYAAPEVLGGSSYKKG			188
PAK1	185					ELAKTVGTP	AFPAPEMCLGEDAFTRYNLTK			216
YGL179C	179					LKSRLGTP	AFPAPELCSSTEKEYS			203
SCH9	156					TNTFCGTT	EYLAPELLLD			174
YPK2	155					TDTFCTGTP	EYLAPEILLG			173
CBK1	209	QTWR				KSRRLMAYSTVGTP	DYLAPEIFLY			236
YNR047W	169	DTKI				CSDGFRTNSTFVGT	EYLAPEVIRG			196
SRA3	153					YTLCTGTP	DYLAPEVVST			170
TPK3	155					YTLCTGTP	DYLAPEVVST			172
PKA3	155					WTLCGTP	DYLAPEVITT			172
PCK1	158					RTSTFCGTP	EYMAPEILKE			177
YBR028C	190					ALYSIIGTP	EYCAPEILLG			209
DBF2	186	NQLR				EKEINYANSMVGS	DYMALEVLEG			213
DBF20	186	HNMR				KTEINYANSMVGS	DYMALEVLEG			213
PKH1	173					SFVGTA	EYVSPPELLND			189
PKH2	171					SFVGTA	EYVSPPELLND			187
YDR466W	175					NQNCASFVGT	EYVSPPELLLY			196
IPL1	155					KTVCCTI	DYLSPEMVES			172
YCL024W	162					LETSCGSP	HYAAPEIVSG			180
GIN4	168					LETSCGSP	HYAAPEIVSG			186
HSL1	192					LKTSCGSP	HYASPEIVMG			210
KIN4	161					MKTSCGSP	CYAAPELVVST			180
YPL141C	168					MKTSCGSP	CYAAPELVISA			187
KIN1	179					LHTFCGSL	YFAAPELLKA			197
KIN2	180					LHTFCGSL	YFAAPELLKA			198
APG1	200					AETLCGSP	LYMAPEILN			217
CDC5	154					KYTICGTP	NYLAPEVLMG			172
CMK1	159					LYKPAGSL	GYVAPEV			174
CMK2	159					IYKAAAGSL	GYVAPEV			174
MEK1	163					MHTVVGTP	EYCAPEVGFRRNRKAYQSFSRA			193
DUN1	178					TNTLCGTP	SYVAPEV			193
RCK1	192					AKTPCGTI	EYVASEV			207
RCK2	214					TKTPCGTV	GYTAPEV			229
RAD53	172					KDTSVSPD	EYEE			184
KIN3	219					FATTYVGT	YMSPEVLMDO			239
CDC15	149					SALTLAGTL	NWMAPEILGNR			169
STE7	169					IADTFVGT	TYMSPERIQGN			189
PBS2	155					LAKTNIGCQ	SYMAPERIKSLNPD			178
MKK1	157					LATTFTGTS	FYMAPERIQGQ			177
MKK2	157					LAMTFTGTS	FYMAPERIQGQ			177
SPS1	153					KRDTFVGT	YWMAPEVVCCEVD			175
NRK1	152					RRQTMAGTP	YWMAPEVIMEGVY			174
CLA4	178					KRAMVGT	YWMAPEVVKQRE			199
SKM1	178					KRAMVGT	YWMAPEIVNQKG			199
STE20	150					KRTTMVGT	YWMAPEVVSKE			171
SSK22	167					VETKSLNEMMGTP	MYMAPEITSGSA			192
SSK2	183					NNENALLDMMGTP	MYMAPEISITGST			208
BCK1	159					NSDMTMRGTV	FYMAPEMVD			179
STE11	196					QNKRASLQGSV	FYMSPEVVK			216
HAL5	217					HVHFQSGAMGSE	PYVAPEEFIRDA			241
YKL168C	183					RVHAQKGIIGSE	PYVAPEEFVDGE			207
NPR1	155					NLVEASGIVGSD	PYLAPEVCIFA			178
YDL214C	157					QMIEANGIVGSD	PYLSPEVFFYN			180
YDL025C	162					TIVKSHGIVGSD	PYLAPELLKQT			185
YOR267C	159					GVTMAHGIVGSD	PYLAPEVITSTK			183
PTK2	165					YTSVVKTCQGMIGSP	YTPPEVMYFDAQKHYP			197
PTK1	165					PVQPCQEVRRDRRLAP	YAPPEVMFYDSKKHYD			197
SKS1	208					VCVGSSYYMAPERILYCLNTTTNGIHV				235
YDR247W	207					VCIGSSYYMAPERISFDGRVSSSKSGG				234
ELM1	208	FE				DCFQRELNKIVGTP	AFIAPELCHLGNSKR			239
CHK1	163					VSMQDQGS	PYMAPEVLYSE			183
YAK1	157					TVYTYIQSR	FYRAPEIILG			176
SKY1	359	SDTNGPYISNTMDSNSNVSTDINSPENLIQIKIADLGNACWYDEHYTNSIQTREYRSP								421
KNS1	190					PVISTR	HYRAPEIVLG			206
YMR291W	196					SLKEFVG	YLAPEIVKCKGVGEMTPDQVG			227
MPS1	154					IYRETQIGTP	NYMAPEALVAMN	YTQNS	ENQ	184
KSP1	219					MDRNVGSE	RYMSPELFDN		LDI	241
IME2	203					YTAIVSTR	WYRSPILLR			221
YKL171W	293	GSLPYASPELLRLYSDARRSKSVEMHIYDSDPSSQSEISAASSSSSSNLS				SLSSSTKASAVTNSGVTTSSPSGSSD				367
YGR052W	161					DFQIGTDN	YRAPETFSGRVSNSCFKKNFD			190

CKA1	189	..	VRVASR...	FFKCP	PELLVD	205			
CDC7	215	NGKVVHLNNVNG	VDLTGYPKNETRR	KRANRAGTR	GFRAP	EVLMMCKG	262		
YKL116C	208	..	MCTARC	GSE	DVVS	PEILMG	227		
IRE1	168	..	FRTNLNNPSGTSG	WRAP	ELLEESNNLQCQV	ETEHSSSRH	207		
SWE1	167	..	FENE	GDR	EYIAPE	IIS	183		
IKS1	225	..	ESRLGT	GCTGTLE	FTAP	DLIIQGRPVSSSTLPSR	259		
VPS15	156	..	FLFYFD	TSKRRTCY	LAPERF	NSKLYQDGK	185		
CAK1	196	..	MDSKVT	DISTGT	YKAPE	VLFG	217		
BUB1	180	..	TKFKSN	NWKADQ	QDCW	EMRAG	200		
YGR262C	171	..	DGARW	TPHLID	FGLGS	VSN	190		
SLN1	142	..	SICLT	G	A	EVNEQ	154		
CTK2	216	..	YSLFET	DEKSV	NEAY	EDIVNFYIN	240		
CTK3	159	..	DTTLID	ATTWYSV	KTER	TTKDYKES	184		
YGL059W	299	..	EILRNT	YEATMKHYIR	KLEK	PEPI	IVTVVSNDES	334	
YIL042C	249	..	QDITFT	CIPPILE	YIMTE	EVFKN	271		
MEC1	168	..	KGKRLP	VPPEIVP	FRLT	FNLLDALG	192		
DBF4	180	..	FKKM	QEKAKN	EKTEL	LKKTDDS	203		
MRK1	158	..	VSYIC	SR	YRAPE	LMFG	175		
RIM11	158	..	VSYIC	SR	YRAPE	LIFG	175		
YOL128C	165	..	KTYFC	SR	FYRAPE	LLLN	182		
FUN31	163	..	PFDV	FVGTI	DYAAPE	VLGGNPNYEGQ	188		
YOL045W	163	..	PFDV	FVGTI	DYAAPE	VLGGSSYKKG	188		
PAK1	185	..	ELAKTV	GTP	AFPAPE	MLGEDAFTRYNLTK	216		
YGL179C	179	..	LKSRL	ALGTP	AFPAPE	LCSTEKEYS	203		
SCH9	156	..	TNTFC	GTT	EYLAPE	LLLD	174		
YPK2	155	..	TDTF	CGTP	EYLAPE	ILLG	173		
CBK1	209	QTWR	KSRL	LMAYSTV	GTP	DYLAPE	IFLY	236	
YNR047W	169	DTKI	CSDG	FRTN	SFVGT	EYLAPE	VIRG	196	
SRA3	153	..	YTL	CGTP	DYLAPE	VVST	170		
TPK3	155	..	YTL	CGTP	DYLAPE	VVST	172		
PKA3	155	..	WTL	CGTP	DYLAPE	VITT	172		
PCK1	158	..	RTST	FCGTP	EFMAPE	ILKE	177		
YBR028C	190	..	ALYS	IIGTP	EYCAPE	ILLG	209		
DBF2	186	NQLR	EKEIN	YANSMV	GSP	DYMALE	EVLEG	213	
DBF20	186	HNMR	KTEIN	YANSMV	GSP	DYMALE	EVLEG	213	
PKH1	173	..	SFV	GTA	EYVS	PELLND	189		
PKH2	171	..	SFV	GTA	EYVS	PELLND	187		
YDR466W	175	..	NQNC	ASVGT	EYVS	PELLLY	196		
IPL1	155	..	KTVC	GTI	DYLS	PEMVES	172		
YCL024W	162	..	LETSC	GSP	HYAAPE	IVSG	180		
GIN4	168	..	LETSC	GSP	HYAAPE	IVSG	186		
HSL1	192	..	LKTSC	GSP	HYASPE	IVMG	210		
KIN4	161	..	MKTSC	GSP	CYAAPE	LVVST	180		
YPL141C	168	..	MKTSC	GSP	CYAAPE	LVISA	187		
KIN1	179	..	LHTF	CGSL	YFAAPE	LLKA	197		
APG1	200	..	LHTF	CGSL	YFAAPE	LLKA	198		
CDC5	154	..	AETL	CGSP	LYMAPE	ILN	217		
CMK1	159	..	KYTIC	GTP	NYLAPE	VLGM	172		
CMK2	159	..	LYKP	AGSL	GYVAPE	V	174		
MEK1	163	..	IYKA	AGSL	GYVAPE	V	174		
DUN1	178	..	MHTV	VGTP	EYCAPE	VGFRANRKAYQSF	SRA	193	
RCK1	192	..	TNTL	CGTP	SYVAPE	V	193		
RCK2	214	..	AKTP	CGTI	EYVASE	V	207		
RAD53	172	..	TKTP	CGTV	GYTAPE	V	229		
KIN3	219	..	KDTS	VSPD	EYEE	V	184		
CDC15	149	..	FATTY	VGTP	YMSPE	VLMDO	239		
STE7	169	..	SALT	LAGTL	NWMAPE	ILGNR	169		
PBS2	155	..	IADTF	VGTS	TMSPE	RIQGN	189		
MKK1	157	..	LAKTN	IGCQ	SYMAPE	RIKSLNPD	178		
