

		Subdomain I	Subdomain II	Subdomain III	Subdomain IV	
Akt1	120	FELLNLVCGKGSFGKV	IQVRRKDDTGE	VYAMKVLSSK	HIVEHNEVEHTLSEKNTLQKIN	HPFLVNLNYSFO
DDB0220670	173	FIFLRMTGRGAFGOV	NIYVKKIDITGR	LYAMKVIKKD	KCLNMNAVGHFTTERKLLKYY	HPFIVGLKYSFO
DDB0216386	86	YFIFKPTSKGGYGOV	FLAITKSN.K	FFAIKLSINKR	DTIGKHMVKELMVERNIVQYO	NQSIKVLFEFCFO
DDB0220701	1527	FEIIKPTSRGAFGRV	YLAQKKKTGD	LYAIKVLKLL	DTIRKNMVNIVIVERNILAMVO	NEFVVKLIFYAFO
DDB0220700	64	FNFLKVIKSGCGFGKV	YLAENKITTKK	TYAIKVLKKS	DTIKKMMVDQVNIKETTISNYK	CNFIVLELSSFO
DDB0185113	810	FEFIKPTKGGYGV	FLAKKIRTGD	IYAIKRLKKS	DMIKKNQLDVKVERNILAYTS	NEFVVKMYYSFO
DDB0229452	232	YKHVECTKGGYGV	CKFINKKTNE	IRAIKTIKRD	YALKEINTKELG	GOFTVNIHFHTFL
NdrA	112	FEVIRITGRGAFGEV	SIIVRHRESNE	LYAMKRLKKS	EMLKKEQAAHVRAERDVILASAN	TNWVVVLYYSFO
NdrB	130	FESIRITGRGAFGEV	RIIVKMKKNNK	FFAMKLLDKS	KMIEKHQTIIVRSERDILADSNNI	HGSNFWIVSILYSFO
NdrC	718	FKILTOIGKGGFGOV	FLAOKKDDTGD	IVTLKRLKKO	TVEWANQRNOVSQEKSVML.VD	NKWITKLLYSFO
NdrD	1555	FQKLTAICKCGFGKV	YLARKKDSNE	IVTLKVIKKS	TYHRANQMTSVTKEKEVMMIPHSSK	DQSOWITRLLYSFH
DDB0231558	756	FTLIEKIGEGGFGOV	FLAKKDDTGE	IYAIKRRMSKE	LLWSKNVSHLTKNERDILAQGKN	HRWIVSILVYSFO
DDB0216387	40	YDIISTIGSGSYGEV	CIIVREKSTKO	VYAMKLIYTT	EVSDTLVKKRALRERDAMVICNNKN	NKRAPKLYCSFID
Pdk1A	69	FIIIGKVLGEGSYGAV	VIQTEKETQQ	QYAIKILKKE	QIITKENKIKYVQIEKEIFCKSN	HPNTIKLFFTFR
Pdk1B	271	FDIFIRITGKGGYGV	KLIVIEKETQL	IFASKILNKK	LIIEKKAQYVNTKETTIDSLD	NPNIKLEFVTFFO
PKA	336	FKQIRVICTGTFGKV	YLIQNTKDCG	YVAMKLNKA	YVVQLKQVEHLNSEKSLSSIH	HPFIVNLQYAFQ
pk4	679	FKFLDLGSGSFAKV	RLICQHIPSER	LFCMKLNLON	KIIRLROEVHVINEKQVIMLTD	NPFIKLYSTFK
DDB0185224	334	FNFYGSLGSGSFGTA	KLICRHRGSL	FFCSKTLRRE	TIVHEKHKEVNNENINMLNIS	HPYIVKTYSTFN
pk2	153	FELLNVIKCGSFGKV	MOVKKKGEDK	IFAMKVLKRD	AIIARKQVNHKTKSEKTIQOCIS	HPFIVNLHYAFO
DDB0220702	128	FIIKHLVCKCGFGKV	FOVVHVDIQK	VYAIKVLKKN	HIIAKKSVVNTLAEKDTIKKIS	HPFIVNLHYAFO
pk3	498	FELLKVLGSGSFGKV	YIVRRKDDTGG	FYAMKVLNKK	DMLKKKQIATNTNEKMLVSTMD	HPFIVRLEHFAFO
Aurora	110	FDIGKLLGMRFGHV	YIAREKKSQF	IYAIKVLKFN	QLOTHNIEHQLRREIEIQSHLR	HPNILLRIFGYFY
MLCK-A	8	YFKEEITGRGAFSIV	YIIGENKOTKO	RYAIKILNKS	ELGDKYEKNLKMVEDILKKNV	HPNITAIKELFD
DDB0216385	13	YNITDITGECTFTSTV	TLANHIEKIE	DKYAIKILISKE	VLDNERTYVDWETSILSKCO	HPNITIKFYBHYE
DDB0216309	38	YILGNETGRGAFSIV	REATSRATCT	KVAIKLSINTR	FIKNKLLMREIEIMKQVGD	HPNITIKLEYEVE
pXi	18	YEIGSOIGNGKFAOV	HSGTNNKSTGK	KSAIKIMKKS	IVEESAIKIEIEMMTEIN	HONITIKLOEYVE
DDB0216308	20	YEFGPEITGRGAFSIV	ROCTHKDDTGD	QVAIKATSQO	HVSEADMKRFRTREIETMKLKL	HPNITIKLOEYVDF
DDB0229351	566	YQIFDRIGSGTFSDV	YICINKENK	QYAMKLIIDKS	LVTMIAOHTDMKVETEVNLIKOSF	HPHVIQIIDLHFE
DDB0216307	56	YVVGKELGRCGAFSV	RECTRKTTSD	KVALKYIEKK	FVKKKHIEQLRREIDIMKVKV	HENVLSIKKEIFE
DDB0216312	6	YELHKEITCKGAFSV	FIVTEKTKKK	QWAMKIIDKK	SSSKAALETEIEMKVD	HPNITIKMHEYFE
Snf1	31	YRLDKTIGIGSFGKV	KLAEHIRTGV	KVAIKILNRT	KIKNLKMDKIRREIQNMKLF	HPHITIKLEYEVE
DDB0229364	9	FIIIGKTLGOGTTGKV	KLGFHKDDTGF	KVGIKILNKE	LLINKPSMRKIEREIVLMKLLD	HPNAMKMYEVE
Lkb1	40	YILGEVLGECAYGKV	KDCMDSFTQK	RVAVKILKRA	RLKKIPGGEASVLKEINTTKLKH	NKHTIKLIDHFI
MARK-A	109	YLVIKTITGRGQFGKV	KLGYHKKIPN	EKVAIKILNKG	KLDPETLKMVQREVRIMKLLH	HPNITIKLEYEVE
MARK-B	65	YLLGKTIIGSGTSSKV	KIGTNIITGK	QYAIKITKPK	RIKERKEIEREISILKRLK	HDNITIKLHDAIY
MARK-C	46	YEVGKTLGNGTFFGKV	KLGTNICITKE	NVAIKILKNN	KLSGKQKETCFREIDIMKLLD	HPNITIKLDDVVD
DDB0231454	542	YTLGKTLGRCGNYGV	KLGTHTINTKE	EIAIKILYKE	QMTSEFTRCREIEILKOLY	HPFINKLNLVLE
DDB0219986	1158	YDIIKTISTHPHN.V	YLANFNDO	LIVLKEFGIG	DAFGKQIFEROVSLKQMN	HKCIMPQAVFY
FHAK-A	180	YDFIKELGSGNFSV	YECVNNKTK	RYAIKHLNLS	KINTHTPKFKSQLNREIETLKFIN	HENVVEIYDIFY
FHAK-B	625	YFVFKELGSGGYGIV	YEGLYKLNK	RYAIKHTDLL	KNGSTSKMELVSKYNAIKNIK	HRNVTEFFDIVF
FHAK-C	199	YSIQGILGTGNFSV	KRCIRRDITGE	VFAVKIIDKK	KFWSQTKTRROMESEVEIQKIK	HPNITISIIDIVO
FHAK-D	218	YDLREVLGTCNFASV	RLGVEKETGN	VYAIKIIDKK	KMSQTKRSDSLMDEVNVLKVKV	HONITISIKVEFE
FHAK-E	145	YFIGEMLGCGNFATV	KLAVERTTGV	KYAVKIVDKK	KYFMNSSARKDSLMDDEVNLRGLS	HPNITIKLVEFE
DDB0220010	201	YVFVRKLCGKTFGKV	KLAYHHDTHH	LYAIKIVNKI	RLKKQTMGIGRPNAFDDVLKEIIMKMN	HPNITIKLVEVIN
Apq1	7	YILDKRICWGAFAOV	YKCFSIKTNE	PFAIKVVDVC	RLADKNKSLTENLNYEIRILKELS	HTNITRILYDVLN
tsunami	5	YKLIQIGEGSFGKV	YKYRKKFTGQ	LVACKVLSKK	GKNEEDILSLRQEIDILKNS	HPNITIKLVEVIN
Cdk1	10	YQKLEKLGEGTYGKV	YKAKEKATGR	MVALKKIRLE	DDGVPSTALREISLKEVP	HPNVVSLFVDVLH
Cdk5	4	YKIEKELGEGTYGIV	YKAKNRETGE	IYAIKRIIRD	SEDEGPCTAIREISLKEIK	HPNITIKLHDVH
Cdk7	4	YNIEALGEGTYGVV	SRATVKATGO	IYAIKIRIKI	LIQNOTDDGINFSAIREIKIQELK	HDNVNLLDIFA
Cdk8	44	YTFSYELGSGTYGMV	YKADDKRPN	NKVAVKKFRST	KEGEGLSLTAYREIIGLEKELS	NENIVKLLDVCL
Cdk9	209	HEKTEOIGEGTFFGOV	YKAKNKNSGD	IYAIKVVIMD	NEVEGPITAIREIKIKELN	HANVNVKQEVVT
Cdk10	7	FEKLDSTGEGTYGIV	SKGRDKETGR	IYAIKVKVIG	QODKDGIPLTSLREIQLEIK	HPNITIKLVEVI
Cdk11	52	FKKLYTINEGAFGVV	YCAQDKETEE	IYAIKVIKME	REREGIPITSVREIKVMEIK	HDNIVQKIEIVL
DDB0229294	64	YEIISKIGEGISGSV	FKAIKKGTTE	MVALKNFKGW	TEGDRASKEECSLQQLR	HIPYITPVIDIY
DDB0229424	4	YQIIEELGSGSYGKV	YKAIHNLKSK	TVAIKILISMV	NIENGLPVEVKYIMKLRD	CKNITVHLEBYFY
DDB0230050	4	YIILSKCGGTYGSV	FKGIHKITHS	LYAIKRVTDI	AQEDGEPVEVKYINOLKN	LSNIVNIRDHFI
CK2	47	YEIIRKITGRGKYSEV	FEGANIKNNE	KCVIKVLKPV	KKKKIKREIKIIONLQCG	GNPNIITVYDVVR
DDB0219953	312	YEVIOKLCGRKYSEV	FSGDIEITSD	EYVIKVLKPV	QKLIQREIKIESLNG	GNPNIITVYDVSVK
ClkA	590	YKVLCTVCGSFTSTV	VECWDTNSSG	QYAIKIVRSR	KKYTEDALVEIDILRNLEKGTGNSNGKYLSHCIRLIDSLF	GKHISTQOSIFK
DDB0229841	74	IDPNTIVDCGTNGIM	FIAFNFDIQK	RYAIKILKSK	MFDNENLGHRIIRNLIFQNLFOG	HPFVSGFKVSKR
DDB0229333	46	ITTKTIYACDINGTM	FQTYNMDINR	LLIHKISLL	QFKNHLQGRMILRNCHYORFFNH	HPPLVSTFQSVFK
DDB0229296	102	INLKSITDCGPDGVM	FRAKNEDSKE	EYVIKISVF	LMKDDKMARKLLRNLLFORHFOQ	HPPLVSTFQSVFK
Dyrk1	304	FEIISIKGGSFGKV	VKAFDSVLKE	VYAIKIKIKN	VPFYNOALTEIRLELMNNKD	PEDQYKIIKIKHHFK
Dyrk2	605	FEIVSILGCGSFCOV	VKGYDYKTGE	MVALKILRNQ	KRFHNOALTEIKLLEYIKTND	PNSTASIVIKKHHFY