MKK2	157	..	LATTFT	GTS	FYMAPE	RIQGG	177		
SPS1	153	..	LAMTFT	GTS	FYMAPE	RIQGG	177		
NRK1	152	..	KRDTF	VGTP	YWMAPE	VVCEVD	175		
CLA4	178	..	RRQT	MAGTP	YWMAPE	VIMEGVY	174		
SKM1	178	..	KRATM	VGTP	YWMAPE	VVKQRE	199		
STE20	150	..	KRATM	VGTP	YWMAPE	IVNQKG	199		
SSK22	167	..	KRTTM	VGTP	YWMAPE	VVSrKE	171		
SSK2	183	..	VETK	SLNEMMGTP	MYMAPE	TISGSA	192		
BCK1	159	..	NNEN	ALLDMMGTP	MYMAPE	SITGST	208		
STE11	196	..	NSDM	TMRGTV	FYMAPE	EMVDT	179		
HAL5	217	..	QNK	RASLQGSV	FYMSPE	VVK	216		
YKL168C	183	..	HVHF	QSGAMGSE	PYVAPE	EFIRDA	241		
NPR1	155	..	RVHA	QKGIIGSE	PYVAPE	EFVDGE	207		
YDL214C	157	..	NLVE	ASGIVGSD	PYLAPE	VCIFA	178		
YDL025C	162	..	QMIE	ANGIVGSD	PYLSPE	VFFYN	180		
YOR267C	159	..	TIVK	SHGIVGSD	PYLAPE	LLKQT	185		
PTK2	165	..	GVTMA	HGIVGSD	PYLAPE	VITSTK	183		
PTK1	165	..	YTS	PKTCQGMIGSP	YTPPE	VMYFDAKKHY	197		
SKS1	208	..	PVQP	CQEVRRDRLAP	YAPPE	VMYFYDSKKHYD	197		
YDR247W	207	..	VCVG	SSYYMAPERILY	CLNTTTNGIHV		235		
ELM1	208	FE	VCIG	SSYYMAPERIS	FDGRVSSSKSGG		234		
CHK1	163	..	DCFQ	RELNKIVGTP	AFIAP	ELCHLGNSKR	239		
YAK1	157	..	VSM	DQRCSP	FYMAPE	VLyse	183		
SKY1	359	SDTNGPYISNTMDSNSNVSTDINSPENLIQIKIADLGNACWYDEHYTNSIQTREYRSPEVLLG					421		
KNS1	190	..	PVIST	R	HYRAPE	IVLG	206		
YMR291W	196	..	SLKE	FVG	TIS	YLAPE	IVKCKGVGEMTPDQVG	227	
MPS1	154	..	IYRE	TQIGTP	NYMAPE	ALVAMN	YTQNS	ENQ	184
KSP1	219	..	MDRN	VGSE	RYMSPE	LFDSN	LDI	241	
IME2	203	..	YTA	VSTR	WYRSPE	ILLR		221	
YKL171W	293	..	GSLPY	ASPELLRYSDARRSKSVEMHIYDSDPSSQSEISA	SSSSSSSLSSSTKASAVTNSGVTTSSPSGSSSTD		367		
YGR052W	161	..	DFQI	GTDN	YRAP	ETFSGRVSN	SCFKKNFD	190	

		650	660	670	680	690	700	710	720	205
YCK1	181	.....	REQSRRD	DEALGHVFFYFLR	GHLPWQG	.....	LKAPNNKQKYEK	IGE	224	
YCK2	181	.....	REQSRRD	DEAMGHVFFYFLR	GLPFWQG	.....	LKAPNNKQKYEK	IGE	224	
YCK3	214	.....	REQSRRD	DESLGHVFFYFLR	GSLPWQG	.....	LKAPNNKQKYEK	IGM	257	
HRR25	179	.....	IEQSRRD	DESLGVVLIYFCK	GSLPWQG	.....	LKATTKKKQYDR	IME	222	
PRK1	199	.....	GLPIDEKS	DIWALGVFLYKICY	YTTPEEKS	.....	GEAGILHARYQ	240		
ARK1	200	.....	GLPIDEKS	DIWALGIFLYKLCY	YTTPEEKG	.....	GDALILSGKFE	241		
YBR059C	207	.....	CLPINEKS	DIWALGVFLYKLLF	FTTPEFMT	.....	GQFMAILHSKYE	248		
FUS3	184	.....	SAKYSRAMD	VWSGCGILAEFL	RRPIEPG	.....	RDYRHQLLLL	IFG	225	
HOG1	168	.....	WQKYDVEVD	IWSAGCIFAEMIE	GKPLFPG	.....	KDHVHQFSI	ITD	209	
SLT2	184	.....	YQGYTKAI	DVWSAGCILAELFG	GKPIFKG	.....	KDYVNQLNQ	ILQ	225	
YKL161C	184	.....	YQECTKAVD	IWSTGCGILAEFLG	RKPMFEG	.....	KDYVDHLNH	ILQ	225	
CDC28	178	.....	GKQYSTGVD	TWSTGCGIFAEMCN	RKPIFSG	.....	DSEIDQIFKI	FR	219	
PHO85	176	.....	SRTYSTSI	DIWSCGCGILAEMIT	GKPLFPG	.....	TNDEEQLKL	IFD	217	
KIN28	172	.....	AKHYTSAID	IWSVGVIFAELML	RIPYLPG	.....	QNDVDQMEVTR	213		
CTK1	172	.....	TTNYGTEVD	MWGCGLLVELFN	KTAIFQG	.....	SNELEQIES	IFK	213	
SSN3	264	.....	ARHYTPAVD	LWSVGCIFAELIG	LQPIFKGEEAK	.....	LDSKKTVPFQVNLQ	IRILE	316	
MRK1	175	.....	ATNYSNQVD	WSSACVIAELL	GKPLFSG	.....	ESGIDQLVE	IIK	216	
RIM11	175	.....	ATNYTNQID	IWSSGCVMAELL	GQPMFPG	.....	ESGIDQLVE	IIK	216	
YOL128C	182	.....	SKDYTTQID	IWSLGCIIGEMIK	GQPLFKG	.....	DSANSQLEET	IAK	223	
FUN31	188	.....	PQDIWATG	IILLYTVVF	KENPEYN	.....	IDEILE	217		
YOL045W	188	.....	PQDIWALGV	LLYTIY	KENPEYN	.....	IDEILE	217		
PAK1	216	.....	NLFRGSCISFMI	DIWAVGVTLYCLLF	GMLPEFSD	.....	FELKLFEK	IVN	261	
YGL179C	203	.....	CSS	.....	AIDIWSGVTIYCLLF	GKLPENAN	.....	SGLELFDS	IIN	241
SCH9	174	.....	ETGYTKMVD	FWSLGCVLIFEMCC	GWSPFAE	.....	NNQKMYQKIA	214		
YPK2	173	.....	QG.YTKTV	DWTLGILLYEMMT	GLPPIYDE	.....	NVPVMYKIL	212		
CBK1	236	.....	QG.YGQEC	DWWSLGAIMECLI	GWPEFCSE	.....	TPQETYRKIMN	276		
YNR047W	196	.....	NG.HTAAVD	WTLGILLIYEMFL	GFTPEKGD	.....	NTNFTFTNL	235		
SRA3	170	.....	KP.YNKSI	DWWSFGILIIYEMLA	GYTPEYDS	.....	NTMKTYEKL	ILN	210	
TPK3	172	.....	KP.YNKSV	DWWSFGVLIYEMLA	GYTPEYNS	.....	NTMKTYENILN	212		
PKA3	172	.....	KP.YNKSV	DWWSLGVLIYEMLA	GYTPEYDT	.....	TPMKTYEKL	ILQ	212	
PCK1	177	.....	QE.YTKAV	DWWSLGVLLYQMLL	CQSPFSGD	.....	DEDEVFNAL	ILT	217	
YBR028C	209	.....	KA.YSQNC	DWWSLGCCLLYDMLV	GKPPYTG	.....	NHKVIINKI	IQ	249	
DBF2	213	.....	KK.YDFTV	DWWSLGCMLFESLV	GYTPESGS	.....	STNETYDNL	RR	253	
DBF20	213	.....	KK.YDFTV	DWWSLGCMLFESLV	GYTPESGS	.....	STNETYENLRY	253		
PKH1	189	.....	NY.TDSRC	DIWAFGCILYQMLA	GKPPFKAA	.....	NEYLTFOQVMK	229		
PKH2	187	.....	SF.TDYRC	DIWAFGCILFQMLA	GKPPFKAT	.....	NEYLTFOQVMK	227		
YDR466W	196	.....	NQ.CGYS	DIWALGCMIIYQFVQ	GKPPFRGE	.....	NELKTFEK	IVA	236	
IPL1	172	.....	RE.YDHTI	DAWALGVLAPELLT	GAPPEEE	.....	MKDDTTYKRIA	212		
YCL024W	180	.....	LPYEGFAS	DWWSLGCVLIFALLT	GRLPFDEEN	.....	GNVRDLLLKVQK	223		
GIN4	186	.....	IPYQGFAS	DWWSLGCVLIFALLT	GRLPFDEED	.....	GNIRTLLLKVQK	229		
HSL1	210	.....	RPYHGGPS	DWWSLGCVLIFALLT	GHLPENDD	.....	NIKKLLLVQS	251		
KIN4	180	.....	KAYEARKAD	VWSLGCVLIIYAMLA	GYPWDHDDH	.....	ENPTGDDIARLYNY	ITQ	228	
YPL141C	187	.....	EPYEARKAD	IWSLGCVLIIYAILA	GYPWDDDDP	.....	NNPEGSDIGRLYNY	INS	235	
KIN1	197	.....	NPYTGPEDV	DWWSFGVVLVFLVC	GKVPFDE	.....	NSSVLHEKIK	Q	238	
KIN2	198	.....	QPYTGPEVD	IWSEGIIVLYVLVC	GKVPFDE	.....	NSSILHEKIK	239		
APG1	217	.....	YQKYNAKAD	LWSVGTVVVFEMCC	GTPPFRAS	.....	NHLELFFKIKR	258		
CDC5	172	.....	KHSGHSFEVD	IWSLGVMLIYALLI	GKPPFQAR	.....	DVNTIYERIKC	214		
CMK1	174	.....	LTQDGHGKPC	DIWSTGVITYTLLC	GYSAPRAE	.....	RVQDFLDECT	217		
CMK2	174	.....	LTQDGHGKPC	DIWSTGVITYTLLC	GYSAPFAE	.....	SVGEFMEECTA	217		
MEK1	193	.....	ATLEQRGYDSK	DIWSTGVITHIMLT	GISPEYGD	.....	GSPERSIQNA	237		
DUN1	193	.....	LTKKGYTSKVD	LWSAGVILYVCLC	GFPPESDQ	.....	LGPSSLEKQ	I	235	
RCK1	207	.....	FTSKRYSMKV	DWSTGCVLFTLLC	GYPPEYK	.....	NEKTLLEKI	248		
RCK2	229	.....	VKDEHYSMKV	DWSTGCVLFTMLC	GFPPEYDE	.....	KIDTLTEKI	270		
RAD53	184	.....	RNEYSSLVD	MWSMGLVYVILT	GHLPFSGS	.....	TQDQLYKIL	223		
KIN3	239	.....	PYSPLSD	IWSLGCVFIFMCS	LHPPEQA	.....	KNYLELQTIKNGKCD	282		
CDC15	169	.....	GASTLS	DIWSTGATVVEMLT	KNPPEYHN	.....	LTDANIYYAVEN	DTY	211	
STE7	189	.....	VYSIKGD	VWSLGLMIIELV	GEFPLGGH	.....	NDTPDGILDLLQRI	VNE	234	
PBS2	178	.....	RATYTVQS	DIWSTGLSILEMAL	GRYP	.....	PETYDNIFSQLSAIV	DG	223	
MKK1	177	.....	PYSVTS	DWWSLGLTILEVAN	GKPPCSSE	.....	KMAANIAPFELLM	WILT	222	
MKK2	177	.....	PYSVTC	DWWSLGLTILEVAG	GRFPEESD	.....	KITQNVAPIELLM	ILT	222	
SPS1	175	.....	GYNEKAD	IWSLGITTYELLK	GLPPLSK	.....	Y.DPMKVMNTNLPKR	215		
NRK1	174	.....	YDTKVD	IWSLGITTYEIA	GNPPEYCD	.....	V.EALRAMQLI	IKS	213	
CLA4	199	.....	YDEKID	VWSLGITTIEMLE	GEPPYLN	.....	E.DPLKALYLIATN	238		
SKM1	199	.....	YDEKVD	VWSLGITTIEMIE	GEPPYLN	.....	E.DPLKALYLIATN	238		
STE20	171	.....	YGPKVD	IWSLGITTIEMIE	GEPPYLN	.....	E.TPLRALYLIATN	210		
SSK22	192	.....	VKGKLGAD	DWALGCVVLEMAT	GRRPWSN	.....	LDNEWAIMYHVAAG	235		
SSK2	208	.....	TKGKLGAD	DWALGCVVLEMIT	GRRPWAN	.....	LDNEWAIMYHVAAG	251		
BCK1	179	.....	KQGYSAKV	DIWSTGCVVLEMA	GKPPWSN	.....	LEVVAAMFKIGKSK	222		
STE11	216	.....	QTATTAKAD	IWSTGCVVIEFT	GKHPFDP	.....	FSQMQAIFKIG	TN	258	
HAL5	241	.....	EYDPRLV	DCWSCGIVYCTMVM	GQYLWKIAI	.....	PEKDSLFLKFS	SFLS	283	
YKL168C	207	.....	YDPRLI	DCWSCGVVYITMIL	GHYLVKVAS	.....	REKDMSYDEFYK	249		
NPR1	178	.....	KYDPRPV	IWSSAIIIFACMIL	KKFPWKIP	.....	KLRDMSYFKLFC	219		
YDL214C	180	.....	EYDPRAL	DWWSGIIFFCMIT	RKFPWKYP	.....	KVKDVQFKAFCS	221		
YDL025C	185	.....	SYDPRVAD	WSTAIIFCYMVL	KRFPWKAP	.....	KKSFSNFRFLTE	226		
YOR267C	183	.....	SYDPQCV	DIWSTGIIYCMVL	KRFPWKAP	.....	RDSDDNFRRLYCM	224		
PTK2	197	.....	EKFQKPYNP	LAMDSYALGIMLITMIN	NIPFIDSCN	.....	TDARFREFEVSYDNFIN	250		
PTK1	197	.....	TELQPPYDPRAL	DCYGLGIIILMTLVN	NVTFELSCS	.....	FDTGFRDYCDAYENFIR	250		
SKS1	235	.....	DECCSSLPTD	TGDIWSTGIIILINLTC	IRNPWLKAH	.....	QKEDNTYFQHFAN	282		
YDR247W	234	.....	HKLGVKCPSC	NGDIWSTGIIILINLTC	IRNPWLKAD	.....	KTEDNTYFQHFAN	281		
ELM1	239	.....	DFVTDGFKL	DIWSTGVTLYCLLY	NEPPEFGE	.....	NEFETYHKI	IE	281	
CHK1	183	.....	EGYYADRT	DIWSTGILLFVLLT	GQTPWELP	.....	SLNEDVFFIE	225		
YAK1	176	.....	IPYSTSI	DWWSLGCIVAEFL	GIPFPGASEYNQL	TRIIDTLGYPPSWMIDMGKNSGKFMKK	LAP	241		
SKY1	421	.....	APWCGAD	IWSTACLI FELIT	GDPLFEPDE	.....	GHSYTKDDDDHIAQ	IKIE	467	
KNS1	206	.....	LGWSFPC	DIWSTGACVLELVI	GESLYPIHENLEHMMAMQ	RING	.....	TPFPTDIIDKMFYKSKH	266	
YMR291W	227	.....	KLDKYGCPV	DIWALGVLTIFYMAF	GITPFDCT	.....	TTDETLECT	ISK	269	
MPS1	184	.....	HEGNKWKVGRPS	DWWSGCGIIYQMIY	GKPPYGS	.....	FQGGNRLLA	IMN	229	
KSP1	241	.....	KERKEPYDCAK	VDLWAMGIVFLNIV	HKNPEFSIAN	.....	QSDKSFCYFAA	287		
IME2	221	.....	SGYYSKPL	DIWAFGCVAVEVTV	FRALFPG	.....	ANEIDQIWK	ILE	262	
YKL171W	367	.....	FPCIVSPLGPAS	DIWALGVMLYTMILV	GKLPENHEFEPR	.....	LRSLLKVGGEFDRFSL	420		
YGR052W	190	.....	RSSAPLYNTYQAD	IYWSLGCATIFYLMF	GDCLFRVSK	.....	SKKVQHLKNFDEFEX	240		

CKA1	205	.....YRMYDYSLDLWSFGTMLASMIFF.KREFPFHG.....TSNTDQLVKIIVK	247
CDC7	262	.....AQSTKIDLWSVGVIILSLLG.RRPFMFQS.....LDDADSLLELCT	302
YKL116C	227	.....VPYDGHLSDTWALGVILYSLFE.DRPFDPDP.....PNASARQSRRA	268
IRE1	208	TVVSSDSFYDPFTKRLTRSIDFSMCCVFFIYILSKKHFFGDKYS.....RESNIIRGIFS	264
SWE1	183	.....DCTDYKADIFSLGLMIVEIAANVVLSDNGNAWHKLRSGDLS DAG.....RLSSTDHSESLSFSDITK	246
IKS1	259	.....SSHITYNEYTFASDMYSLGMICYFIVF.GELPFEPQLD.....IVDLKVRIKNFRF	308
VPS15	185	.....SNGRLTKEMDIFSLGCVIAEIAEGRPIFNLS.....QLFKYKSN SYD	229
CAK1	217	.....VKCYDGGVDVWSLLIISQWFQRETSRMGHVPAMIDD.....GSDDMNSDGSDFRLICS	271
BUB1	200	.....KPWSYEADYVGLAGVIHSLHFGKFETIQQLQNGRCKLKN.....PFKRYWKKEIWGVIFD	255
YGR262C	190	.....LVEDKGVLDVLERAILSTHSHAEKYN.....AWIMEGFEEVYR	230
SLN1	154	.....NSLSSKHRSRHEGLGSVNLDRL..PFLQS.....TGATSSRNIP	192
CTK2	240	.....SFDMDCLQRHLPADLPLTGVERFMELKKNAGPESG.....LPQIPDHLLN	285
CTK3	184	.....LQRTESLLKDRDLKLAFFQFNSDTTAINPDLQTQP.....TNANILLHRMEA	233
YGL059W	334	.....YLFRISSDKAGGVLHDDENLWSFGKSKERAQESLNNPHKLPG.....LQTVSIYDEVHS	387
YIL042C	271	.....AFEAQIALGKEHMPIEINLLKPDDELYLRIRDHG.....GGITPEVEALMFNYSYS	323
MEC1	192	.....IIGTEGTFKKSSSEVTLALMRKNEVALMN.....VIETIMYD	228
DBF4	203	.....AVQDVRNEHADQTEKNSILLNETETKEPPLKE.....EKENKQSI AE	246
MRK1	175	.....ATNYSNQVDVWSSACVIAELL..GKPLFSG.....ESGIDQLVEI IK	216
RIM11	175	.....ATNYTNQIDVWSSGCVMAELL..GQPMFPG.....ESGIDQLVEI IK	216
YOL128C	182	.....SKDYTTQIDVWSLGCII GEMIK..GQPLFKG.....DSANSQLEETAK	223
FUN31	188	.....PQDIWATGILLYTVVF.KENPEYN.....IDEILE	217
YOL045W	188	.....PQDIWALGVLLYTIY.KENPEYN.....IDEILE	217
PAK1	216	.....NLFRGSCISFMDI WAGVTLTYCLLF..GMLPFPSD.....FELKLFKEIVN	261
YGL179C	203	.....CSS.....AIDVWSGVTIYCLLF..GKLPENAN.....SGLELFDSIIN	241
SCH9	174	.....ETGYTKMVDVWSLGCVLIFEMCC..GWSPEFAE.....NNQKMYQKIA.	214
YPK2	173	.....QG.YTKTVDWTLGILLYEMMT..GLPPIYDE.....NVPVMYKKIL.	212
CBK1	236	.....QG.YGQECDWWSLGAIMYECLI..GWPFECSE.....TPQETYRKIMN	276
YNR047W	196	.....NG.HTAAVDWTLGILLIYEMLF..GFTPEKGD.....NTNETFTNIL.	235
SRA3	170	.....KP.YNKSIDVWSFGILIIYEMLA..GYTPFYDS.....NTMKTYEKLIN	210
TPK3	172	.....KP.YNKSVDWWSFGVLIYEMLA..GYTPFYNS.....NTMKTYENILN	212
PKA3	172	.....KP.YNKSVDWWSLGCVLIIYEMLA..GYTPFYDT.....TPMKTYEKLQ	212
PCK1	177	.....QE.YTKAVDWWSLGCVLIIYEMLA..CQSPFSGD.....DEDEVFNALIT	217
YBR028C	209	.....KA.YSQNCDWWSLGCCLLYDMLV..GKPPYTGSG.....NHKVIINKIQ	249
DBF2	213	.....KK.YDFTVDVWSLGCMLFESLV..GYTPFSGS.....STNETYDNLRR	253
DBF20	213	.....KK.YDFTVDVWSLGCMLFESLV..GYTPFSGS.....STNETYENLRY	253
PKH1	189	.....NY.TDSRCDVWSLGCILYQMLA..GKPPFKAA.....NEYLTFQKVMK	229
PKH2	187	.....SF.TDYRCDVWSLGCILYQMLA..GKPPFKAT.....NEYLTFQKVMK	227
YDR466W	196	.....NQ.CGYSIDVWSLGCMIYQFVQ..GQPPFRGE.....NELKTFKEIVA	236
IPL1	172	.....RE.YDHTIDVWSLGCILYQMLA..GAPPEEE.....MKDTTYKRIAA	212
YCL024W	180	.....LPYEGFASDVWSLGCVLIFALLT..GRLPFDEEN.....GNVRDLLLKVQK	223
GIN4	186	.....IPYQGFASDVWSLGCVLIFALLT..GRLPFDEED.....GNIRTLLLKVQK	229
HSL1	210	.....RPYHGGPSDVWSLGCVLIFALLT..GHLPEFND.....NIKKLLLVQS	251
KIN4	180	.....KAYEARKADVWSLGCVLIIYAMLA..GYLPWDDH.....ENPTGDDIARLYKITQ	228
YPL141C	187	.....EPYEARKADVWSLGCVLIIYAMLA..GYLPWDDH.....NNPEGSDIARLYKINS	235