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Yaka	205 YKVLDSI	CGTFFGOV	VKCKNCDTDE	LVAIKILKNK	QAYFQOGRLEIOTIKSINDOHD	PEDKNHILRLDLSFI
Prpf4B	490 YQIFSP	IGSIVFSTV	VSAKETKTNE	DVVIKLIIRNR	PSMHRSGLKEIETLQKISNTPTS	SNQKSHCIOMKDFHN
GSK-3	56 YITEGVI	IGNGSFGV	TOAIVADTKE	VVAIKKVLQD	QRYKNRELQIMKMLN	HINIVSLIKNSFY
GlaA	91 YEIIKOV	CGGTFFGV	YBAKNQDNKR	VAIKKVEKS	NHFISREYDIKIVA	HPNCLRLDMFY
Erk1	149 YSIVKCI	CHGAYGVV	CSAKDNLTGE	KVAIKKISKA	FDNLKDPKRTLLRETHLRHF	HENLISIKDILK
Erk2	14 YEVLQVI	CGKAYGIV	WKAIDKKTQ	TVAIKKIFDA	FQNTADQARTFREIMFQELHG	HENIILKLNVIK
DDB0229430	4 YQFIKOV	CGDGAAGDV	IKAIDVKTGE	IVAIKRMKK	FSDWKECIOLREIKAKKIK	HPNIVKLEIIL
Sky1	135 YQVVDLK	GWCHFSTV	WLCNDKDTPTTSS (29)	QVALKIVRSA	RTYETAEDETIKLNASKY	NAQDKCVARLDHFT
DDB0230051	414 QIHKVS	ICNGCGHFV	IKLIPTVSGTNGV	NSYSKFIYNS	IYSSTLAESEILLFREAMLTKLN	HNNILKLESITK
DDB0230126	654 YHLGPL	IENSTTV	FRAFDCKSLI	PVAIKVLPV	ALNIPV	HENLTKVYQVCO
Cdc7	622 YRILEK	ICGCTFSGV	VKSVCIDGPN	GLIVALKRVAPT	SSPARILNETHSILRVGG	HYNVSAIFGALR
DDB0229971	77 VISDIAI	CKCAFATV	FKGLNTLSGD	FVAIKRFEKS	KISNEQHSVSTEFDTLORLN	HENIVRILCREE
DDB0229896	18 YNLGVVI	CKGGFGTV	YOGLDIEDGD	FVAIKQINLT	KIPKDLQOGIMNEIDLKLN	HANIVKILKYVK
DDB0229877	13 YQIGEAV	CKGAFGKV	FKALNAETGD	FCAIKQIEKT	IISEKQLPSIOEIKLQTL	HPNIVKFIESYE
DDB0231212	22 YLLIDI	CKCGFGV	YKGLHKTGY	FSAIKKIKIM	KKKKLOSEQISLMAEINLKVLS	HNNIVRYEHIP
DDB0229915	36 YTLGKVI	CKGAFGOV	FKGLNGKTGE	FVAIKQIDSN	KIDESSLQSVKGEVETLHKL	HNNIVKVLQVVE
FNIPK-A	11 WEILSOL	CKGAFGRV	VKAKKINCDGTGI	IIDICAIKIIKKS	VFTKNEIETIKQLD	HPLIVKYVYGYV
FNIPK-B	11 WEIVETL	CKSNV	FKVNNKNNIVLNG	NSFKTCILKIIINK	DKNVWKEGOVLEKLN	IDSVIKYCWCC
FNIPK-C	33 FEIIRIL	CKKDEFTT	CKAKKLSGQFNEK	RVNFCILKIIKRR	VKKFDSKKNIEIIEIDPRKERETEKIK	HICVLEIYGYSE
FNIPK-D	33 WEIITOL	CKSNEQFTV	YMSKKLKGPNFTN	NRFGLCTVKKIKSO	YFNEIENHILKLRD	NKYVLYVYCGK
FNIPK-Ea	368 WEIIK	CKOFTFSGV	YKSVCIDGPN	GLIVALKRVAPT	TKHNAKIDVLN	ICKSLKLYCVK
FNIPK-Eb	860 WEIIST	CKGNECKV	FKARKINGIINGS	KVSLCAIKKIEKK	DKLKIKLSTEFETLKNLKD	NEHSMKYVYGY
DPYK4-a	9 WEEISST	CKSNCSSRVK	IKCRKKNGLIENE	KVDIVAIKIIKKS	FFKRNETDIEKIR	LFNIPRYSHAE
ZakA-a	9 WEEISST	CKGQYGRV	IKCRKKNFILNE	QVDYVAIKIISKD	FFKRNETDIEKIR	LFNIPRYSHAE
DDB0230002	16 IEKNYR	CKGGFSKI	SKAKKNGIINGTIVNKKMI	AIKKIKFD	DKIQFNEVNNLELTKNKNK	EMOISSIDYFG
DDB0229378	31 WVIEROL	CKSGSFGOV	YKAHKKLDPN	FVCAIKVLOYC	KFTMKEVDYKKNL	DPKFKVYVSLF
Mek1	292 LKIIIRVL	CKRCAGGV	KLAYHETSGT	YIAIKVITLD	IQENIRKQIILELKTTHKTS	YPIYTSYDFADY
MEKKalpha	495 WQKGQI	CKGGYGSV	YGLNKTDTGE	LFVAIKOLEIV	DINSDPKLKNMILSFSKIEVMRSLR	HDNIVRVLCTSL
DDB0229911	71 YELKETT	CKGGSLV	ORAIKLPFOE	NVAIKIIDLE	HCKNVLEETRKEIQAMSLCH	HPNIVVAHSTFV
DDB0230012	97 YNLIEPT	CKECTEGRV	FKAYCIPLKE	NVAIKVVELD	KMDPQFVKDVIVKVKVMNGN	HPNLIHYSFSL
MkcA	585 YTFREK	CKGGFGTV	YLVRRNMDKSK	SRIAIKKLPHV	RKKEKFFNVKEIRVLEFTN	HPNIIITVYNSHM
MkcB	438 YKNSDO	CKGGFGTV	YFAKSTKEKR	LVAIKKMPHV	TKROQQONFREAAIYAKCD	HPNIVKLHTCHI
MkcC	616 YKNDKQI	CKSGFGSV	FLAKSTVDKC	EIAIKKIAHV	SAKARTNLNETGFLNFKC	HPNIVSLRSHL
MkcD	369 FKNLDF	CKGGFGSV	FCAKNKNPHSAYD	KQVVALKMKPIK	TLRHKRMNLSEIGFLYFN	HPNIVKELCAYQ
MkcE	429 KENAEV	CKGAFGTV	YQVFYVNGOYN	NVDVALKMKMDH	SEKKRRNMLNEISITRYLK	HPNIVTYINSYE
MkcF	401 IGFTHMV	CKGQYGV	YDALYDKKR	VCVIVVNY	TPKEQHNVLQEIIGFLQCD	HPNIIKYNCSVL
PakA	911 YYNINKI	CKGGAGEV	FEAINSRNTQ	TIAIKKMKLK	AQNLKTVINEIGMMKNSN	HENIVQVYDSYI
PakB	570 GEGSTKI	CKGGAAGEV	FVVTQLKTN	KVAIKKMLN	QONMKLIVTEIGIMKSCR	HONIIDYDSYL
PakC	205 YKNMTKI	CKGCAAGEV	FVATSSKNNK	RVAIKKIEIN	NDNAKLLVTEIATIMKTS	HDNIVYVYDSYI
PakD	1376 YKVREVV	CKGGSTGKV	YVGENSITGE	KVAIKKMKVD	NNNIKNIINEISTMKNSK	HKNVIVYVSSH
Pake	650 FEFKEKI	CKGGYGA	FKVLHRETNF	PLAIKVLISIT	PTRIKDIEKEIDLKCKR	CPNVLSYVGSIS
PakF	394 FILDKEL	CKDCAAGSV	YKGTHTDLGF	TIAIKVEMK	EDEFDLVVEIDILNRCN	HPNIVKLYGSV
PakG	139 FLIDCII	CKTGSYGTV	YKAIHKDTNF	VIAIKSLPIK	ESEIEIEKESITKCK	SONIVSFGSGQ
PakH	42 FEIQEKI	CKGSGFSV	YRAIHKSNT	SIAIKEFEIF	EANDVEPISKEIOLKKN	NPYVVSYVGSIM
Krs1	20 FTIIVEKI	CKGCSYGSV	YKAINISTGI	VVAIKVSV	NDLEDMEKEISFMKCK	SPYITVYVYASFR
DDB0216375	23 FDLIECI	CKGRSFGSV	YKATYKKTGN	IVAVKLVPIN	EDFQEIKEINIMKCK	SKYVVOYVGNF
Svka	12 YVROEKI	CKGSGFEV	FKGINKTNE	TIAIKTIDLE	DAEDEIEDIOEINVLQCE	SPFVTKVYGSFL
DDB0216374	21 FRVLEVI	CKGSGFGV	CTCINTVNE	VVAIKFLEME	GEENSSLKKEITIKNTVR	CPYITVYVHCYI
DDB0216379	23 FQIVEVV	CKGSGFGTV	CACRWMKKDRES	NGNRLIAKQFVEVN	ADDVETNLNLVKEIDILKESMD	CPYIIVEYKCYL
DDB0216377	29 YHIOERI	CKGSGFGOV	FKAVHFANGK	VVAIKIISLD	DOEAIKDVKEISITAEEN	YPNIVQVYGSYF
DDB0216378	20 FELIEEL	CKGAFSFGTV	YKGNHLPNG	IMAVKIIALD	IEDTFDLVVEIDILNRCN	HNNIVKLYGSV
DDB0230010	935 FRDKIKL	CKTGAAGNV	FYAIRKSDSS	PVAIKVLMER	TKKDSPIPELYHSACN	HSNIVTYLESYL
DDB0229972	173 YESPPTI	CKYDKV	ILVILSOQYLON	OVNIFPKILIDRE	RINLIHONILSNEFOLIKSLK	HSGIVNYIGMIN
DDB0229973	848 IKLCEQI	CKGSGCTV	HVKTVDGFT	VVAIKVLLK	NTSPFLVEQFISEITIMVKLS	HONIAKYLCHRL
IfkA-a	449 WKKGSC	IERKSNYSV	YRGVDEDTDRKLLC (55)	VVELKRLIE	KVKMIQKIEISMKYL	NPYIILKLTGTFN
SAMK-A	191 YEYVESI	CKGVFSV	GKYKRKGOENE	FIAIKKIDIL	SLNEEKIIEKINKIYSIN	HPNIIKIIYCYK
SAMK-B	186 YKLIIEI	CKGAFSIV	EKYENKLPKN	EFISIKRINVL	ASEKMIKVEINMLYSIN	HPNIIKIIYCYK
SAMK-C	181 YVFIKQ	CKGSVNCSL	EKYINKKTKE	RILIKRIGKS	NINETIINEISITCSID	HPNIIKTYCYK
SAMK-D	136 YIETISK	CKNFCEIEKY	YKSQTKVNEY	IILIKKIIKN	STLNEEKLINEIDTYLLD	HPNIIKIIYCYK
DDB0230038	521 AQPSDI	CKSGNNGTTORAC	AIHKDKR	IVMKOWNFI	TSQATPMLFNEIEQLVAIK	HPNIIALACASF
DDB0230124	961 IOVGSRI	CKLSFGDC	YICNAFSR	TIIKLRTO	RFTDQFLGQKNEVMOIRELO	HENLIVPVSQCL
DDB0229871b	695 IKTIIVK	CKSYSILEGOYK	KGKL	VSIKQINGS	INDFEMKOLGVLASIK	SPLAVRITGVVF
DDB0229850	51 IEYVCR	CKSGSLCRV	YKGRNLGPK	VAIKVFPSI	RFEFFKTEFLMQSIRS	SPFLISYGVSI
ARCK-1	1112 LEYTEK	CKSGASGV	FKCIYRCRV	VAIKVLKSA	DDEMTREDELKEFGVLASIE	SHTIVGLYCVVL

	Subdomain I	Subdomain II	Subdomain III	Subdomain IV	
SAPKalpha	351 LEYTEKIGAGSSGKV	YKGLYRGKE	VAIKVLKSM	TESKEIEEFKKEFOIMS AIR	SKHVVFHYCAVL
DDB0229849	529 LEYTLKIGSSSSGKV	YKCLYKCKE	VAIKVLKSI	TTQSQLEEFKKEFOIMGSIR	SQFMVTFYCACI
DDB0229848	601 LTYNVLLGTGASGKV	YKGTFFNGQE	VAIKVLKSF	TDKKDIABEFKKEFOIVSAIR	APGVVYFHGAGI
Phq2	807 LEYIKRIGSGTYSKV	YKGYRDKF	VAIKVMRGS	NMTTEQIESFKKECDILSTIO	SPLLISFYGSCI
DDB0229847	1949 IVFLNKIGECTSAKV	YKATWRNQE	VAIKVLRSE	PESQKLLDLFKELEIMSSIR	SPHVVFYVMVL
SplA	2058 LEFGQITGKGFGEV	KRGYWRETD	VAIKLIIRD	QFKTKSSLVDFONEVGLISKLR	HPNVVQFLGACT
DPYK4-b	299 NKDDTVGGDGFSSV	KKGYNETE	VAIKLIKKA	HGENVTVCDTFYHEVLIISNLR	HPNIVQFIAACI
DDB0229872	177 LTVEKIGCGFFGKV	YKARWRGKS	VAIKKITLI	KFRDLTETEIFDKEVSIIMSKIC	HPITCVVFYGCACS
DDB0229844	1476 LFLIKKIGAGSFSKV	YKAKYMGE	VAIKVLKGE	ATSEQIELEFKKEYDILSLVS	SONLKIIFYGACK
ZakA-b	379 DKDDSEGGAGNFGDV	KKGLLNETE	VAIKFVKKA	HCEAITVCDTFYHEVLIISNLR	HPNIVQFMAACI
7TMK1	363 FKFGQVIGEGYFGEV	RKAVWKCAY	VAIKILHRN	SFRNTDGNKEENVLKEVALISILR	HPNVLOFLGVCSS
rk1	374 IKIGVRIKGNNGYGEV	YLGTVWRGSO	VAIKKLPAH	NINENILKEFHREINLMKNLR	HPNVIOFLGCSL
rk2	391 IKIGVRIKGNNGYGEV	YLGTVWRGSO	VAIKKLPAH	NINENILKEFHREINLMKNLR	HPNVIOFLGCSL
rk3	491 IVQVNRIGRSCAEV	FTCTWRGI	VAIKKAKLL	NEDDEDFLNELAQEATIMSOLR	HPNICOFITCTCN
DDB0214883	851 IAIGARIGRGGYGOV	FRGSRWGRTE	VAIKMLFND	NVNLKLISDLRKEVDLLCKLR	HPNIVLFLMGACT
Shk1	45 ITTESILIGDGSFGTV	YKGRCLKD	VAIKVMLKQ	VDQKTLTDFRKEVALMSKIF	HPNIVLFLMGACT
Shk2	174 YNREAKIGSCAFGSV	YKQIVRCKE	VAIKKITQT	VFEENTMNEFKKEVSLMAKLR	NPHLLFLMGACT
Shk3	24 INFEEIIGTGSFSGKV	YKGRCRCKA	VAIKLLHKQ	NFDAATLSAFRKEVHLSKIF	HPNICLFLMGACT
Shk4	277 IDRTDFIGGGSFGSV	YKGRCRGQE	VAIKIPRKO	KLISLYELTFRHEVKIMSKIF	HPNVVLFMGACT
Shk5	237 DVKTDLLCGGAYGKV	YKATCRGKK	VAIKVPPKQ	TLSESELKSEKNEVEIMKQIF	HPNVVLFMGACT
DDB0229963	1073 IKIDKEIGKGFHFSKV	LKGNWKGKD	VAIKKLNNS	KDKAREEMIQEFKAEVELLGSIQ	HPNIVTCYCYSL
DDB0231199	1377 LQILOFVIGEGALAEV	HKGIWKGKE	VAIKIFNEG	SFSFRLEDFLKEVALIGLIS	HPNLLKLGKACI
DDB0229940	386 VAFGDVIGASCAGKV	YKGIYKGRD	VAIKVYSSSE	NFCFNIEEDREVTIMSLIDS	DHPNFTREYGCANK
DDB0218878e	702 VIFGDVIGAGASGKV	YKGIYKGRD	VAIKVYSSSE	NFCFNIEEDREVTIMSLIDS	DHPNFTREYGCANK
Rck1	842 VSIHKWIGASSGRV	YNGQYKGGK	VAIKVLGPE	VCVHFDLNEFKREVALMSIFK	HDNLARCLGAGO
DDB0231197	599 VKNVHLYDPSPLCTV	YSCVYNGMD	VAIKVFSQD	GMGFDVWVSEYKEITIVASQ	HPKVIKCYCAHT
DPYK2	853 IQFIQVIGGAFSEV	WEGWKKGIH	VAIKKLLKI	GDEEQFEREIREVONLKKGN	HONIVMFTGACY
DPYK3-b	1057 VAIVEKIGAGSFANV	FLGIWNGYK	VAIKILKNE	SISNDEKFIKEVSSLIKSH	HPNVVTFMGACI
Gdt1	1372 IHFQELIEKYSWEILL	YRCTLVGDKN	ALIKKILKL	TKNCEEAYRELNITISRIK	HONILPLITCVI
Gdt2	1290 IIKKNYIGSEGTFGIV	YRGIWRRSSP	VAIKLLKNE	YVDHDEIEKEISLERLR	HPNILLVYGRFI
Gdt4	1349 IVLEKYIGSEGSFGV	YSAIWRSSS	VAIKLFFKH	YSKDEIDKETSITISKIK	HPNIVSFTIGSL
Gdt6	1194 IEVKEIISQNNLSTV	NIANYRGLQ	VILRKIKTH	SANYTKTYSQAIKKEVYTEMDDISKIK	NKNIVSFTICCTH
Gdt8	1038 TEQLIASYLPKVVYV	FKGYRDLA	VAIKKFAIS	DNSKSFEEKIKNEVQILSKVN	NINIVVRIYCSAQ
Gdt9	1290 LDFDEICCGGTGMV	YKGRWRSOV	VAIKMMRVG	TVNCDEVYREMDIMGKIR	HONIVSFTICCVV
KinX	22 LDFISEIGSGGFGKV	FKGEYLCAV	VAIKRHIL	PDDPNRVDLEKFLNREIETIKLFT	HPNVIOFLGVCSS
KinY	32 LKVGESIGSGAYGIV	YRGTTLFNSD	VAIKKIQNE	KSEKNEFIKYLKREVAVLKNIQ	HPNVIOFLGVCSS
DDB0229853	33 LFMDFVIGRGSFGOV	OKASYFGTD	VAIKQLSTL	VSIDPDYFKFMLREIKILKGMR	HPNIVQYIYGCAC
DDB0229863	336 .VGNIEIGSGKYGSV	SICVWLGTP	VAIKKLHEN	NEETEILVORELOLKEIR	HPQIVQFLGCVSR
DDB0229866	35 LEFGQITGKGAAYGKI	FKGEYFCTP	VAIKKISLQ	PNDVKYKDLTKFIOREVAMLRFS	HPNIVQFLGVCSS
DDB0229851	23 FDFPLSISGSGGFGKV	YQGVNLNGE	IGIKKISIT	DNDPNRDLKFLEREITLKMIS	HPNVIKFYGIAE
DDB0229865	15 IEENEFSKCSFAKV	YKGSYYGNP	CVKVIKDD	TLIDKESVFLKREIETLKNLNLQ	GKKNIRITIGICE
GefX	21 LEFNEKIGKGSFSGSV	FRGCYLELD	VAIKKIEKA	DDPEYLKVIDREVSMLQSLR	HPFVIVNFSGICV
DDB0229867	18 LVFKDIIGKGNFGCV	YRGNYLGEV	VAIKQIPSF	DDPDYCKYTEREVKALRYIR	HPFVIVNFSGICV
HH498	530 FKTARKIGACAFGDV	YKVEWRNKN	VAIKRVKIE	VVGSDFYKQWIRDKILEAVLVMKISN	FSSFVILKYATCI
GbpC	878 VKINKEVGRGAFGIV	YEAEMWSEV	VAIKKLLLP	SSTDTTNLNGNGEVMVYDDPDQLIEDRLRVFRFRHEVYVMSGLN	HPNVMKISGFCI
Pats1	2247 LMIEELIGEGGAALV	YRARWOGOT	VAIKKLLTI	ENLDSPIEINDISLKAFFNFRRECVWVSELE	HPNIVQFLGCLL
QkqA	1242 ILYEROLIGEGGFLI	HKGLLISNKS	DIAIKSLILCNSNNNNNSNNNSNNNSNNNFKNNNNEDEFIKQEF	OHEVFTMSNLN	HPNIVKLYGLMH
Roco4	1026 IEYEKQIGKGGFGLV	HKGRLLVKDKS	VAIKSLILG	DSEGETEMIEKQEFQREVFIMSNLN	HPNIVKLYGLMH
Roco5	2175 LEIEIEKVGEGGFGIV	YKGLLRGO	VAIKQITID	SGQAEAAEYIREFRREVWLSNTIT	HPNIVSLKYGCL
Roco6	1356 FESPKLIGRCASGKI	YRANLNDTM	VAIKQIEVV	GEDAPRISEFRREIHMVMDLK	HPNVNVLGCFTL
Roco7	1775 LKFGPOLGSGSYANV	YRGIWNGSE	VAIKVLNFD	DGHANTTEKYERFRNEAHTGELR	HANTVSLMGVSL
Roco8	1456 LIYQEEIGVGGFSRV	YKGIYKNNT	VAIKQNFTE (120)	LSTSSLSNSNSOGEDSMNQISSGKLNAINFRREVWLSGSL	HPNIVLMKGFQ
Roco9	3008 ELDPNPLIGCGGTATV	YKGRWRQSD	VAIKLLKTD	VVGSDFSKVFAEYRREIFCLSSFI	HDNILDKFCFL
Roco10	2069 HSNQENEGTSTQSMGMV	YKQF	VNIKVFNAP	LLGADFQNNCARILSSFRHEALSILNFR	HSNVLSITIGISM
Roco11	1185 VVCEEQIGVGGFGLV	HKGLILODKS	LVVAIKSYIVG	NSSASDIIRKQEFHHEMYIMSSLN	HLNIVKLFVGSQ
DPYK3-a	726 IKLEKLESNSKSSNIW	QIEYKSTQ	LVLPQPKDQ (11)	LFNGSNVSGSNNSGSSGNNHHHCNNSNSNSEVIPSXYTMIQ	HKNLGLLVGCG
DDB0229956	758 LELTKEIGRGSVGV	KRCKWKGYE	VAIKQFNEE	ELGFSEREFHSEATIMSVLR	HDNIVHCVGCSA
DDB0229957	986 VQLHERIGTGATGDI	YRGLISQDNLNRHI (42)	VAIKKLHPL	ADPSPEMIQDFYNEVRLISMFN	HPNVKYYVGGCT
DDB0220138	946 IOFFNIGCGGFSKV	YKGVWRSKD	VAIKQIELO	NNKSLDDFRREVGLISKIKP	HPNLLAYYGCACK
DDB0220436	345 FNDNSKIGEG.GOC	SILYKMG	TAMKRFKPS	LSSSLISKFEENEVLLERLN	HPNIVKILITYST
DDB0230133	192 LEIGNVIGGGYGAIV	YKAKWRGLS	VAIKVISEL	SDGSEFEKELEMHKELH	HPNIVHVFQFCV
DDB0229871a	360 LLFIKIKIGSACCEV	COYEWKTP	VAIKTIFKS	LLRKDKKEEFKEVSIILKCLR	HPNVVLFMGACT
DDB0229955	662 LKISSKIGEGTFGV	YKGLWRGSS	VAIKQIKIN	EDVNNQVLEEFKELTILSRIR	HPNIVLLMAACT
Bud32	35 DEIGILISQGAEAKT.Y	ETD	LYGLKICIVKE	RFSKAYRHPILDQKISSKRILQEVRSINCK	KKGIQVPSLYLV
DDB0231196	459 IDFHTOIGSAGNASV	FEGTYKGP	IACKEMPVS	GTYEQSVDSIKEIAAGQIKK	LGCATVVETIGVLK