KIN1	197	.....NPYTGPEDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	238
KIN2	198	.....QPYTGPEVDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
APG1	217	.....YQKYNADVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
CDC5	172	.....KHSGHSFEVDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
CMK1	174	.....LTQDGHGKPCDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
CMK2	174	.....LTQDGHGKPCDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
MEK1	193	.....ATLEQRGYDSKCDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
DUN1	193	.....LTKKGYTSKVDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
RCK1	207	.....FTSKRYSMKVDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
RCK2	229	.....VKDEHYSMKVDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
RAD53	184	.....RNEYSSLDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
KIN3	239	.....PYSPLSDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
CDC15	169	.....GASTLSDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
STE7	189	.....VYSIKGDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
PBS2	178	.....RATYTVQSDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
MKK1	177	.....PYSVTSDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
MKK2	177	.....PYSVTSDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
SPS1	175	.....GYNEKADVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
NRK1	174	.....YDTKVDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
CLA4	199	.....YDEKIDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
SKM1	199	.....YDEKIDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
STE20	171	.....YGPKVVDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
SSK22	192	.....VKGKLGADVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
SSK2	208	.....TKGKLGADVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
BCK1	179	.....KQGYSAKVDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
STE11	216	.....QTATTAKADVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
HAL5	241	.....EYDPRLDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
YKL168C	207	.....YYDPRLDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
NPR1	178	.....KYDPRVDVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
YDL214C	180	.....EYDPRALVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
YDL025C	185	.....SYDPRVADVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
YOR267C	183	.....SYDPQCVDSVWSLGCVLIIYAMLA..GKVPFDEE.....NSSLVHEKIKK	239
PTK2	197	.....EKFPKPYNPPLAMDSYALGIMLTIMIN.NIIPFIDSCN.....TDARFREFEVSYDNFIN	250
PTK1	197	.....TELQPPYDPRALDCYGLGIIIMTLTVN.NVTFELES CS.....FDTGFRDYCDAYENFIR	250
SKS1	235	.....DECCSSLPDTGDIWSLGCILINLTC.IRNPWLKAD.....QKEDNTYQHFAN	282
YDR247W	234	.....HKLGVKVPSCNGDLWSLGCILINLTC.IRNPWLKAD.....QKEDNTYQHFAN	282
ELM1	239	.....DFVTDGFKLDVWSLGCILINLTC.IRNPWLKAD.....QKEDNTYQHFAN	282
YAK1	183	.....EGYYADRTDIWSLGCILINLTC.IRNPWLKAD.....QKEDNTYQHFAN	282
CHK1	176	.....IPYSTSIDVWSLGCILINLTC.IRNPWLKAD.....QKEDNTYQHFAN	282
SKY1	421	.....APWGCGADVWSLGCILINLTC.IRNPWLKAD.....QKEDNTYQHFAN	282
KNS1	206	.....LGWSFPCDIWSLGCILINLTC.IRNPWLKAD.....QKEDNTYQHFAN	282
YMR291W	227	.....KLDKYGCPVDVWSLGCILINLTC.IRNPWLKAD.....QKEDNTYQHFAN	282
MPS1	184	.....HEGNKWKVGRPSDMWSLGCILINLTC.IRNPWLKAD.....QKEDNTYQHFAN	282
KSP1	241	.....KERKEPYDCAKVDLWAMGIVFLNIVF.HKNPEFSIAN.....QSDKSFCYFAA	287
IME2	221	.....SGYYSKPLDIWAGCVAVEVTV.FRALFPG.....ANEIDQIWKILE	262
YKL171W	367	.....FPCIVSPLGPASDIWAGCVAVEVTV.FRALFPG.....ANEIDQIWKILE	262
YGR052W	190	.....RSSAPLYNTYQADVWSLGCILINLTC.IRNPWLKAD.....QKEDNTYQHFAN	282

			730	740	750	760	770	780	790	800	247
YCK1	225	KKRSTNVYDLAQQ						LPVQFGRY	LEIVR		250
YCK2	225	KKRLTNVYDLAQQ						LPIQFGRY	LEIVR		250
YCK3	258	TKQKLNPPDDLLNN						AIPYQFATY	LKYAR		285
HRR25	223	KKLNVSVETLCSG						LPLEFQEY	MAYCK		248
PRK1	241	YPSFP						QYSDRLKN	LIR		256
ARK1	242	FPLYP						NYSEQLKGL	LIR		257
YBR059C	249	FPVN						KYSSKLIN	LII		263
FUS3	226	IIGTPHSDNDLRCIESPRAREYIKSLPMYPAAPLEKMFP						RVNPKGIDL	LQR		276
HOG1	210	LLGSPPKD.VINTICSENTLKFTVTSLPHRDPPIPFSEFVK						TVEPDAVDL	LEK		259
SLT2	226	VLGTPPDE.TLRRIGSKNVQDYIHQLGFIPKVPFVNLYP						NANSQALDL	LEQ		275
YKL161C	226	ILGTPPEE.TLQEIASQKVYNYIFQFGNIPGRSFESILP						GANPEALELL	LKK		275
CDC28	220	VLGTPNEAIWPDIVYLPDFKPSFPQWRRKDLQSVVP						SLDPRGIDL	LDK		267
PHO85	218	IMGTPNESLWPSVTKLKPKYNPNIIQORPPRDLRQVLQPHTKE						PLDGNLMDFL	HG		270
KIN28	214	ALGTPDTRDWPEVSSFMTYN.KLQIYPPPSRDELKR.FI						AASEYALDF	MCG		263
CTK1	214	IMGTPTINSWPTLYDMPWFFMIMPOQTTKYVNNFSEKFKSVL						PSSK.CLQLAIN			266
SSN3	317	VLGTPDQKIWPYLEKYPEYDQIT.KFPKYRDNLATWYHSAG						GRDKHALSL	LYH		368
MRK1	217	IMGITPKD...EISGMNPNYEDHVFPNIKPIITLAEIFK						AEDPDTLDLL	TK		263
RIM11	217	ILGTPSKQ...EICSMNPNYMEHKFPQIKPIPLSRVFK						KEDDQTFVEF	LAD		263
YOL128C	224	LLGRFPKS...SIK.NSQELQDSLNDQFKKKFMHWF						SIEFFDVFE	LK		268
FUN31	218	GDLKFNNAAEEVS						EDCIELIK			237
YOL045W	218	GELRFDKSEHVS						EECISLIK			237
PAK1	262	DPLKFPTTFKEIQSNKV						SKVSCEEEYEMAKDL	LL		294
YGL179C	242	KPLEFSPSYBEMLNGAT						SGIT.MEETYDAKD	LLK		273
SCH9	214	.FGKVKFPR						DVLSQEGRSFVK			234
YPK2	212	.QQPLLFP						DGFPDPAAKDL	LI		231
CBK1	277	FEQTLQFPD						DIHISYEADLI			297
YNR047W	235	.KNEVSFPNN						NEISRTCKDL	IK		256
SRA3	210	.AELRFP						PFFNEDVKDL	LS		228
TPK3	212	.AELKFP						PPFHPDAQDL	LK		230
PKA3	212	.GKVVP						PYFHPDVVDL	LS		230
PCK1	217	.DEPLYP						IDMAGEIVQIF	Q		235
YBR028C	250	NKQGPPIP						FYLSEGMKDIL	LN		269
DBF2	254	WKQTLRRPRQ						SDGRAAFSDRTW			275
DBF20	254	WKQTLRRPRT						EDRRAAFSDRTW			275
PKH1	230	IQYAFTAG						FPQIVKDL	VK		247
PKH2	228	VQYAFTPG						FPLIIRD	VK		245
YDR466W	237	LDYPWGPNNRINN						STSPINPLVIN	LQ		263
IPL1	213	LDIKMPSN						ISQDAQDL	IL		230
YCL024W	224	GQFEMPNDTE						ISRDAQDL	LIG		243