Subdomain V

Subdomain VIA

Akt1	T	EDKLYFILDYV.NGG	ELFYHLO	KDKKFTE	DRVRYVGA	EIVL	LALE
DDB0220670	T	QDSLQCMVLDYI.GGG	ELFYHIS	ERETFS	ETARFYIG	QIML	LAIG
DDB0216386	T	KKKLYVMVEFL.HGG	DCASLTH	SLNTLE	BREAKNI	IAQI	VNGL
DDB0220701	S	TDKLYLVMEYL.IGG	DCASLLR	ALGCFE	BHMAKHYI	IAETV	LCLE
DDB0220700	T	DKKLFVMEFL.NGG	DCASLLR	SFNNMPE	DLTKNI	IAQI	LCLE
DDB0185113	T	KEYYLVMEYL.QGG	DCFSLLO	MLGSMDE	BNMAKMI	IAETV	LALE
DDB0229452	SP	CKEKVLIMEYL.SGG	DCAFHLN	DVGVFPE	ELAKOYI	IAETV	CLD
NdrA	D	DNYLYLIMEYL.PGG	DMMSLLI	KYDIFTE	NOARFYI	IAETV	LATE
NdrB	D	ANFLYLIMEYV.PGG	DMMTOLI	KYDTFTE	DATRFYI	IAETV	LALH
NdrC	D	ANYLYLAMEYH.CGG	DFRALIN	NLGTLS	DEARFYI	EMTE	BAIS
NdrD	D	SQYLYLAMEYH.CGG	DFKTLIN	NLQRL	EDDIAPFY	MAEM	LAVE
DDB0231558	D	DOYLYLAMEYV.PGG	DLRSLSL	ALNSL	DEDSARFY	MAEM	BEAVD
DDB0216387	D	NEGVFYVMEFI.AGG	DFNSYCKRLV	DGKKEFTE	EIKFYI	IAELV	LCLE
Pdk1A	S	EOCLYVLELC.SQG	DLLHQIK	KVGSF	DYRSCOYI	VAET	ISGLE
Pdk1B	D	ENNLFILEYC.PNG	DLLGALK	KAGCF	SIDVVRFY	AAET	LIALE
PKA	D	EKKLYLLEFYV.AGG	EVFTHLR	KSMKE	SNSTAKFY	AAEIV	LVALE
pk4	D	DRYLYLQEFFI.PGG	ELFDYIR	ANGSL	SLYVTOIY	AAEIV	LVALE
DDB0185224	T	PTKIHFIMEYA.GKK	DLFHHLR	ANKCFTE	BOTTKLIV	AEIV	LVALE
pk2	T	KDKLYMVLDFV.NGG	ELFFHLK	REGRE	SEPRVKIY	AAEIV	SALD
DDB0220702	N	EKKLYLVDFV.NGG	QLFYHLO	KEAIF	SEDOVRFY	MAEL	LVALE
pk3	N	EDFLFMCMDYV.PGG	ELFHHLO	KAGKF	PEELAKFY	IAEIV	ICSLH
Aurora	D	DKRVFLIIEFA.KGG	ECFKELQ	KVGSF	NEQTAATY	TLOI	ADALR
MLCK-A	T	PEKLYLVMELV.TGG	ELFDKIV	EKGSYS	EADANLV	VKKIV	SAVG
DDB0216385	S	DEDICLVLEWI.PNG	DLFDRIV	KKGVFNE	EEARLT	MTKSL	LSAVE
DDB0216309	T	TKHLHLVLELV.TGG	ELFDKIV	QRGEYS	BODASKIV	ROIV	SAVG
pXi	T	DNEVLVLVLELV.TGG	ELFDKIV	EREFYTE	QDASTL	LIGTV	TKVIO
DDB0216308	S	NDYLYLVLELI.RGG	ELFDKIV	EKGNYS	EKDACNL	VRROIV	SAVE
DDB0229351	S	ELYYYIVTELL.QGG	ELLYOLEK	NHPST	NENVSNY	TEHARK	IIKOVIQAVG
DDB0216307	S	DSHLTLVMELV.TGG	ELFYKIV	ERGSFTE	BKARNV	VRVOC	QAVE
DDB0216312	S	TDKIYLVVLELV.TGG	PLFDRIV	DKKSFTE	BKAKLIT	OOQL	LSLV
Snf1	T	TTDIFVMVEYV.TGG	ELFEYIV	KNGKLE	DESRR	LFOOM	ISGVD
DDB0229364	T	SKYLFILLEYV.EGG	ELFDYIV	EKGGL	ESGEAL	FFFQ	IIIGLE
Lkb1	IE	EKGKLYIVVEYV.GGG	TSONILE	NAPNGR	LPPHQ	SOFIF	ROLIACE
MARK-A	T	SRALYLIMEYA.GEG	EVMDFMI	AHGVLT	ESCA	RFTT	OLVSAIN
MARK-B	ED	DVGRICLILELV.SGG	ELFDYIV	ARGRL	SEK	GRKFF	ROMLCLGI
MARK-C	KR	EEEGTTYIVVEYV.SGG	ELFDYIV	AREYI	KEK	ARKFF	ROMISAIE
DDB0231454	K	DDAMFILMDYC.QGG	DLFHYV	NKFG	LKGVK		MVNSPDIGDQVLMGVLP
DDB0219986	T	DRNAFMOMEYI.SGG	NLLDWC	RN			NNNDNENKRRPWEIOKIFOOIIOAIA
FHAK-A	T	KDQQLFFILELA.NGG	ELYNKIG	FNEPL	LNQ	SFIF	COLINAVS
FHAK-B	S	STDCFFIVLELA.TN	DLSNLLR	KRCV	DE	DIKRI	COLLGFN
FHAK-C	S	DRYFYIVLELA.TGG	ELFEKIK	OKGRF	SE	PEAKD	TEKOLEAVS
FHAK-D	T	QKNLYLVLELV.TGG	ELFDKIV	SERKFO	EDT	CRYIL	COLCDSVR
FHAK-E	N	EKVLSLILELV.ECG	ELLNDIVS	NLFY	TE	DKAKT	LFRQIVDGVL
DDB0220010	DP	QEEYIYIVMEYI.EGG	SIM	SANETS	EDL	ARKY	FRDIVFGL
Apq1	EE	TDPTFIYIMECC.EGG	DFSKYTR	THKLT	TE	EKALY	FMKOLANGLK
tsunami	N	KNEFTLVTEYA.DG	DLSQIIS	EETLS	V	DLIQ	SICYOLVIALN
Cdk1	C	QNRLYLVEFYL.DO	DLKKYMD	SVPAL	CPQL	TKSYLY	OTIKGLA
Cdk5	T	ERKLTIVVEFYL.DO	DLKKYLD	ECGGE	ISKPT	IKSFM	OLLKGV
Cdk7	H	KSNVYLVFELM.OW	DLQEVIE	DKSIL	IKPAD	IKSYM	KMLIQGIE
Cdk8	NP	KDKLLYLTFDYA.EF	DLFGIIK	YHRENG	SHFS	DATIK	SLIWOVINGIH
CDK9	SKASA	SNNHKGVSVMVEYV.DH	DLNGLM	DSP			AFKYFAPQIKCYL
Cdk10	GS	TGDKIYLVVEYL.EH	DVASLIDNI	NKPFK	SEIK	CFLL	OLLRAVE
Cdk11		GKNINSIFMAMEFI.DH	DLRGLMEVI	KKPFL	PSEI	IKTLI	QOLINGVS
DDB0229294	TNF	ETSEYIIVVEPYF.EH	DLSGLLS	EHR	LSI	PQVK	CYFKOLLEGIN
DDB0229424	S	NDDKLVVVEFYL.EY	DLWKFIS	PNKYM	TL	SCTK	FFIHOLEGLD
DDB0230050	ID	KNSVLVLEMEFI.EG	DLWKIMS	NPQCT	LSL	GOLK	NFTKOLLEGVK
CK2	DP	OSKTPSLIFEYI.NNT	DFK	HLSP	TL	DFD	VRYYIRELHALD
DDB0219953	DQ	SSKVCSLVVEPFV.NKT	DIRELVY	TLDDYD	IRYYI	FEI	LKAID
ClkA	F	KDHICLVKRY.GL	SLYEFLK	KNRYR	PL	SQI	ONISKOLITAIY
DDB0229841	RKCS	DSYQPPLTSILNSIISSNDNPOQHSTLIQQKDEDFYFESIQP.OY	SLNLNIS	NNM	DQDD	LC	QFYETLMLGLK
DDB0229333	KSLN	IKTKN.LIESPVDDGTYDLYFEHDSQS.DF	TLYQIMR	SDKA	SRK	QCPY	VLITTIK
DDB0229296	RKSS	ENYLI	SNKNN.RNNVRLPLLQKGGDDDIYFEYLLP.EF	TLQMI	H		NKLT
Dyrk1	F	RNHLCIVTELL.SY	NLYDLLR	NTHF	HGVS	LN	LKKFAHOLITLAF
Dyrk2	F	RNHLLITTELL.SM	NLYDFLK	VNH	FQY	NL	VRRFGOLITSLR

Subdomain V

Subdomain VIA

SAPKalpha	EPKLCMVMENC.SRC	SLYHVMD	NNSLDIGWERTFRFALETVRGIE
DDB0229849	EPKLCMVMVEYC.SRD	SLYHVMN	TKKYDIGWDRFFQFTMOMTLGVO
DDB0229848	KDKLCVMVEYC.SRC	SLYHITK	DDTTQFTWDFNFFNLGTQAINSLD
Phq2	ESQLSMVMVEYC.SKG	TLHKVLN	NPLDFDWDKWFKWMTEVVEGVR
DDB0229847	DPKICMVMVEYC.SNO	TLYHLMH	LQMNFTWDVWFKFAIEMVRCVN
SplA	GEDHHCIVTEWM.GGC	SLRQFIT	DHFNLLEQNPHIRLKLALDIAGMN
DPYK4-b	NKEVNHCIVSEWM.SGG	NLSQFIS	NERKILEINPHLRVKILLDIAGML
DDB0229872	GPSNDRSLIMEYM.EGG	SLRRLLD	EKSSYHLPPSLQLSIARDIAEGMN
DDB0229844	EKKLRMVEYEC.QHG	SLYHIMS	KRKMDISWPLVFKWMHOAVDGIN
ZakA-b	EKETNHCIVSEWM.SGG	NLTOFLM	NNHKVLENNPHLRVKLLLDIAGIL
7TMK1	ETNLNGIVTEYM.GGC	SLDRLLT	DRYFLIKQNPILAWNMALDIARGMF
rk1	PPDICTCTEYM.PRG	SLYSILH	DQALQLOWSLLIKMMIDAAKQVI
rk2	SPDICTCTEYM.PRG	SLYSILH	NEKIKISWSLVKRMMDAAKQII
rk3	PPEILVMEYM.PLC	SLYRILH	DPSISLDWPRMKSMALDIAGCMN
DDB0214883	PSSPCIVTEYL.SRC	SLANILL	DESIEMDWGLRLQLGFDGARGMT
Shk1	TPGKLMICTELM.KG	NLESLL	DPMVKLPLITRMRMAKDAALGVL
Shk2	PEDLSIVTELM.PKG	SVHSLRA	KEDTSDFTFKRAILARDTVLGMT
Shk3	PGRCVIVTELV.PKG	NLETLLH	DQKIQLPLYLRMRMARDAAALGIN
Shk4	SGKMOIVTELC.OTD	LEKLIHND	RTKKEFSLFRRMQAKDAALGMN
Shk5	PGKVMIVSELM.OTD	LEKLIHSS	EVEPPPLYERMKCLDAALGIN
DDB0229963	NPMCIVMEFL.PSC	NLFELIHSKPS	QQQSIKLDSLILALAFDIARGMQ
DDB0231199	SHKSTFMIVTELM.HKG	TLLEVIN	KNKPLSLEDIIKYALSVAQGLA
DDB0229940	NKKYLFHIVSELV.KSC	SLRDLL	DKEKPLAYFTQLSIASDIANAMK
DDB0218878e	NKKYLFHIVSELV.KSC	SLRDLL	DKEKPLYFTQLSIASDIANAMK
Rck1	DDKYFHLIETEC.HNG	SLFSYLR	DQRNNISFGORLHFALGIARGMR
DDB0231197	NTNKPFIIVTELC.SRC	TISNALNQIR	KTTGQPPAIPLIVHMAIDAAOSLE
DPYK2	KPACITCTEYM.AGG	SLYNIILHNP	SSTPKVKYSFPLVLKMATDMALGLL
DPYK3-b	DPPCITCTEYL.QGG	SLYDVLH	IQIKLNLPLMMYKMIHDLISLGM
Gdt1	SKDYLCIAFEYP.PLC	SLDYIIS	KKKLMKSTQKIRILIDVAKGCK
Gdt2	FSGIHGIVTDYC.SKG	CLSKYIH	ENKYKTI IQIRILIDISKACA
Gdt4	FLNTYGIVIDYH.PRG	SLNYYTR	NONIKLSMVQNIIRISLIDISRACS
Gdt6	DSSHLWIVTEYA.PLC	SLSSLIH	QKKEKLSLIQKVLMLDTAKGCE
Gdt8	ISHVCIVTEYA.KEG	SLGSLIH	DSKIKLSFIQKVKFMLDAAGFT
Gdt9	LEHLCIVTEFS.PIG	SLGDLIHGDNNQKSNNTNT	ITNTITNTNTNTNTSTSTSTKLTVKOKLRILADDIARGCO
KinX	NGILFIVTELI.EGG	DLQYYLK	NQSIDLPWFLRANIALDVSLAMS
KinY	EPLASPS	LVNRLNLSSTWIVTEYI.GGC	NLHERIK
DDB0229853	EGRYMIVTEYI.KGG	DLHQFIK	ARGVNSISWTLRMKALDIASAFS
DDB0229863	EKDEIHLTEFM.DGG	DLFDALI	FGDIPLTWKEKLRISLIDIAOSCR
DDB0229866	GSSLYIVTEFV.QGG	DLAYYLFRNKFDTPPEQYIHRKVN	VGSSSTPDLSDPTVHNGEKLVLAWPLRIKIAYDVACAMA
DDB0229851	ERSLFLITELV.SGG	DLHWYIK	NKSIDI TWKLVKVIARDIAASMA
DDB0229865	DSLFLIVTELI.NGC	DLGNILL	DHKFHIPWSLRVKIARDIAECME
GefX	SSGLYIVTEFV.SGG	DVRQLLK	KTPPIGWDKRVSIAVDIAKAMV
DDB0229867	ESGFYLIETEFI.EGL	DLRRYIK	SVKPPKWLRSRVNIALGVAKTFL
HH498	EKELLVLEFC.DNG	SLYTIINTIPIGGAG	ANNNNNNNNNNDIIQSLPSINTLSLNIANCMN
GbpC	QPLCMALVEYV.RYG	SLYSLLS	NSSIEISWGLRLOIASEIAGMQ
Pats1	DPLCIVTEYL.PHG	NLYSFLH	KPEMEFSWLFRLKVALDISSGMA
QkqA	PPRMVMEYV.EHG	DLYHLCO	DKERYASLGWTLKLRMLDIAGCIG
Roco4	PPRMVMEFV.PCG	DLYHRL	DKAHPIKWSVKLRMLDIALGIE
Roco5	DPCCIVMEYI.PNG	TLYSHLR	KSFSSITWOLKLIANIDAIK
Roco6	SPFTVMVEYI.DCC	DLHKFLH	SPIGDQNGNWALILKLALDIAGCME
Roco7	SPFCLVTELL.QYG	DLAKFIR	NTAETFSWGTVLKLALDIAGCMN
Roco8	FEPYAVMEYM.DIG	SLSSFLLK	KKEDGOVLDWQMLLKIIVTDIASGMA
Roco9	PLAITTEFO.SGG	NLYDYIH	DLKNPLDWOLRIKIAKIAASLO
Roco10	NPIALITENP.TFG	SKGSTTLSEYIQD	ROKHPEIPWNIKLIALDIARAMD
Roco11	PPRMVMEFA.PHG	DLYHFLE	KKKNIKWSFKVRLMLDIAGKIE
DPYK3-a	S...LFEFS.KGMN	SLHDLIH	RDGLKIDMALFIKISKDIASVMG
DDB0229956	PGKMYLVCDDY.SRC	SLYSVIT	ANICPLSNARIVHLALQVAKGMN
DDB0229957	IANWSIVMEYV.PCG	NLMDVLA	NPVLVIPYKLVLRMALDIAGLH
DDB0220138	ANACYLITEYL.PRG	SLHDLIH	REQLMKLDFKQKVSFAICVALGCY
DDB0220436	IERILLLEFI.DGN	SLDKYPSQLPL	SPSSSLPNPLKVIQDFQOIVDAMI
DDB0230133	PKCIVLEYI.EGG	SLDKYLH	NPNYTFSPQLRLKMANDIAGKMC
DDB0229871a	NGNLAITTEYL.NRC	SLRDVLT	TMNKSELISLVKVKMLIDVAGCMN
DDB0229955	PPNLCFITEYL.PCG	SLYDALH	SKKIKMNMQLYKKLAIQIAGCMN
Bud32	GNNRIVMEFI.KGE	TVKHLYL	KNQESTQHQNQIESIMKELGNQIG
DDB0231196	NQKLFVLMVKE.KCN	LSFLCNKSEILK	MOREGI.WTSIFKISKDILKGLV

Subdomain VIB

Subdomain VII

Akt1	HLHLS	GVLYRDLKPENLLLT	NEGHI	CMTDFGLCKEG
DDB0220670	FLHEH	GVLYRDLKLENLLMD	LDGNI	CLVDFGLCKEG
DDB0216386	FLHSC	GIYHRDLKVENLLFD	KNGII	KLVDFGLSEVGF
DDB0220701	YLHKS	AVYHRDLKPDNMLID	GLGHI	KLDFGLSKIGIIDDK
DDB0220700	YLHNH	GIYHRDLKPDNMLID	SNGHI	KLDFGLSKFDFVDE
DDB0185113	YLHSH	GIYHRDLKPDNMLID	KKGHI	KLDFGLSKVGLLD
DDB0229452	FLHEK	SIYHRDLKPDNMLID	SDGHI	KLDFGLSKVGLLD
NdrA	SVHTL	GVYHRDLKPDNMLID	SKGHV	KLDFGLSKVGLLD
NdrB	SLHKL	SYIHRDLKPDNMLID	QKGHI	KLDFGLSKVGLLD
NdrC	SLHEM	GIYHRDLKPDNMLID	KLGHV	KLDFGLSKVGLLD
NdrD	SLHRL	GVYHRDLKPDNMLID	KLGHV	KLDFGLSKVGLLD
DDB0231558	SCHRL	GVYHRDLKPDNMLID	RDGHV	KLDFGLSKVGLLD
DDB0216387	AFHSY	GLYHRDLKPDNMLIN	KDGHV	KLDFGLSKVGLLD
Pdk1A	HLHSL	GVYHRDLKPDNMLMS	SDLHV	KLDFGLSKVGLLD
Pdk1B	YLHGK	GIYHRDLKPDNMLLG	KNOHL	KLDFGLSKVGLLD
PKA	FLHKO	NIYRDLKPDNMLID	NOGHI	KLDFGLSKVGLLD
pk4	YLHNO	DIYRDLKPDNMLID	OYGHI	KLDFGLSKVGLLD
DDB0185224	YLHAE	NIYRDLKPDNMLID	EKGHI	KLDFGLSKVGLLD
pk2	HLHKO	DIYRDLKPDNMLID	SEGHI	KLDFGLSKVGLLD
DDB0220702	HLHDS	NIYRDLKPDNMLID	SOGHC	KLDFGLSKVGLLD
pk3	YLHSN	NIYRDLKPDNMLID	EEGHI	KLDFGLSKVGLLD
Aurora	YCHSK	HVIHRDLKPDNMLIG	VGGEI	KLDFGLSKVGLLD
MLCK-A	YLHGL	NIYHRDLKPDNMLLKS	KENHL	EVAIADFGLSKI
DDB0216385	YLHDK	SVVHRDLKPDNMLIF	SDSYGGI	KLDFGLAKF
DDB0216309	HLHAN	GIYHRDLKPDNMLIC	AGEEGDD	IRVADFGLSKI
pXi	YLHSK	DIYHRDLKPDNMLYS	DNSDOA	IKKCDFGLSOR
DDB0216308	YMHQH	GVYHRDLKPDNMLIC	SGDDEKEE	IVRIADFGLSKI
DDB0229351	FLHSN	KIYHRDLKPDNMLIF	DKSLGS	ILKIIDFGLSYVD
DDB0216307	YLHSQ	GIYHRDLKPDNMLIC	NGEGEDM	TIKIADFGLSKI
DDB0216312	YLHSI	GIYHRDLKPDNMLLLK	TPDDL	TVALSDFGLSKI
Snf1	YCHHH	MVYHRDLKPDNMLLLD	PINKC	IKIADFGLSNM
DDB0229364	YCHSR	NIYHRDLKPDNMLLS	GDKRI	KIADFGMSI
Lkb1	YLHSQ	KIYHRDLKPDNMLIFT	HANVL	KLDFGLVAEDSS
MARK-A	YCHSK	RAVHRDLKPDNMLLLD	CNRQI	KIIDFGLSNV
MARK-B	YCHSN	MVYHRDLKPDNMLLLD	EDGNL	KISDFGLSNI
MARK-C	YCHAN	LIYHRDLKPDNMLLLD	SNGDI	KISDFGLSNN
DDB0231454	HCHKL	NIYHRDLKPDNMLIFD	NQMNV	KIIDFGLS
DDB0219986	YMHSN	CIYHRDLKPDNMLIR	QDQTP	VISDFGLSKDIS
FHAK-A	YLHSK	GIYHRDLKPDNMLIF	DSYGGDYL	KIKITDFGLARF
FHAK-B	YLHNL	GIYHRDLKPDNMLIF	YNEFKQGS	IKITDFGLSSF
FHAK-C	YLHDL	NIYHRDLKPDNMLIS	AVSHGKS	SVIKVDFGLAKI
FHAK-D	YLHSN	GIYHRDLKPDNMLLAT	PNSFL	LKISDFGLSRA
FHAK-E	YLHNK	GIYHRDLKPDNMLLK	HKNFNQND	AIKITDFGLSRT
DDB0220010	YLHEQ	KVIHRDLKPDNMLLVN	SEGVV	KITDFGLVSHI
Apq1	FLRQK	QVIHRDLKPDNMLLL	SDDSEHP	ILKIGDFGLAKF
tsunami	YLHYK	KVIHRDLKPDNMLIT	SGGQI	KVDFGLAKTI
Cdk1	YSHGH	RVIHRDLKPDNMLID	ROGAL	KLADFGLARAV
Cdk5	FCHDH	RVIHRDLKPDNMLIN	RKGEL	KLADFGLARAF
Cdk7	ACHRN	WVIHRDLKPDNMLMS	INGDL	KLADFGLARQY
Cdk8	YLHSN	WVIHRDLKPDNMLVM	GEGKECG	TVKIGDFGLARIFQ
CDK9	YCHRN	NVIHRDLKPDNMLLD	NNGIL	KLADFGLARPFN
Cdk10	YLHSH	WVIHRDLKPDNMLYG	NNGNL	KLADFGLARKF
Cdk11	YMHDN	WVIHRDLKPDNMLYT	NKGVL	KLADFGLAREY
DDB0229294	ETHNA	GVMHRDLKPDNMLLVN	NKGSV	FIGDFGLATS
DDB0229424	ELHSQ	KIMHLDIKPDNMLIN	PRFDL	KIADFGFTT
DDB0230050	QCHVN	GIMHRDLKPDNMLIT	TNGVL	KLDFGLSTSY
CK2	FCHSN	GIMHRDLKPDNMLMID	HQKRK	LYLIDWGLAEF
DDB0219953	YTHSK	GIYHRDLKPDNMLAID	HSKRK	LSLIDWGLAEY
ClkA	SMHKL	SLVHTDLKPDNMLLE	SSRFYFDNSIPLQF	KNSIDT
DDB0229841	FMHSA	GVYHRDLKPDNMLIF	VDFENFNI	KFTEFNNCFLD
DDB0229333	YINSA	GVYHRDLKPDNMLIAVN	KEYKT	KLDFGLSFS
DDB0229296	FMHSA	GVYHRDLKPDNMLIT	QNOQ	LKLEFGLSFC
Dyrk1	FMSTP	EVDVHCDLKPDNMLLR	NPKRS	IKLIDFGSSC
Dyrk2	FLSKR	NIYHADLKPDNMLLKS	PTKSGI	KLIDFGSSCF

Subdomain VIB

Subdomain VII

SAPKalpha	CLHKWD... PPIVHRDLKSLNLLVN.DKWEI	KVCDFGLSR.FN
DDB0229849	CLHNWT... POIVHRDFKSLNLLVN.EDWEC	KVSDFGLSR.FN
DDB0229848	SLHNWT... POVLHRDLKSLNLLVT.ENWTV	KICDFGLSR.FD
Phq2	YLHSMN... PPMVHRDLKTLNLLIS.SDWTA	KLCDFGLTTRMT
DDB0229847	CLHSWK... PVIIVHRDLKSLNLLVS.DNWTT	KVADFGLSR.FA
SplA	YLHGWT... PPIVHRDLSSRNLLLD.HNIDPKNPVVS	SRQDIKCKISDFGLSRLK
DPYK4-b	YSHRO... GIIVHRDLTSNNVLLN.FRKKLLNNSNSNDE	QFYDSDEIIAKVCDFGLS
DDB0229872	YLHTNFK... EGPVHRDLTSSNLLLN.SSYTVA	KINDFGLSKEM
DDB0229844	SLHTMR... PALVHRDIKSONLLIN.SQFDL	KVADFGLAKP
ZakA-b	YLHKO... HTIHRDLTSNNVLLD.FKREILPNOLYG	SNEFTAKVCDFGLS
7TMK1	YLHDWK... PNPVHRDLSTKNLLLD.ESLTTA	KVADFGLSK
rk1	YLHNST... PVIIVHRDLKSHNLLVD.ENWKV	KVADFGLST
rk2	YLHGST... PVIIVHRDLKSHNLLVD.ENWKV	KVADFGLST
rk3	YLHCCD... PVIIVHRDLKSHNLLVD.EHYRV	KISDFGLSTRFK
DDB0214883	YLHSRN... PVIIVHRDLKTDNLLVD.DSQOV	KVADFGLAT
Shk1	WLHSSN... PVFVHRDLKTSNLLVD.ANLTV	KVCDFGLSQIKOR
Shk2	WLHAS... NLIHLDLKPANLLVD.QNWVV	KVADFGLSKYMK
Shk3	WLHESN... PVFVHRDIKSSNLLVD.ENMRV	KICDFGLSALKQ
Shk4	WLHGI... TRIVHNDLKTANLLVD.INLRV	KVIDFGFSO
Shk5	WLHGIC... NLIHHRDLKLANLLMIS.KDKTV	KIGDFGFSQVIK
DDB0229963	HLHTR... NLIHHRDLKSSNLLMD.KHFNI	KIADFGLAR
DDB0231199	YLHSV... DFVHRDLKAANLLVD.KNNNA	KVGFDFGLSRV
DDB0229940	HLHSI... GVIHHRDLKSLNLLIT.EDFTA	KVIDFGTSRN
DDB0218878e	HLHSI... GVIHHRDLKSLNLLIT.EDFTA	KVIDFGTSRN
Rck1	YLHSM... STIHRDLKSMNLLIT.KRLKI	KVIDFGTSR
DDB0231197	FLHSK... NLIHHRDVKGNLLVN.ENWEV	KLIDFGVSR
DPYK2	HLHSI... TIVHRDLTSONLLLD.ELGNI	KISDFGLSREKS
DPYK3-b	HLHSI... QMLHRDLTSKNLLLD.EFKNI	KIADFGLAT
Gdt1	FLQOS... STIOKTLRARNIFLYDTNENAEV	CAKVLDLTSSTK
Gdt2	YLHRN... GIIVHRDLKPENLLIT.SLNPKSL	VCAKVSDFGTSKE
Gdt4	FLHKN... GIIVHRDLKPDNLLIV.SFDPDSS	ICAKISDFGTCRE
Gdt6	FLHSN... DITNCNIKSNLLLLFSTMEKDDV	CVKISDFGLKKF
Gdt8	FLHAS... EIVHGDIKPDNLLVF.SKE.TSG	VCVKICDFGNSEE
Gdt9	FLHOC... GIIVHRDLKPDNLLVF.DINHNP	VCAKISDFGTSKET
KinX	YLHSK... SIIVHRDLKSTNLLVD.KNWKI	KVCDFGFARIV
KinY	YLHSR... DLIFRDLKSKNLLID.DSSSP	IRGKVCDFGFARILN
DDB0229853	YLHSK... KVIIFRDLKAKNLLVD.EIGDG	LYRAKVIDFGFARIF
DDB0229863	FLHAR... GIIVHRDLKSONLLIS.TNRRR	KLCDLGLARMF
DDB0229866	YLHSR... NVIIVHRDLKSTNLLVG.DNWRI	KVCDMGFARTAOV
DDB0229851	YLHEN... GVIIVHRDLKSTNLLVA.ENWVI	KVCDMGFLARKM
DDB0229865	YLHSK... QIIVHRDLKSNLLLLG.RNWTT	KICDFGFAKEI
GefX	FLHAK... KLIIVHRDLKSKNLLLD.EFORI	RLCDFGFAR.MS
DDB0229867	FLHSK... NLIIVHRDLKSKNLLLDISRNI	KLCDFGFARVGSQYSNGSDSSSSSEDESSEC
HH498	YLHSLK... POIIVHRDLTSONLLID.RNGIA	KIADFGLSRFK
GbpC	HLHSHN... PPIVHRDLKSPNLLNGITEGONS	VATIIDFGTST
Pats1	FLHSSST... PPIIVHRDLKSPNLLA.SINENAO	TIAKVDFGLS
QkqA	YMONQN... PPIVHRDLRSPNIFLK.SLDENSP	VCAKIADFGLS
Roco4	YMONQN... PPIVHRDLRSPNIFLQ.SLDENAP	VCAKVADFGLS
Roco5	HMHGFT... PKIIVHRDLKSPNIFML.SDMNAAV	VCKVDFGETRA
Roco6	FLHSVT... PPLIIVHRDLKSPNILL.SMKDGVY	TAKVDFGLSRMFI
Roco7	FLHSCK... PMLIIVHRDLKSNLLGGSSMDNLVA	KVGFDFGLSI
Roco8	FLHNIT... PPLIIVHRDLKSPNILLA.SHPTNPNE	ISAKVDFGLSR
Roco9	FLHDSR... PSVVHRDLKSPNILL.SKDSLTM	ECHLCDFGLS
Roco10	KLNSHS... PPFLLTNLTSSGILLE.KSNDHQSSGNGL	IEPFVNAKIIDFSQS
Roco11	YMONQN... PPIVHRDLRSPNIFLF.SLDENAP	VCAKVADFGLS
DPYK3-a	YLHSK... DVAHCNLTISRSTYLD.RFOI	VKVSF
DDB0229956	YLHSL... GIIVHRDLKPGNLLID.QDWNII	RISDFGLSR
DDB0229957	YLHSL... GIIVHLDLDMKSPNLLVS.SLSTSAK	VNIKVADFNTCINRSRITAGFF
DDB0220138	HLSTYEP... PIIVHTDLKTKNLLVT.NALKI	KIADFGLASFAKSLTTIINNNTNNTAT
DDB0220436	YLHNEI... GIIVHFDLKPSPNILLKN.SKNNK	LKLIDFGLSKFLNN
DDB0230133	FLHRN... EILHLDLKPONFLVV.SISPEAP	VSIKLAADFGLA
DDB0229871a	YLHTYS... PPIIVHRDLKSLNLLVD.NNFNV	KVSDFGLSRFIS
DDB0229955	YLHLS... GVIIVHRDIKSLNLLLD.EHMNV	KICDFGLSKL
Bud32	ILHEM... NVIHGDLTTSNMLLR.ESTNE	LVFIDFGLSYT
DDB0231196	SLREA... GMYHRDFKTANFLVS.NTGKI	LISDFGTSR