GIN4	230	GEFEMPSDDE						ISREAQDL	LIR		249
HSL1	252	GKYQMPSN						LSSEARDL	IS		269
KIN4	229	TPLKFPEY						ITPIPRDL	LR		246
YPL141C	236	TPLKFPDY						ILPIPRDL	LR		253
KIN1	239	GKVEYPQH						LSIEVISL	LS		256
KIN2	240	GKVDYPSH						LSIEVISL	LT		257
APG1	259	AND.VITFP						SYCNIEPEL	KELIC		280
CDC5	215	R...DFSFP						RDKPISDEG	KILIR		234
CMK1	218	GEYPVKFHRP						YWDSVSNKAKQ	FIL		241
CMK2	218	SRYPVTFHMP						YWDNISIDVKR	FIL		241
MEK1	238	KIGKLNFKLK						QWDIVSDNAKS	FVK		261
DUN1	236	LQAKYAFYSP						YWDKIDDSVL	LHLIS		259
RCK1	249	SRGDYEFLLAP						WWDNISGAKNA	VT		272
RCK2	271	SRGEYTFCLKP						WWDEISAGAKNA	VA		294
RAD53	224	GRGSYHEGPL						KDFRISEARD	FID		247
KIN3	283	TVP...E						YYSRGLN	AIH		297
CDC15	212	YPP...S						SFSEPLKDF	LS		226
STE7	235	PSPRLPKDR						IYSKEMTD	FVN		254
PBS2	224	PPPRLPSD						KFSSDAQDF	V		242
MKK1	223	FTPELKDEPESN						IIWSPSFKS	FID		246
MKK2	223	FSPQLKDEPELD						ISWSKTFRS	FID		246
SPS1	216	KPPKLQG						PFSDAAKDF	VA		233
NRK1	214	KPPRLEDR						SYSTSLKEF	IA		232
CLA4	239	GTPKLKHPE						SLSLKIKR	F		258
SKM1	239	GSPKLRHPE						SVSKQTKQ	FLD		258
STE20	211	GTPKLKEPE						NLSSSLKK	FLD		230
SSK22	236	RIPQLPNRD						EMTAAGRAL	L		255
SSK2	252	HTPQFP TKD						EVSSAGMK	FLE		271
BCK1	223	SAPPPEDTLP						LISQIGRN	F		244
STE11	259	TTPEIPS						WATSEGN	FLR		276
HAL5	284	EIKDDGQFYLFEE						LRHVSSSELNRL	KIALY		313
YKL168C	250	EMQRKNQFRVFEE						LKHVNSELATN	RKIALY		279
NPR1	220	GRDCDLSLSSLVTRTPDPPSYDESHSTEKKKPESSSNVSDPNN					VNIGPQRL	LHNSLPEETQH	IVG		283
YDL214C	222	GRGVSSFKDLVTR...PATDDSNND...NDGYEEGV					IDMGPNFIL	HLRHPETH	KIMR		273
YDL025C	227	EPED...DDIVRG...P						NKILRLLPRHS	RTIG		254
YOR267C	225	PDDIE...HDYVES...ARHHEELKE						RKEKRQRF	LNHSDCSAINQ		264
PTK2	251	HQNPHFRDKGCHKPG						GSEYSLARN	FKNTDATRIAWR		287
PTK1	251	LHDRAFRNRAITAR						GREWSITWLEIS	RTDMHLAWHGG		287
SKS1	283	DNN						VLKKILPIS	DELFTVLT		302
YDR247W	282	DPN						ILKQILPL	SDDFYSL		301
ELM1	282	VSLSSKINGN						TLNDLVIKR	LLEKDV		306
CHK1	226	NDGNLNWG						PWSKIEFTH	LNLLR		247
YAK1	242	EESSSSTQKHRMKTIEEFCREYNIVEKPSKQYFKWRKLDPDIIRNYRYPKSIQNSQELIDQEMQNRECLIHFL									313
SKY1	468	LLGELPSYLLRNGKYTRTFNNSRGLLRNISKLFWP						LEDVLTEKYKFSKDEAKEISDFL			526
KNS1	267	KLGNSPSDLNSTVIKHFDRKTLSLQWPEKNKRGDTITTEKSMKRVLQSCDRLDIYISKVLKQDYGDSLINWNLPPEKNW									346
YMR291W	270	CDYVVDEQMMHDP						KYEQFWN	FVQ		292
MPS1	230	PDVKIPPFPEHTSNN						EKIPKSAI	ELMK		255
KSP1	288	NREALFDVFS						TMAYDFFQ	VLR		308
IME2	263	VLGTPIKRSDFVNTNHTATPPPGGFWDASNLVHKLN						LKLPHYVEGSS	LDHLLSSSQ		318
YKL171W	421	AQVCKPDRKKNE						GTIGQGLY	DTVIG		445
YGR052W	241	DPFAFIYRKVVVPRLSGCGYNDEEDLHVSLOHTROYIWQDLDPDIYDVFLCKIMVDTLLKVSNAKERSMENFIN									313

CKA1	248	VLGTSDFEKYLKYEITLPREFYDMDQYIRKPWHRFIN.....	DGNKHLSGNDEI	LDLIDN.....	303
CDC7	303	IFGWKELRCCAALHGLGFEASGLIWDKPNGYSNGLKEFYDLLNKECTIG...	TFPEYSVAFETFGFL	QQELHDRMSIEP	379
YKL116C	269	TSHRIARFDWR.....	WYRLSDYKTNV	G.....	291
IRE1	265	LDEMCKLHDR.....	SLIAEATDLIS	.....	285
SWE1	247	VDTNDLFDPERDNISGNSNAGTSTVHNNSNINNNPMNNGN.....	DNNNVNTAATKNRL	LHKSSKIPAWVP	314
IKS1	309	DTEGMIEKHQAMK.....	LKPIDRRIFHLM	D.....	334
VPS15	230	VNREFLMEEMN.....	STDLRNLVLD	.....	250
CAK1	272	IFEKLGIPSIQKWEVAQHGSVDFAVGMFGADGDGKYVLDQEKDVQISIVERNMPRLDEIADVKVKQKFIN.....	QALPMTEKIVEIRN	.....	342
BUB1	256	LLLNSGQASN.....	AKKLKEVTK	.....	279
YGR262C	231	EQGAKG.....	TSVKILVVEDN	.....	245
SLN1	193	VKDDDKNE.....	NNVQERRYVLS	.....	211
CTK2	286	ADPYITITRD.....	TSWIERSNDILDESE	.....	306
CTK3	234	DRELHKRSKE.....	ITLKPYMHTSLEP	.....	260
YGL059W	388	HTKYNKSLKSLQS.....	FGLPMCKTYLELFGG	.....	413
YIL042C	324	THTQQSADSESTDLPGEQINNVSIMG.....	VLNRKIRGIDPDQG	.....	364
MEC1	229	RNMDHSIQKALK.....	KELAATPKLN	.....	254
DBF4	247	ESNKYPQR.....	AEDPDTLDDLTK	.....	264
MRK1	217	IMGIPTKD...EISGMNPNYEDHVFPNIKPIITLAEIFK.....	KEDDQTVFELAD	.....	263
RIM11	217	ILGTPSKQ...EICSMNPNYMEHKFPQIKPIPLSRVFK.....	SIEFFDVEFLK	.....	263
YOL128C	224	LLGRFPKS...SIK...NSQELQDSLNDQKFKKFMHWF.....	EDCIELTK	.....	268
FUN31	218	GDLKFNNAEVVS.....	EECISLTK	.....	237
YOL045W	218	GELRFDKSEHVS.....	SKVSCEEEYEMAKDLL	.....	237
PAK1	262	DPLKFPTFKIQQSNKV.....	SGIT.MEEYTDKADLLK	.....	294
YGL179C	242	KPLEFFSYEEMNGAT.....	DVLSQEGRSFVK	.....	273
SCH9	214	.FGKVKFP.....	DGFDPAAKDLLI	.....	234
YPK2	212	.QQPLLFP.....	DIHISYEAEDLI	.....	231
CBK1	277	FEQTLQFPD.....	NEISRTCKDLTK	.....	297
YNR047W	235	.KNEVSFPNN.....	PFFNEDVKDLLS	.....	256
SRA3	210	.AELRFP.....	PFFHDPDAQDLLK	.....	228
TPK3	212	.AELKFP.....	PFHHPDVVDLLS	.....	230
PKA3	212	.GKVVP.....	IDMAGEIVQIFQ	.....	230
PCK1	217	.DEPLY.....	FYLSEGMKDILN	.....	235
YBR028C	250	NKQGPPIP.....	SDGRAAFSDRTW	.....	269
DBF2	254	WKQTLRRPRQ.....	EDRRAAFSDRTW	.....	275
DBF20	254	WKKTLRRPRT.....	FPQIVKDLVK	.....	275
PKH1	230	IQYAFTAG.....	FPLIIRDLVK	.....	247
PKH2	228	VQYAFTPG.....	STSPINPLVINLVQ	.....	245
YDR466W	237	LDYPWGPNNRINN.....	ISQDAQDLLIL	.....	263
IPL1	213	LDIKMPSN.....	ISRDAQDLIG	.....	230
YCL024W	224	GQFEMPNDTE.....	ISREAQDLIR	.....	243
GIN4	230	GEFEMPSDDE.....	LSSEARDLIS	.....	249
HSL1	252	GKYQMPSN.....	ITPIPRDLIR	.....	269
KIN4	229	TPLKFPEY.....	ILPIPRDLIR	.....	246
YPL141C	236	TPLKFPDY.....	LSIEVISLIS	.....	253
KIN1	239	GKVEYPOH.....	LSIEVISLIT	.....	256
KIN2	240	GKVDYPH.....	SYCNIEPELKEIC	.....	257
APG1	259	AND..VITFP.....	RDKPISDEGKILIR	.....	280
CDC5	215	R...DFSFP.....	YWDSVSNKAKQFIL	.....	234
CMK1	218	GEYPVKFHRP.....	YWDNISIDVKRFL	.....	241
CMK2	218	SRYPVTFHMP.....	QWDIVSDNAKSFVK	.....	241
MEK1	238	KIGKLNFKLK.....	YWDKIDDSVLHLIS	.....	261
DUN1	236	LQAKYAFYSP.....	WWDNISAGKNAV	.....	259
RCK1	249	SRGDYEFLLAP.....	WWDEISAGAKNAVA	.....	272
RCK2	271	SRGEYTFLLKP.....	KDFRISEEARDFID	.....	294
RAD53	224	GRGSYHEGPL.....	YYSRGLNATH	.....	247
KIN3	283	TVP.....E.....	SFSEPLKDFLS	.....	297
CDC15	212	YPP.....S.....	IYSKEMTDFVN	.....	226