Subdomain VIII

Subdomain IX

YakA	.....YEKSTLYTYIQSRHYRSPEVLV.....	.....GTVVYCASIDMWSLGCISAEFLGL.....
Prpf4B	.....EIHSEITPYLVSREYRAPEIIL.....	.....GHKYDYSIDVWSVCCLAFFFTCK.....
GSK-3	.....LIKGETNVSYICSRHYRAPELIF.....	.....GSTNYTTTIDVWSLGCVLAEILLGQ.....
GlkA	.....LESNHTSMSYICSRHYRAPELIV.....	.....GCSNYTTKIDVWSIGCILAEMLIGK.....
Erk1	.....DATHQGFMEYVATRWYRAPEVIL.....	.....SWNKYTKAIDVWSVGCIFAFILGRK.....
Erk2	.....ESIAEANPVLTEYVATRWYRAPEILL.....	.....GSTKYTKGVDVWSIGCILGELGEEK.....
DDB0229430	.....IESKPPFTDYISTRWYRAPEVLL.....	.....RCTYVYVAPIDVWVAGTAMAEVYSLK.....
Sky1	.....WTDKHFTDDIQ.TROYRAPEAIV.....	.....KAKWGTPVDVWSAACMAFFATCD.....
DDB0230051	.....FGNSITQPTYSNPSSYSVLSPEYICSVLDKENHSKLSNEIDWKAFDVWSIGCIFLELYYKK.....	.....FGRVINTESDVWSLGVIFVIYLLQTKOE.....
DDB0230126	.....GNVDSEPAEDG.MIYGSPEI.....	.....KYNKQTTAIDVWSVGVILLCLMSGR.....
Cdc7	NNNNNNNTN (64) PSTNENGTTSNASSTSNNTSSSSSSSNKSKNLRNDPKPQAPRAGTRGFRAPEVLL.....	.....RTK.....
DDB0229971	.....IKESDKRYSVVGTPVWMAPEVIE.....	.....ISGHCOVSDVWSLGCITIEFLFTSY.....
DDB0229896	.....KFDDTSAAAVVGTPVWMAPEVIE.....	.....LNGATTKSDVWSVGCITVIELLTCG.....
DDB0229877	.....YSAIDRKLTVVGTPVWMAPEVIO.....	.....MDMNAARSTACD VWSLGCITLLEMLTGN.....
DDB0231212	.....DLSSDNPDDTFAGTPVWMAPEVIO.....	.....MQGISTACD VWSLGCITIEILLTCT.....
DDB0229915	.....DSESQLRFSVVGTPVWMAPEVIE.....	.....ISGCSSASD VWSLGCITMIELLTCN.....
FNIPK-A	.....CDGDSKYYSLVGTSTHMPPEVALR.....	.....NNTACRKS D VWSLGCITIEMAGCN.....
FNIPK-B	.....PSNDGSKCYTQCGSIGYIPPEIKL.....	.....GGQCGRKS D VWSLGCITLIVKMLGCE.....
FNIPK-C	NNNNNNNANN (28) GGGGGGEASITSTISTILSGSSSSQLSTPSTSLSSFSLEINLNDSSCYLLIPEIRN.....	.....QQKITSKGLSKKSD VWSLGCITLIVKMLGCE.....
FNIPK-D	.....INF.....	.....LNI.....
FNIPK-Ea	.....LDSEVNSNIIGVTEHMAPEIKLK.....	.....NGKLGYS D VWSLGCITLIVKMLGCE.....
FNIPK-Eb	.....IEKNSKYYSFVGTDSHMAPEVKLO.....	.....NGKAGSKSD VWSLGCITLIVKMLGCE.....
DPYK4-a	.....DDGDNICKESSFAITGHTYMAPEVKK.....	.....LHRSTKKS D VWSLGCITLIVKMLGCE.....
ZakA-a	NNN.....NNNNNNNNNNNNINNNNNNDLNGSGSGISTYLNQYKQSSFAITGHTYMAPEVKK.....	.....NYRATRKS D VWSLGCITLIVKMLGCE.....
DDB0230002	.....GDLKRDRHYG.....	.....TYLPDECIL.....
DDB0229378	.....NIINKTVKLOTISSVGTLYMAPEVILL.....	.....NNKGSNSSLD VWSLGCITLIVKMLGCE.....
Mek1	.....QHTLSKAVTWVGTVMSPERTS.....	.....GRSYFDS D VWSLGCITLIVKMLGCE.....
MEKKalpha	.....SGIVSQFKSMQGTVMMAPEVIK.....	.....QTGHGRSSD VWSLGCITLIVKMLGCE.....
DDB0229911	.....IDTGETSRNTFVGTVMMAPEVIME.....	.....QVNYDYAV D VWSLGCITLIVKMLGCE.....
DDB0230012	.....EKNTCCSRKTIIVGTVMMAPEVITS.....	.....ERGNQGV D VWSLGCITLIVKMLGCE.....
MkcA	.....NLSKGERIRMCSPVWMAPEVIO.....	.....QKQHGTC D VWSLGCITLIVKMLGCE.....
MkcB	.....DVATSTPMHMVGSVWMAPEVIO.....	.....QKYHSTPVD VWSLGCITLIVKMLGCE.....
MkcC	.....DANERKLVHMAGSPVWMAPEVIR.....	.....GESYGCPT D VWSLGCITLIVKMLGCE.....
MkcD	.....SIEKEEINMLGSPVWMAPEVIR.....	.....GNPHSLST D VWSLGCITLIVKMLGCE.....
MkcE	.....LTHLKQDINMCGSPVWMAPEVIR.....	.....DKAHLGAV D VWSLGCITLIVKMLGCE.....
MkcF	.....SVEKGGSOHMGSPVWMAPEVIR.....	.....GEECSYPS D VWSLGCITLIVKMLGCE.....
PakA	.....TQIRQERNVSVGTVMMAPEVIR.....	.....GNNYDFKVD VWSLGCITLIVKMLGCE.....
PakB	.....TKSKQKRVTVGTVMMAPEVIR.....	.....GQNYDRKVD VWSLGCITLIVKMLGCE.....
PakC	.....TQKQKRVTVGTVMMAPEVIR.....	.....GHDYGVKVD VWSLGCITLIVKMLGCE.....
PakD	.....TRKKLQRNSVGTVMMAPEVIR.....	.....GNQYNHKKVD VWSLGCITLIVKMLGCE.....
PakE	.....QTEYGOANVYI GSPVWMAPEVIR.....	.....KAPYNSKAD VWSLGCITLIVKMLGCE.....
PakF	.....NGALDQSKEMI GTPVWMAPEVIL.....	.....KKNYDYKAD VWSLGCITLIVKMLGCE.....
PakG	.....DSLGEASQLV GTPVWMAPEVIL.....	.....RONYNNKCD VWSLGCITLIVKMLGCE.....
PakH	.....IQSTFSKGS IAGTPVWMAPEVIL.....	.....QTDYNNKID VWSLGCITLIVKMLGCE.....
Krs1	.....SDTMAKRQTVI GTPVWMAPEVIO.....	.....EIGDYKAD VWSLGCITLIVKMLGCE.....
DDB0216375	.....SERTRRKNTVI GTPVWMAPEVIO.....	.....EVGYDNKAD VWSLGCITLIVKMLGCE.....
Svka	.....TDQMTKRNTFV GTPVWMAPEVIO.....	.....QTGYDSKAD VWSLGCITLIVKMLGCE.....
DDB0216374	.....VNTGFKQKTVV GSPVWMAPEVIR.....	.....PKGSNGYDSKAD VWSLGCITLIVKMLGCE.....
DDB0216379	.....AEQOQKMNVTI GSPVWMAPEVIR.....	.....GOGYDQKAD VWSLGCITLIVKMLGCE.....
DDB0216377	.....FNTFSKRNTFV GTPVWMAPEVIO.....	.....ENKYDGKAD VWSLGCITLIVKMLGCE.....
DDB0216378	.....LDKSSKRNTFI GTPVWMAPEVIR.....	.....RSNPVYDTKAD VWSLGCITLIVKMLGCE.....
DDB0230010	.....CSLGRGRTRMCGTVMMAPEVIR.....	.....REPYDTOS D VWSLGCITLIVKMLGCE.....
DDB0229972	.....SAIEPSIRFSLNGYVWMAPEVIR.....	.....MKPFNHKVD VWSLGCITLIVKMLGCE.....
DDB0229973	.....LGNVTLKTCI GTPVWMAPEVIR.....	.....DGGNSGYSLKAD VWSLGCITLIVKMLGCE.....
IfkA-a	.....GRNIKIFDHFELKLSLKNLNSWISS (28) NQINNEIDRREDINLGVVLEMLCCSGLAN (22) FIQP.....	.....IDRREDINLGVVLEMLCCSGLAN (22) FIQP.....
SAMK-A	.....IDDSTNLKTLCKKPFVWMAPEVIR.....	.....QEIQIFSEKTD VWSLGCITLIVKMLGCE.....
SAMK-B	.....IENNTNFKTACCSVWMAPEVIR.....	.....KSTSDFSRKCD VWSLGCITLIVKMLGCE.....
SAMK-C	.....NHNHNHNHNHNHDNDNDNDNTNVKIKTQCMERWVWMAPEVIR.....	.....EPPHESKES D VWSLGCITLIVKMLGCE.....
SAMK-D	.....IDLLTNQKTOFISVWMAPEVIR.....	.....KTKNKISKEAD VWSLGCITLIVKMLGCE.....
DDB0230038	.....KFMSFOLKQQLLHTQ.....	.....YLAPELNFNL.....
DDB0230124	.....FVKDGI FRTGQSSPYLAPELFNSN.....	.....CNOYDNTNSD VWSLGCITLIVKMLGCE.....
DDB0229871b	.....TOENEESLKEIKGNFLYSPELIS.....	.....LNTYSNKS D VWSLGCITLIVKMLGCE.....
DDB0229850	.....LNTEYINSNNQNKSAFCSPESSDFQDID.DDYTSLSSSITKSD VWSLGCITLIVKMLGCE.....	.....EYS.....
ARCK-1	.....TESNQETLNKTRGTSVYCAPEVFE.....	.....GKEYNERS D VWSLGCITLIVKMLGCE.....