STE7	235	PSPRLPKDR.....	KFSSDAQDFVS	.....	254
PBS2	224	PPRLPSD.....	IIWSPSFKSFID	.....	242
MKK1	223	FTPCLKDEPESN.....	ISWSKTFRSFID	.....	246
MKK2	223	FSPQLKDEPELD.....	PFSDAAKDFVA	.....	246
SPS1	216	KPPKLQG.....	SYSTSLKEFTA	.....	233
NRK1	214	KPPRLDR.....	SLSLKIKRFLS	.....	232
CLA4	239	GTPKLKHPE.....	SVSKQTKQFLD	.....	258
SKM1	239	GSPKLKHPE.....	NLSSSLKKFLD	.....	258
STE20	211	GTPKLKEPE.....	EMTAAGRALLG	.....	230
SSK22	236	RIPQLPNRD.....	EVSSAGMKFLE	.....	255
SSK2	252	HTPQFP TKD.....	LISQIGRNFLD	.....	271
BCK1	223	SAPPIDETLP.....	WATSEGNFLR	.....	244
STE11	259	TTPEIPS.....	LRHVSSSELNRLRKIALY	.....	276
HAL5	284	EIKDDGQFYLFEE.....	LKHVNSSELATNRKIALY	.....	313
YKL168C	250	EMQRKNQFRVFEE.....	VNIGPQRLHLSPETQHIVG	.....	279
NPR1	220	GRDCDSLSSLVTRTPDPSPSYDESHSTEKKKPESSSNVSDPNN.....	IDMGNPFIHLRLPEETHKIMR	.....	283
YDL214C	222	GRGVSSFKDLVTR...PATDDSNNDY.....NDGYEEGV.....	NKILRLLPRLHSRTIIG	.....	273
YDL025C	227	EPEDIE...DDIVRG...P.....	RKEKRQRFNLNHSDCSAINQ	.....	254
YOR267C	225	PDDIE...HDYVES...ARHHEELKE.....	GSEYSLARNFKNTDATTRIARW	.....	264
PTK2	251	QNPHPFRDKGCHKPG.....P.....	GREWSITWLEISRTDMHLAWHGG	.....	287
PTK1	251	LHDFRAFRNRATAR.....	VLKKILPISDELFTVLT	.....	287
SKS1	283	DNN.....	ILKQILPLSDDFYSLIS	.....	302
YDR247W	282	DPN.....	TLNDLVIKRLLEKDV	.....	301
ELM1	282	VSLSSKINGN.....	PWSKIEFTHLNLR	.....	306
CHK1	226	NDGNLWNG.....	ESSSSSTQHRMKTIEEFCREYNIVEKPSKQYFKWRKLPDIIRNYRYPKSIQNSQELIDQEMQNRECLIHFL	.....	247
YAK1	242	ESSSSSTQHRMKTIEEFCREYNIVEKPSKQYFKWRKLPDIIRNYRYPKSIQNSQELIDQEMQNRECLIHFL	LEDVLTKEYKFSKDEAKETSDFL	.....	313
SKY1	468	LLGELPSYLLRNGKYTRTFFNSRGLLRNISKLKFWP.....	KYEQFWNFVQ	.....	526
KNS1	267	KLGNPSDLNSTVIKHFDRKTLISLQWPEKNKRGDTITTEKSMKRVLQSCDRLDIYISKVLKQDYDGSISINWNLPPPEKNW	EKIPKSAIELMK	.....	346
YMR291W	270	CDDYVDEQMMHDP.....	TMAYDFFQVLR	.....	292
MPS1	230	PDVKIPFPPEHTSNN.....	LKLPYVESSLDHLLSSSQ	.....	255
KSP1	288	NREALFDVFS.....	GTIGQGLYDTVIG	.....	308
IME2	263	VLGTPIKRSDFVNTNHITAPPPGGFWDDASNLVHKLN.....	DPFAFIYRKYYVPRLS	CGYNDEEDLHVS	318
YKL171W	421	AQVCKFDRKNE.....	QYIWDLPDIYDV	FHLCKIMVDTL	445
YGR052W	241	DPFAFIYRKYYVPRLS	CGYNDEEDLHVS	LQHTRQYIWDLPDIYDV	313

		810	820	830	840	850	860	870	880	303
YCK1	250					SLSFEEC	PDYEGY	..RKLLLS	VLLDDLGETADGQYDWM	285
YCK2	250					NLSFEET	PDYEGY	..RMLLLS	VLLDDLGETADGQYDWM	285
YCK3	285					SLKFDEDP	PDYD	.....YLIS	LMDDAL	306
HRR25	248					NLKFDEK	PDYL	.....FLARL	FKDLSI	270
PRK1	256					LMMEAP	SQRPN	.....ICQV	LEEVSR	278
ARK1	257					DLVQDP	PRHRPN	.....VYQV	LLKRISI	279
YBR059C	263					IMLAEN	PNLRPN	.....IYQV	LYHLCE	285
FUS3	276					MLVFD	PAKRIT	.....AKEA	LEHPYL	297
HOG1	259					MLVFD	PKKRIT	.....AADAL	LAHPYS	280
SLT2	275					MLAFD	PQKRIT	.....VDEA	LEHPYL	296
YKL161C	275					MLEFD	PKKRIT	.....VEDA	LEHPYL	296
CDC28	267					LLAYD	PINRIS	.....ARRAA	IHPYF	288
PHO85	270					LLQLN	PDMRLS	.....AKQAL	LHHPWF	291
KIN28	263					MLTMN	PQKRWT	.....AVQC	LESDF	284
CTK1	266					LLCYD	QTKRFS	.....ATEAL	QSDYF	287
SSN3	368					LLNYD	PIKRID	.....AFNA	LEHKYF	389
MRK1	263					TLKYH	PCERLV	.....PLQC	LSSYF	284
RIM11	263					VLKYD	PLERFN	.....ALQC	LCSYF	284
YOL128C	268					VLTYD	ATERCD	.....ARQL	MAHEFF	289
FUN31	237					SILNR	CVPKRPT	.....IDD	INNDKWL	259
YOL045W	237					RILT	TREVDKRPT	.....IDEI	YEDKWL	259
PAK1	294					KLLEKN	PQKRMT	.....IPA	IKKHPFV	316
YGL179C	273					KLQKD	PKKRIK	.....LAD	IKVHPFM	295
SCH9	234					GLLNR	NPKHRLG	.....AIDDG	RELRAHPFF	260
YPK2	231					GLSRD	PSRRLG	.....VNGT	DEIRNHPFF	256
CBK1	297					RRLTH	ADQRLG	.....RHGG	ADEIKSHPPF	323
YNR047W	256					KLITK	NESKRLG	.....CKMGA	ADVKKHPFF	282
SRA3	228					RLITR	DLSQLG	.....NLQNG	TEDVKNHPWF	255
TPK3	230					KLITR	DLSERLG	.....NLQNG	SEDVKNHPWF	257
PKA3	230					KLITAD	LTRRIGNL	.....QSGSR	DIKAHPWF	257
PCK1	235					GLITK	DPEKRLG	.....AGPR	DADEVMEEPFF	262
YBR028C	269					ALLKK	ETAKR	.....WNVD	KYWAKTGANNKPTK	297
DBF2	275					DLITR	LIADPIN	.....RLRS	FEBVKKRMSYF	301
DBF20	275					DLITR	LIADPIN	.....RVRS	FEBVKKRMSYF	301
PKH1	247					KLIVR	DNDRLT	.....IKQ	IKAHLEFF	269
PKH2	245					KLIVK	NLDRLT	.....ISQ	IKEHLEFF	267
YDR466W	263					KILV	IEVNERIS	.....LEQ	IKRHPYF	285
IPL1	230					KLKYD	PKDRMR	.....LGD	VKMHPWI	252
YCL024W	243					KILV	VDPQR	.....IK	IK	265
GIN4	249					KILT	VDPERRIK	.....TRD	ILKHPL	271
HSL1	269					KILV	IDPEKRIT	.....TQE	ILKHPLI	291
KIN4	246					RILV	PNPERRIN	.....LQT	IKRHVWL	268
YPL141C	253					RMLV	SDPKKRIN	.....LKQ	IKKHEWL	275
KIN1	256					KMLV	VDPKKRRAT	.....LKQ	VVEHHWM	278
KIN2	257					RMLV	VDPPLRRAT	.....LKN	VVEHPWM	279
APG1	280					SLLT	TFDPAQRIG	.....FEEF	FANKVV	302
CDC5	234					DILSL	DPIERPS	.....LTE	IMDYVWF	256
CMK1	241					KALNL	DPSKRPT	.....AAEL	LEDPIWI	263
CMK2	241					KALRL	NPADRPT	.....ATEL	LDDPIWI	263
MEK1	261					DILQ	TDVVKRLN	.....SKQ	GLKHIWI	283
DUN1	259					NLLV	LNPDERYN	.....IDEA	LNHPWF	281
RCK1	272					HLLE	VDPNPKRYD	.....IDDF	LNDPWL	294
RCK2	294					KLLE	LEPSKRYD	.....IDQ	FLDDPWL	316
RAD53	247					SLLQ	VDPNNRST	.....AAKA	LNHPWI	269
KIN3	297					SMID	VNLRTPS	.....TFEL	LQDIQI	319
CDC15	226					KCFV	KNMKRP	.....ADQ	LLKHVWI	248
STE7	254					RCCIK	NERERSS	.....IHEL	LHHDLI	276
PBS2	242					LCLQ	KIPERRPT	.....YAA	LETHPWL	264
MKK1	246					YCLK	KDSRERPS	.....PRQ	MINHPWI	268
MKK2	246					YCLK	KDAREPS	.....PRQ	MLKHPWI	268
SPS1	233					GCLV	KTPADRPS	.....AYNL	LSFEFV	255
NRK1	232					LCLD	EDPKERLS	.....ADD	LLKSKFI	254
CLA4	258					VCLC	VDVRYRAS	.....TEEL	LHHGFF	280
SKM1	258					ACLQ	VNVESRAS	.....VRKL	LTFFFL	280
STE20	230					WCLC	VEPEDRAS	.....ATEL	LHDEYI	252
SSK22	255					KVFG	SRPHYEGY	.....CCGT	TDRLDDTNP	281
SSK2	271					RCLQ	IQNPSKRAS	.....AVE	LLMDPWI	293
BCK1	244					ACFE	INPEKRPT	.....ANEL	LSHPFS	266
STE11	276					KAFEL	DYQYRPS	.....ALE	LLQHPWL	298
HAL5	313					RTFQ	VDPTKRIT	.....IEQ	LLQSSWM	335
YKL168C	279					RIFQ	WEPRKRIS	.....VGK	LLDMQWM	301
NPR1	283					RMIDL	APACRGN	.....IEE	IMEDPWI	305
YDL214C	273					RILE	VSPFRIT	.....ING	ILQDG	293
YDL025C	254					RMLA	LEPKQVRL	.....MND	VVKDD	274
YOR267C	264					QQPA	HESNLKTV	.....QNQ	VPNTP	284
PTK2	287					LADPN	PATRYT	.....MDD	LNDPFF	308
PTK1	287					SLTQ	KPPPATPST	.....TSSK	THGSKLRLVLMPTTNMCVR	323
SKS1	302					KILQ	LNPTRID	.....MKT	LMSEVSSLTSFT	329
YDR247W	301					KILQ	VNPKNRMS	.....LQEL	LMKEVSS	323
ELM1	306					TLRI	SIQDLVKVLS	.....RDQ	PIDSRNHSQI	333
CHK1	247					KILO	PDNPKRVT	.....LKA	LKLHPWV	269
YAK1	313					GGVL	NLNP	.....PQQA	MLHPFI	336
SKY1	526					SPML	QLDPRKRAD	.....AGGL	VNHPWL	549
KNS1	347	SLINSKLAWKRQTHSSSSSTTDELDKETFLFWYWFIDLLRKMFEFDPTKRIT								408
YMR291W	292					CCFT	IDPAVRRS	.....AKN	LKQHPFI	314
MPS1	255					ACLY	RNPDKRWT	.....VDK	VLSSTFLQPFM	281
KSP1	308					YSLT	IDPANRDLKMMRTELQNLSEYT			334
IME2	318					LSDL	SEVVKCLRWDPNERAT	.....AQEL	CEMPFF	349
YKL171W	445					CLTI	DLDKRWK	.....LKRI	EEVL	464
YGR052W	313					EVDSA	WNKDSMSDCFSYQNKIDLFWEQWSVNTETVPAKFQLK			356

CAK1	303	.....LLRYDHQERLT.....AKEAMGHPWF.....	324
CDC7	380	QLPDPKTN....MDAVDAYELKKYQEEIWSHDYWCFOVLEQCFEMDPQKRSS....AEDLLKTPFF.....	437
YKL116C	291	.....KQIVENTLTTRKN.QRWSINEIYESPFV.....	317
IRE1	285	.....QMIDHDPLKRPT.....AMKVLRLPLF.....	307
SWE1	315	KFLIDGES.....LERIVRWMIENPYERRPT.....ANQILQTEECLE.....	351
IKS1	334	.....ALLQPNNDARPT...AKTVEETLDEML.....	358
VPS15	250	.....MIQLDPSKRLS..CDELLNKYRGIF.....	274
CAK1	342	.....CILGMVSFSFNERWS....CQRILQELEKP.....	368
BUB1	279	.....LIESHLEQHAENHLRNVLISIEEELSHFQYKGPSSRRF.....	317
YGR262C	245	.....RFEEVRLRGKR.....SMLG.....	261
SLN1	211	.....HVNQEVIKRMLN....LEGIEN.....	229
CTK2	306	.....LELINGESSIN.....SSTRHA.....	323
CTK3	260	.....FKSLWTHFETTDSGFDKDDYKNIKALNDIAKASYIY.....	296
YGL059W	413	.....MSYPSIINGHIKYETPLIELLSGLLDTSGLG.....	445
YIL042C	364	.....KIDVQSLLGWGTDVYIKLKGPSKTALLSKK.....	394
MEC1	254	.....LVLSVAGQTETLIQEATSEDNLSKMYIGWLFPW.....	287
DBF4	264	.....HPVLATFARQETEEVPDDLCTLKTKSRQ.....	292
MRK1	263	.....TLKYHPCERLV....PLQCLLSSYF.....	284
RIM11	263	.....VLKYDPLERFN....ALQCLCSPYF.....	284
YOL128C	268	.....VLTYDATERCD....ARQLMAHEFF.....	289
FUN31	237	.....SILNRCVPKRPT....IDDINNDKWL.....	259
YOL045W	237	.....RILTREVDPKRPT....IDEIYEDKWL.....	259
PAK1	294	.....KILLEKNPQKRMT....IPAIAKKHPFV.....	316
YGL179C	273	.....KLLQKDPDKRIK....LADIKVHPFM.....	295
SCH9	234	.....GLLNRNPKHRLG.AIDDGRELRAHPFF.....	260
YPK2	231	.....GLLSRDPSSRLG..VNGTDEIRNHPFF.....	256
CBK1	297	.....RRLLTHADQRLG.RHGGADEIKSHPPFF.....	323
YNR047W	256	.....KLLTKNESKRLG.CKMGAADVKKHPFF.....	282
SRA3	228	.....RLITRDLSQRLGNLQNGTDEVKNHPWF.....	255
TPK3	230	.....KLITRDLSERLGNLQNGSEDVKNHPWF.....	257
PKA3	230	.....KLITADLTTRRIGNLQSGSRDIKAHPWF.....	257
PCK1	235	.....GLLTKDPEKRLGAGPRDADEVMEEPFF.....	262
YBR028C	269	.....ALLKKKETAKRWNVDKYWAKTGANNKPTK.....	297
DBF2	275	.....DLITRLIADPIN.RLRSFEHVKKMSYF.....	301
DBF20	275	.....DLITRLIADPIN.RVRSFEQVRKMSYF.....	301
PKH1	247	.....KLLVRDPNDRLT....IKQIAKHLFF.....	269
PKH2	245	.....KILLVKNLDRRLT....ISQIKEHHFF.....	267
YDR466W	263	.....KILLVIEVNERIS....LEQIKRHPYF.....	285
IPL1	230	.....KLLKYDPKDRMR....LGDVKMHPWI.....	252
YCL024W	243	.....KILLVVDPRQRIK....IRDILSHPLL.....	265
GIN4	249	.....KILLTVDPERRIK....TRDILKHPLL.....	271
HSL1	269	.....KILLVIDPEKRIT....TQEILKHPLI.....	291
KIN4	246	.....RILLVNPERRIN....LQTIKRHWL.....	268
YPL141C	253	.....RMLVSDPKKRIN....LKQIKKHEWL.....	275
KIN1	256	.....KMLVVDPKRRAT....LKQVVEHHWM.....	278
KIN2	257	.....RMLVVDPLRRAT....LKNVVEHPWM.....	279
APG1	280	.....SLLTFDPAQRIG....FEEFFANKVV.....	302
CDC5	234	.....DILSLDPIERPS....LTEIMDYVWF.....	256
CMK1	241	.....KALNLDPSKRPT....AAELLEDPW.....	263
CMK2	241	.....KALRLNPADRPPT....ATELLDDPW.....	263
MEK1	261	.....DILQTDVVKRLN....SKQGLKHIWI.....	283
DUN1	259	.....NLLVLNPDERYN....IDEALNHPWF.....	281
RCK1	272	.....HLLLEVDPNKRYD....IDDFLNDPW.....	294
RCK2	294	.....KLLLELEPSKRYD....IDQFLDDPW.....	316
RAD53	247	.....SLLQVDPNNRST....AAKALNHPWI.....	269
KIN3	297	.....SMIDVNLRTSPS....TFELLQDIIQI.....	319
CDC15	226	.....KCFVKKNMYKRPT....ADQLLKHVWI.....	248
STE7	254	.....RCCIKNERERSS....IHELLHHDLI.....	276
PBS2	242	.....LCLQKIPERRPT....YAALTEHPWL.....	264
MKK1	246	.....YCLKKDSRERPS....PRQMINHPWI.....	268
MKK2	246	.....YCLKKDARERPS....PRQMLKHPWI.....	268
SPS1	233	.....GCLVKTPADRPS....AYNLLSFEFV.....	255
NRK1	232	.....LCLDEDPKERLS....ADDLLKSKFI.....	254
CLA4	258	.....VCLCVDVRYRAS....TEELLHHGFF.....	280
SKM1	258	.....ACLQVNVESRAS....VRKLLTTFEFL.....	280
STE20	230	.....WCLCVPEDRAS....ATELLHDEYI.....	252
SSK22	255	.....KVFGRSPHYEGY....CCGTTDRPLDDTNP.....	281
SSK2	271	.....RCLIQNPSPKRAS....AVELLMDPW.....	293
BCK1	244	.....ACFEINPEKRPT....ANELLSHPF.....	266
STE11	276	.....KAFELDYQYRPS....ALELLQHPWL.....	298
HAL5	313	.....RTFQVDPTRKRIT....IEQLLQSSWM.....	335
YKL168C	279	.....RIFQWEPKRKRIS....VGKLLDMQWM.....	301
NPR1	283	.....RMIDLAPACRGN....IEEIMEDPW.....	305
YDL214C	273	.....RILEVSPFRIT....INGILQDG.....	293
YDL025C	254	.....RMLALEPKQRLV....MNDVVKDD.....	274
YOR267C	264	.....QQPAHESNLKTV....QNQVPNTP.....	284
PTK2	287	.....LADPNPATRYT....MDDLFDNDPFF.....	308
PTK1	287	.....SLTQKPPPATPST....TSSKTHGSKLRLVLMPTTNMCMVR.....	323
SKS1	302	.....KILLQNPYTRID....MKTLMSEVSSLTSTF.....	329
YDR247W	301	.....KILLQVNPKNRMS....LQELMKEVSS.....	323
ELM1	306	.....TLRLSIQDLVKVLS.RDQPIDSRNHSQI.....	333
CHK1	247	.....KILLQPDNPKRVT....LKALKLHPWV.....	269
YAK1	313	.....GGVLNLNPLERWT....PQAMLHPFI.....	336
SKY1	526	.....SPMLQLDPRKRAD....AGGLVNVHPWL.....	549
KNS1	347	SLINSKLAWKRQTHSSSSSTTDELDKETFLFWYWFIDLLRKMFEFDPTKRIT....AKDALDHEWF.....	408
YMR291W	292	.....CCFTIDPAVRRS....AKNLKQHPFI.....	314
MPS1	255	.....ACLYRNPKRWT....VDKVLSSFTLQPFM.....	281
KSP1	308	.....YSLTIDPANRDLKMMRTELQNLSEYT.....	334
IME2	318	.....LSDLSEVVKCLRWDPNERAT....AQELCEMPFF.....	349