Subdomain VIII

Subdomain IX

SAPKalpha	TGSNLETLVKMRGT	FAYCAPEVYY	GEQFSGKSDVYSIAVILWELVTRCING	RYE
DDB0229849	TADNLETLKIRGT	FAYCSPEVAVG	NGSLYTTKSDIYSGIVFWELVTRVING	EYS
DDB0229848	TGSNLETLGKLRGT	YAYVAPEVYF	GKKYTTKSDVYSMGIIILWEMTYRCIKG	THL
Phq2	MTNVSTLGMRLGT	MAYTAPEIYD	GLLFNTKSDVYSLGVMWEAIVORCISG	VYL
DDB0229847	TAKSASNRTRGT	FAYCAPEVYF	YGIHTTKGDIFSGIILWELAVRCSIKS	KYE
SplA	MEQASQMTQSVGC	IPYMAPEVFK	GDSNSEKSDVYSYGMVLELLETS	
DPYK4-b	SNQSESKKLRGS	IHYMAPENLN	GSPINEKSDIYSGFLLVWOMFS	
DDB0229872	KPGPTEMTAAMGS	LAWMAPECFK	AENYTEKVDVYSFAIILWELVTR	
DDB0229844	TELOQGSNSTIKGT	MAYCAPELYN	GISYSEKADVYSLGIVLWELVTRVITG	KYQ
ZakA-b	SNQSESKKLRGS	IHYMAPENLN	GSPINEKSDIYSGFLLVWOMFS	Y
7TMK1	EOGFE.MTSTVGH	LCYQAPVFI	GELYTPKADVYSFGIILWELVTR	
rk1	IEOQGATMTACGT	PCWTSPEVLR	SORYTEKADVYSFGIILWELVTR	
rk2	IEOQGATMTACGT	PCWTSPEVLR	SORYTEKADVYSFGIILWELVTR	
rk3	KHLDKKTAMTPVGT	PCWTAPEVLR	NDPYTEKADVYSFAIVLWELVTR	
DDB0214883	VKSHTFAKTMCGT	TGWVAPEVLA	EEGYTEKADVYSYAIVLWELVTR	
Shk1	GENLKDGDGAKGT	PLWMAPEVLO	GRLFNEKADVYSFGIILWELVTR	
Shk2	PDSKDKLLGOAGS	PLYMAPEMLV	NOPYDGVKDVYSFILLWELVTR	
Shk3	KHKMLKDQSSAKGT	PLYMAPEVMM	FKEFNESSDVYSFGIILWELVTR	
Shk4	IKEGEEFDQKAAKGT	PLWMAPEVMM	GPNYNEKADVYSFGIILWELVTR	
Shk5	TGTTLSQDQKPKGT	ALYMAPEVMM	KHEFNEKADVYSFGIILWELVTR	
DDB0229963	ETSFTQMTTIGT	VAWTAPEILL	HESYNQKADVYSYAIVLWELVTR	
DDB0231199	IDNNFNMTAVAGT	PKWESPECLM	GEAYTSASDVYSYGMMLFELATG	
DDB0229940	VDLAKQMTLNLGT	SCYMSPELFF	GNGYDETCADVYAFGIVLWELVTR	
DDB0218878e	VDLAKHMTMNLGT	SCYMSPELFF	GNGYDETCADVYAFGIVLWELVTR	
Rck1	VANKYNMTHVGT	QAWMAPEIFT	SRTYTNKADVYSYAIILWELVTR	
DDB0231197	FVEARLGYTIVGT	PNYMAPELFN	GOPYHOPADVYSFGVLLWELVTR	
DPYK2	REGSMTMTNGGIC	NPRWRPELTK	NLGHYSEKVDVYCFSLVWELVTR	
DPYK3-b	TLSDDMTLSGITN	PRWRPELTK	GLVYNEKVDVYSFGLVVYELVTR	
Gdt1	IKGLACNNYIERVDT	PNLTREISIRDPK(29)	NNSNNSSSLKYNTHSFAVLSYELVTR	
Gdt2	TNERYNLQTRRG	VAYMSNEILS	QGSYTKSTDIYSGMILCYELVTR	
Gdt4	INGKHELNSKAGT	TRYMSPEILE	GLPYTYSTDVYSFAIILWELVTR	
Gdt6	EVQONEKEIFK		DEKDOKLIDVYEFGITVYELVTR	
Gdt8	LGEKESKSKPDS	TMNYLPNEVFD	GEGYQKSADVYAFGVSLVYELVTR	
Gdt9	NEFSNKNTNCVGT	PIYMSNEILE	KKTYDNSTDVYSFAVILWELVTR	
KinX	EEDNNKSMTICGT	DNWMSPEMIT	GLDYDERSDIFSGIVLWELVTR	P
KinY	KKQOQNRHLSICGT	DSIMAPELIL	GMEYDESVDIFSGVLLWELVTR	SK
DDB0229853	DGKDTNNTLICGS	ENTMSPEVIV	GSSYNDSCDVYSYGVLLWELVTR	
DDB0229863	EERINKRYTCVGT	EIWMAPVCL	DQSYSTADVYSFGIVLWELVTR	PD
DDB0229866	GGGSRAKRTMTICGT	TNCMAPEVVL	GODYNEACDVYSFGIVLWELVTR	RPS
DDB0229851	DKSEKSMTICGT	DDWMAPEVLI	GEEYDASCADVYSFGVLLWELVTR	
DDB0229865	TIQNPLSMTICGT	DEFMSPEVIL	GIQYSYADIVYSFGVLLWELVTR	R
GefX	EQTKKSRRHMTMCGT	TGWVAPEILL	GMSYDTSADVYSFGVLLWELVTR	
DDB0229867	VNGAAGGGGDDVYK	NNNGKPNYRLRRMSICGT	PSFMPPEILL	
HH498	NDIGDKTMTSIC	NPRFRSPEVTK	GQKYSEKVDVYEFGITVYELVTR	
GbpC	ALYGGAAALIRCVD	QPLWLGPEVLA	GTAYSEPSDVYSFGIILWELVTR	
Pats1	GLOHTITNRGVEN	PLWLAPEILN	KTKEASTOTDVYAFGIVLWELVTR	
QkqA	QOSVYSVSGLLGN	FQWMAPEITIG	VEDESYTEKVDIYSGFAMILVTR	
Roco4	QOSVHSVSGLLGN	FQWMAPEITIG	AEEESYTEKADIVYSFAMILVTR	
Roco5	VVTSALGRDKLSN	PIWLSPEIMR	GDEYTEKADVYSFGIVLWELVTR	
Roco6	QALKHKLNRNFPVGN	ITWVAPEILL	EEEYTVKSDVYAFGLWELVTR	
Roco7	KPIGKEVKGRKVVN	WRWLAPECMG	DGOYTEKIDIVYSYAIVLWELVTR	
Roco8	SIVQNFSSKVVND	PTWQSPVLR	GMEYNEKSDIYSGMILWELVTR	
Roco9	GFSTTVANRSVQNP	VWLAPEVIN	NELCSDKSDVYAYGVILWELVTR	
Roco10	SFLPSLFPSTSTTP	KSYHSPVLR	KLNYHENSADVYSFGIILWELVTR	
Roco11	QOSLYSVSGLLGN	FQWMAPEITIG	AEEESYTEKIDIVYSFAMILVTR	
DPYK3-a	PKLNATDLNPNPAIE	PRYMAPEMTR	MEEDQISCSIDVYAFVWELVTR	
DDB0229956	VVDNR.MTKTVGT	PCYMAPEVLR	GLTDYSQOADVYSFAVILWELVTR	
DDB0229957	NRHTGSGDNNKVEK	SKKGTTLWMAPEVIR	GAMYSEKADVYSFAIILWELVTR	
DDB0220138	SSTTTSSANGANSIS	NNNNNTSVDSQRLAYAFYAPEILN	SKHFSEKSDVYSFGIILWELVTR	
DDB0220436	NNQNNNNSLNMGS	YRYSPELLECN	NQNNLINKSDVYSFGIILWELVTR	
DDB0230133	TSSRSFYGPTVEGS	FLYMSPEVFT	QKKFSRAADVYSYGAELVTR	
DDB0229871a	GGIGSSAKTFCG	LSWLAPEVFN	GSGYTTKVDVYSFGIILWELVTR	
DDB0229955	KSKSTEMTKSICGS	PIWMSPELLM	GEDYTEKVDVYAFGLWELVTR	
Bud32			SNSVEDKAVDLY	VLERA
DDB0231196	DENEKRLNTFAKTI	GMWYRCPR	LDGCS	EKTLTHYNEKSEIYSLGIIILWELVTR