YKL171W	445	.....CLTIDLDKRWK....LKRIIEVL.....	464
YGR052W	313	.....EVDSAWNKDSSMDSFYSQNKIDLFWEQWSVNTETVPAKFQLK.....	356

		890	900		LLRYDHQERLT.....AKEAMGHPWF.....	324												
YCK1				EIWS	DHYWCFQVLEQCFEMDPQKRSS.....AEDLLKTPFF.....	437												
YCK2					KQIVENTLTKRN.QRWSINEIYESPFV.....	317												
YCK3					QMI	DHDPKLRPT.....AMKVLRRHPLF.....	307											
HRR25					LERIVRWMI	EPNYERRPT.....ANQILQTEECLE.....	351											
PRK1					ALLQ	PNNDA	RPT.....AKTVEETLDEML.....	358										
ARK1					MIQ	LDPSKRLS..CDELLNKYRGIF.....	274											
YBR059C					CIIGMV	SFS	PNERWS.....CQRILQELEKP.....	368										
FUS3					LIESH	LEQAENHL	RNVILSIEEELSHFQYKGKPSRRF.....	317										
HOG1						RFE	EVRLRGKR.....SMLG.....	261										
SLT2					HVNQ	EVIK	RMLN.....LEGIEN.....	229										
YKL161C						LE	LINGESSIN.....SSTRHA.....	323										
CDC28						FKSLWTHFET	TD	SGFDKDDYKNIKALNDIAKASYIY.....	296									
PHO85						MSYPS	I	NGHIKYETPLIELLSGLLDTSGLG.....	445									
KIN28						KIDV	QSL	LGWGT	DVYIKLKGPSKTALLSKK.....	394								
CTK1						LVLS	VAGQ	TETLIQEATSE	DNLSKMYIGWLPFW.....	287								
SSN3						HPV	LAT	FARQETEEV	PDDLCTLKTKSRQ.....	292								
MRK1							TLKYH	P	CERLV.....PLQCLLSSYF.....	284								
RIM11							VLKYD	P	LERFN.....ALQCLCSPYF.....	284								
YOL128C							VLTYD	A	TERCD.....ARQLMAHEFF.....	289								
FUN31							SILN	R	CVPKRPT.....IDDINNDKWL.....	259								
YOL045W							RILT	T	REVDKRPT.....IDEIYEDKWL.....	259								
PAK1							KILLE	K	NPQKRMT.....IPAIAKKHPFV.....	316								
YGL179C							KLLQ	K	DPDKRIK.....LADIKVHPFM.....	295								
SCH9							GLLN	R	NP	KHRLG.AIDDGRELRAHPFF.....	260							
YPK2							GLLS	R	PSRRLG..VNGTDEIRNHPPFF.....	256								
CBK1							RRLL	T	HADQRLG.RHGGADEIKSHPPFF.....	323								
YNR047W							KLLT	K	NESKRLG.CKMGAADVKKHPFF.....	282								
SRA3							RLIT	R	DRDLSQRLGNLQNGT	EDVKNHPWF.....	255							
TPK3							KLIT	R	DRDLSERLGNLQNGSE	DVKNHPWF.....	257							
PKA3							KLIT	A	DLTRRIGNLQSGSRD	IKAHPPWF.....	257							
PCK1							GLLT	K	DKPEKRLGAGPRDA	EVMEEPFF.....	262							
YBR028C							ALLK	K	ETAKRWNV	DKYWAKTGANNKPTK.....	297							
DBF2							DLIT	R	LIADPIN.RLRSFEHVKRMSYF.....	301								
DBF20							DLIT	R	LIADPIN.RVRSFEQVRKMSYF.....	301								
PKH1							KLLV	R	D	PNDRLT.....IKQIAKHLFF.....	269							
PKH2							KILL	V	KNLDRRLT.....ISQIKEHHFF.....	267								
YDR466W							KILL	V	IEVNERIS.....LEQIKRHPYF.....	285								
IPL1							KLLK	Y	D	PKDRMR.....LGDVKMHPWI.....	252							
YCL024W							KILL	V	D	PRQRIK.....IRDILSHPLL.....	265							
GIN4							KILL	T	D	PERRIK.....TRDILKHPLL.....	271							
HSL1							KILL	V	D	PEKRIT.....TQEILKHPLI.....	291							
KIN4							RILL	V	P	NP	RRRIN..LQTIKRHWVL.....	268						
YPL141C							RMLV	S	D	PKKRIN.....LKQIKKHEWL.....	275							
KIN1							KMLV	V	D	PKRRAT.....LKQVVEHHWM.....	278							
KIN2							RMLV	V	D	PLRRAT.....LKNVVEHPWM.....	279							
APG1							SLLT	F	D	PAQRIG.....FEEFFANKVV.....	302							
CDC5							DILL	S	L	D	PIERPS.....LTEIMDYVWF.....	256						
CMK1							KALN	L	D	PSKRPT.....AAELLEDPW.....	263							
CMK2							KALR	L	N	P	ADRPT.....ATELDDDPWI.....	263						
MEK1							DILL	Q	T	D	VVKRLN.....SKQGLKHIWI.....	283						
DUN1							NLLV	L	N	P	DERYN.....IDEALNHPWF.....	281						
RCK1							HLLV	E	V	D	PNKRYD.....IDDFLNDPWL.....	294						
RCK2							KLLV	E	L	E	PSKRYD.....IDQFLDDPWL.....	316						
RAD53							SLLQ	V	D	P	NNRST.....AAKALNHPWI.....	269						
KIN3							SMID	V	N	L	RTRPS.....TFELLQDIIQI.....	319						
CDC15							KCFV	K	N	M	YKRPT.....ADQLLKHVWI.....	248						
STE7							RCCI	K	N	E	RERSS.....IHELLHHDLI.....	276						
PBS2							LCIL	Q	K	I	PERRPT.....YAAALTEHPWL.....	264						
MKK1							YCLK	K	D	S	RRERPS.....PRQMINHPWI.....	268						
MKK2							YCLK	K	D	A	RERPS.....PRQMLKHPWI.....	268						
SPS1							GCLV	K	T	P	ADRPS.....AYNLLSFEFV.....	255						
NRK1							LCLD	E	D	P	KERLS.....ADDLLKSKFI.....	254						
CLA4							VCLC	V	D	V	RYRAS.....TEELLHHGFF.....	280						
SKM1							ACLQ	V	N	V	ESRAS.....VRKLLTFFEL.....	280						
STE20							WCLC	V	E	P	EDRAS.....ATELLHDEYI.....	252						
SSK22							KVFG	S	R	P	HYEGY.....CCGTTDRPLDDTNP.....	281						
SSK2							RCIL	I	Q	N	PSKRAS.....AVELLMDPWI.....	293						
BCK1							ACFE	I	N	P	EKRPT.....ANELLSHPFS.....	266						
STE11							KAFEL	D	Y	Q	YRPS.....ALELLQHPWL.....	298						
HAL5							RTFQ	V	D	P	TKRIT.....IEQLLQSSWM.....	335						
YKL168C							RIFQ	W	E	P	RKRIS.....VGKLLDMQWM.....	301						
NPR1							RMID	L	A	P	ACRGN.....IEEIMEDPWI.....	305						
YDL214C							RILE	V	S	P	FRIT.....INGILQDG.....	293						
YDL025C							RMLA	L	E	P	KQRLV.....MNDVVKDD.....	274						
YOR267C							QQPA	H	E	S	NLKTIV.....QNQVPNT.....	284						
PTK2								LAD	P	N	PATRYT.....MDDLFDNPPFF.....	308						
PTK1	324	NLLSKPLRTRIRGVSISLQMLL	345				SLTQ	K	P	P	PATPST.....TSSKTHGSKLRLVLMPTTNMCVR.....	323						
SKS1							KILL	Q	L	N	PYTRID.....MKTLMSEVSSLTSFT.....	329						
YDR247W							KILL	Q	V	N	PKNRMS.....LQELMKEVSS.....	323						
ELM1							TLRI	S	I	Q	DLVKVLS.RDQPIDSRNHSQI.....	333						
CHK1							KILL	Q	P	D	PNKRV.....LKALKLHPWV.....	269						
YAK1							GGVL	N	L	N	P	LERWT.....PQAMLHPFI.....	336					
SKY1							SPML	Q	L	D	PRKRAD.....AGGLVNHPWL.....	549						
KNS1							ETFL	F	W	Y	FIDLLRKMF	FEFDP	TKRIT.....AKDALDHEWF.....	408				
YMR291W								CCFT	I	D	PAVRRS.....AKNLLKQHPFI.....	314						
MPS1							ACLY	R	N	P	DKRWT.....VDKVLSSFTLQPFM.....	281						
KSP1							YSLT	I	D	P	ANRDLKMMRTELQNLSEYT.....	334						
IME2								LSDL	S	E	V	VKKLRWD	PNERAT.....AQELCEMPFF.....	349				
YKL171W								CLTI	D	L	D	KRWK.....LKRIIEEVL.....	464					
YGR052W	357	NFEKPCLIQDGK.....	368					EVDS	A	W	N	KDSSMDS	CFSYQNKIDLFWEQW	SVNTE	T	VP	AKFQLK.....	356

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