Subdomain VIII

Subdomain IX

DDB0229339 DENEKRFNTFAKTI~~G~~TLWYRC~~P~~RLGDCSGD..... EKTLNHYNEKSE~~T~~YSLGII~~L~~WELICIAMTGT~~Y~~V... SPK
DDB0231195 TESNGCTLQOIR~~G~~TNLHIA~~P~~ECYK..... GFLFSSQS~~D~~IFSV~~G~~ISL~~Y~~QLAYKL~~V~~YG..... KFV
DDB0229335 ETNENT.LQKYR~~G~~TSVFI~~P~~PELND..... NILYNEKS~~D~~ISL~~G~~VSF~~M~~MLLYK~~V~~VYG..... KME
DDB0216331 KYENS.MSGVA~~G~~TY~~Y~~LS~~P~~EILL..... NKNYSRPA~~D~~IFSL~~G~~CIF~~Y~~EMYTLN~~L~~.....
DDB0229344 AHHTGSIHSETV~~G~~TY~~C~~SS~~P~~EILL..... STYDKT~~T~~DI~~F~~SL~~G~~CFI~~Y~~ELITL~~K~~.....
DDB0231281a TLYTQNKSTLI~~G~~TNO~~Y~~IA~~P~~EVIE..... KKGHTNL~~I~~DI~~F~~SL~~G~~KTL~~L~~LS~~S~~KRN.....
DDB0230037a QVKTINSSTLI~~G~~TNO~~Y~~IA~~P~~DVIK..... RGGYTGT~~I~~DI~~F~~CL~~G~~KTL~~L~~LL~~L~~LN.....
DDB0219988a MVIDTQKNTLI~~G~~TNO~~Y~~MA~~P~~EIDL~~G~~..... GYTKCV~~D~~IFSL~~G~~CT~~M~~LSL~~I~~IT.....
DDB0231281b ELKNDQDLYYSK~~D~~TL~~G~~Y~~O~~S~~P~~EI~~Y~~SSEL..... RGNGDI~~K~~NQ~~P~~Y~~K~~M~~D~~VF~~G~~IR~~C~~V~~M~~K~~Y~~LS~~K~~.....
DDB0230037b GKHLENYSRD~~G~~T~~F~~G~~Y~~~~O~~A~~P~~EI~~Y~~REEL..... RGDGDI~~K~~T~~O~~K~~Y~~K~~M~~~~D~~VF~~G~~SL~~G~~CT~~M~~AFL~~I~~KK.....
DDB0219988b DFGFILKTNES~~G~~SK~~M~~~~O~~A~~P~~EI~~Y~~QE~~E~~YRS..... KENDIT~~N~~Q~~H~~Y~~K~~L~~D~~IFSL~~G~~F~~T~~L~~S~~HLM~~K~~.....
DDB0231182 LPSNELIYNQRNDR...SKEFC.....FYS~~D~~LY~~S~~F~~S~~SSL~~N~~K~~I~~K~~I~~KE.....
IksA LAPPLYKNNIKRTGNT~~G~~TIE~~V~~LA~~P~~ELL~~O~~KGV.....NGEYNSDYDEK~~C~~DI~~F~~SL~~G~~ILL~~Y~~Q~~M~~AYGT.....
IreA LDNDDQ.SLTFTSDSHGW~~O~~PAE~~Y~~LN.....GTNRNTK~~K~~V~~D~~IFSL~~G~~CV~~V~~Y~~L~~IT~~G~~A.....
IrlA VETSYSF.TNNAPT~~G~~QEG~~V~~HP~~I~~EVLO.....EKRKTKS~~V~~DIFSL~~G~~CIL~~F~~YLL~~T~~NG~~Q~~.....
IrlB VESSYSF.TSNIPT~~G~~GG~~V~~HP~~F~~EVLO.....SKRMTKS~~V~~DIFSL~~G~~CIL~~F~~YLL~~T~~NG~~Q~~.....
IrlC VTSSYSF.TMHAPT~~G~~QEG~~F~~HPA~~E~~VLL.....EKRKTKS~~V~~DIFSL~~G~~CIL~~F~~YLL~~T~~NG~~Q~~.....
IrlD VTSSYSF.TMHAPT~~G~~QEG~~F~~HPA~~E~~VLL.....EKRKTKS~~V~~DIFSL~~G~~CIL~~F~~YLL~~T~~NG~~Q~~.....
IrlE VSSTYNFSTNAIPT~~G~~QD~~G~~Y~~H~~P~~V~~EVLL.....EKRKTKS~~V~~DIFSL~~G~~CL~~I~~Y~~F~~IM~~T~~NG~~A~~.....
IrlF VESSYSF.TTNVPT~~G~~GG~~V~~HP~~V~~EVLO.....SKRMTKS~~V~~DIFSL~~G~~CIL~~F~~YLL~~T~~NG~~Q~~.....
DDB0216373 NRKDALSLODEVEQNT~~P~~FP~~Y~~RA~~P~~EL~~F~~DIPS.....DCQIDERI~~D~~V~~W~~AL~~G~~CL~~L~~Y~~T~~MAY~~N~~N.....
DDB0229347 ATERGKAEDDINMFT~~L~~FP~~Y~~RA~~P~~EM~~V~~DL~~Y~~R.....GOIIDEK~~V~~D~~V~~W~~AL~~G~~CL~~L~~F~~K~~M~~A~~F~~Y~~V~~.....
DDB0229350 KNKTEMQNAEDDISRHT~~L~~Q~~V~~RA~~P~~EI~~V~~DF~~Y~~R.....SPVINEK~~I~~D~~I~~W~~AL~~G~~CL~~L~~Y~~K~~L~~L~~F~~Y~~V~~.....
Nek2 LNESLYAHTFV~~G~~TP~~Y~~Y~~M~~S~~P~~EQ~~I~~H.....GLKYNE~~R~~S~~D~~V~~W~~SV~~G~~CL~~I~~Y~~E~~MAT~~L~~S.....
Nek3 NSETSLASTVL~~G~~TP~~Y~~Y~~L~~S~~P~~E~~L~~IO.....NEKGYDH~~K~~S~~D~~I~~W~~SL~~G~~CV~~L~~Y~~E~~L~~T~~TL~~K~~.....
Nek4 LNSSEFAKMI~~G~~TP~~Y~~Y~~M~~S~~P~~E~~C~~FG.....SRAYDF~~K~~S~~D~~I~~W~~SL~~G~~CIL~~F~~Y~~L~~M~~T~~L~~K~~.....
DDB0229345 SETDLYANTTAG~~T~~PQ~~V~~YS~~Y~~E~~I~~CN.....KKPYTN~~K~~T~~D~~I~~W~~SL~~G~~V~~V~~L~~Y~~E~~L~~M~~T~~LS.....
Ifka-b INLSSSTNSTAQQT~~P~~MW~~D~~LNDEN~~L~~SMT~~G~~GV~~G~~TP~~F~~Y~~C~~CP~~E~~ILE.....KNTKHYG~~T~~K~~V~~D~~M~~Y~~S~~L~~G~~I~~F~~F~~E~~M~~C~~F~~Q~~.....
IfkB INLSSSTNSTAQQT~~P~~MW~~D~~LNDEN~~L~~SMT~~G~~GV~~G~~TP~~F~~Y~~C~~CP~~E~~ILE.....KNTKHYG~~T~~K~~V~~D~~M~~Y~~S~~L~~G~~I~~F~~F~~E~~M~~C~~F~~Q~~.....
DDB0216407 SVIN...TKQQQQQQPON~~Y~~WE~~D~~E~~V~~E~~G~~QQQQQQQQQQQQQQQQQQQ~~Q~~H~~T~~A~~R~~V~~G~~T~~L~~Y~~S~~T~~S~~P~~E~~Q~~E~~A.....GTNGD~~S~~A~~Y~~DD~~K~~V~~D~~M~~Y~~S~~L~~G~~I~~V~~F~~F~~E~~M~~W~~Y.....
DDB0229432 IPISTPPTS (21) AAT~~H~~L~~N~~S~~S~~L~~G~~CT~~I~~SS~~S~~S~~S~~T~~T~~TAT~~A~~T~~T~~S~~T~~P~~F~~M~~F~~Y~~N~~S~~I~~V~~N~~T~~V~~G~~V~~T~~L~~Y~~S~~A~~S~~P~~E~~Q~~L~~S~~N~~K~~G~~V~~F~~.GGGGY~~T~~N~~T~~W~~Y~~T~~N~~K~~T~~D~~I~~Y~~S~~C~~G~~I~~L~~F~~E~~M~~I~~V~~G~~.....
DDB0220611e ININQQLQQ (>63) PTG~~S~~Q~~S~~IP~~S~~TP~~S~~SL~~S~~S~~S~~ST~~T~~PS~~V~~ST~~G~~TS~~L~~RS~~L~~E~~H~~CK~~H~~TS~~A~~V~~G~~T~~L~~Y~~S~~S~~P~~E~~Q~~.....KGLYNE~~K~~T~~D~~I~~Y~~S~~L~~G~~I~~L~~F~~E~~L~~Y~~F~~.....
DDB0220652 NNNNNINNNNNNNK~~V~~G~~L~~L~~G~~T~~Y~~L~~Y~~S~~S~~NE~~Q~~EQ.....GDNYN~~Q~~K~~T~~D~~I~~Y~~S~~V~~G~~V~~I~~F~~F~~E~~M~~L~~S~~Q~~F~~K.....
PLK VEHGERKKTIC~~G~~TP~~N~~Y~~I~~A~~P~~E~~I~~L~~D~~.....NSNGHS~~Y~~E~~V~~D~~V~~W~~S~~I~~G~~I~~L~~Y~~T~~L~~L~~I~~G~~K.....
Vps15 FIPEDNPADFS~~F~~Y~~F~~DT~~S~~GR~~R~~TC~~V~~I~~A~~P~~E~~R~~F~~Y~~E~~T~~N~~R~~G~~.....APSNNE~~L~~TP~~K~~M~~D~~I~~F~~SL~~G~~CV~~L~~Y~~E~~L~~F~~LD~~G~~.....
TBCK LSDHGENVSF~~P~~IC~~N~~L~~L~~Y~~L~~S~~P~~ES~~I~~L.....RGAKGS~~N~~TK~~A~~D~~V~~W~~AL~~G~~C~~IL~~L~~H~~I~~CL~~G~~Y.....
TtkA DDTTNIVRESO~~I~~GT~~I~~N~~Y~~S~~P~~EAL~~I~~D~~T~~SO.....GGPKQ~~C~~M~~K~~L~~G~~RAS~~D~~I~~W~~SL~~G~~CIL~~Y~~E~~M~~A~~F~~G~~Y~~.....
DDB0220004 LNEATNTKIYSE~~G~~DS~~R~~Y~~L~~S~~R~~ELL~~H~~.....DDMSAL~~K~~K~~S~~D~~I~~F~~S~~L~~G~~C~~I~~L~~Y~~E~~L~~AR~~C~~K.....
DDB0229384 NNTSMDSDCNNLSL~~D~~EDD~~I~~FF~~D~~LE~~G~~DS~~R~~Y~~L~~A~~Y~~E~~F~~LL.....DKQ~~I~~S~~K~~PS~~D~~I~~F~~S~~L~~G~~V~~T~~F~~F~~E~~M~~V~~T~~G~~N~~E~~M~~P~~.....TNG
DDB0216398 TTTGGDDSE~~G~~Q~~I~~Y~~M~~A~~P~~ELL~~N~~.....DIHTPS~~A~~D~~I~~F~~S~~L~~G~~I~~T~~Y~~E~~MAT~~N~~Y.....
Scy1 INNSILRNHNDLIPN.K~~V~~K~~S~~P~~E~~IM~~K~~S~~Q~~.....WQIQ~~O~~Q~~S~~PS~~Y~~S~~I~~D~~S~~W~~M~~L~~G~~CL~~M~~Y~~F~~EC~~N~~T.....
Scy2 REYQYISGGGGGESSN~~S~~NY~~L~~P~~O~~LD~~Y~~L~~A~~P~~E~~F~~I~~S.....QRKFET~~N~~S~~D~~I~~F~~S~~L~~G~~I~~R~~L~~I~~F~~E~~L~~S~~I~~N~~L~~E~~Q~~AL~~D~~SH~~L~~IS~~Q~~.....
SLOB1 LGMKPLFND~~Y~~I~~Y~~G.....IG.L~~P~~OS~~F~~K~~D~~N~~L~~E.....
SLOB2 LGLEPRFS~~D~~F~~I~~R~~O~~.....HNEKID~~P~~.D~~V~~L~~S~~F~~S~~GL~~V~~L~~F~~E~~M~~A~~C~~G.....
DDB0229334 NFLNQD~~Y~~Q~~S~~P~~E~~V~~L~~K.....SNNFTH~~K~~S~~D~~I~~W~~S~~E~~G~~F~~I~~L~~L~~K~~M~~I~~D~~K~~.....
DDB0231326 TODVEGYTTRN~~R~~CT~~E~~F~~I~~K~~S~~PE~~M~~L~~T~~I~~A~~YAS (7) DRR~~K~~V~~G~~S~~N~~TAS~~D~~V~~W~~S~~L~~G~~C~~L~~F~~Y~~E~~L~~L~~T~~G~~D.....
DDB0231559 CTNLNSSLKNGA~~C~~TV~~C~~Q~~A~~PEAS~~R~~.....GKATIO~~S~~D~~I~~Y~~S~~L~~G~~V~~V~~L~~F~~E~~L~~CGA~~I~~PK~~Y~~N~~Y~~.....NYF
DhkG-a TMID.....NIDL~~T~~NS~~Y~~NNNN~~S~~ST~~N~~N~~I~~FF~~N~~F~~N~~ND~~Y~~DEESINEL~~F~~K~~S~~Y~~P~~DL~~S~~R~~F~~ST~~S~~Y~~Y~~I~~S~~P~~E~~D~~T~~G~~R~~T~~I~~H.....PVDE~~K~~S~~D~~I~~Y~~S~~L~~G~~V~~T~~F~~F~~E~~L~~L~~T~~G~~R.....
DDB0231198 LVHDNNFTST~~F~~HT~~D~~Y~~V~~PE~~E~~Y~~G~~.....RFQYD~~G~~E~~K~~V~~D~~I~~Y~~S~~F~~G~~C~~T~~F~~F~~E~~M~~V~~T~~K~~H~~R~~.....
DDB0231179 DVPIRLCDT~~N~~CHEN~~K~~SL~~E~~RY~~W~~D~~Y~~N~~Q~~C.....RIKT~~T~~S~~F~~I~~R~~D~~N~~E~~D~~I~~F~~SL~~G~~V~~L~~I~~F~~E~~M~~L~~T~~G~~E~~.....V
DDB0231335 SNIGDDR~~K~~G~~Y~~D~~I~~SN~~L~~K~~S~~I~~Y~~D~~F~~F~~N~~Y.....
7TMK2 NPTALQQQKLNN~~F~~OS~~A~~T~~T~~T~~T~~T~~T~~TE~~O~~T~~T~~E~~P~~IE~~V~~AA.....TTTP~~O~~T~~I~~HS~~A~~F~~O~~H~~D~~I~~L~~S~~F~~G~~F~~I~~V~~L~~D~~F~~L~~T~~S~~N.....
DDB0229381 GNDSAEIHSTLAG~~S~~PL~~M~~A~~P~~E~~I~~I~~H~~I~~L~~SP (11) DSSE~~G~~YN~~P~~LL~~V~~D~~W~~A~~I~~GA~~V~~A~~F~~R~~L~~I~~T~~G~~D~~D~~L~~.....IS
Bub1 IYSQ~~A~~R~~Y~~Q~~S~~PI~~E~~L~~L~~P~~I~~G~~T~~P~~L~~E~~W~~L~~K~~I.....NQS~~S~~T~~T~~N~~V~~G~~W~~S~~Y~~N~~L~~D~~Y~~L~~G~~I~~C~~K~~V~~M~~F~~H~~L~~T~~C~~G~~K~~.....
DDB0230007 SI~~Y~~Y~~L~~S~~P~~E~~V~~L~~K~~.....GYT~~S~~F~~S~~S~~D~~I~~W~~S~~F~~G~~V~~L~~F~~K~~C~~I~~T~~G~~Y~~.....
DDB0229337 QFF~~F~~Q~~D~~Y~~L~~S~~S~~P~~E~~N~~Y~~K.....GSL~~V~~G~~V~~NE~~Y~~S~~M~~V~~T~~L~~G~~I~~L~~Y~~Q~~CL~~T~~G~~E~~.....
DDB0229346
Lvsg
DDB0230125 TENE~~E~~F~~Y~~Q~~G~~T~~M~~N~~T~~AS~~N~~R~~I~~Y~~N~~I~~L~~I~~N~~.....NRT~~N~~H~~A~~F~~S~~V~~V~~ES~~D~~D~~L~~E~~S~~L.V~~K~~V~~Y~~I~~M~~E~~N~~E~~Q~~.....
DDB0204911e TENE~~E~~F~~Y~~Q~~G~~T~~M~~N~~T~~AS~~N~~R~~I~~Y~~N~~I~~L~~I~~K~~.....NET~~N~~H~~A~~F~~S~~V~~D~~ES~~D~~D~~L~~E~~S~~L.V~~K~~V~~Y~~I~~M~~E~~N~~E~~Q~~.....
CK1 THO~~H~~I~~P~~Y~~R~~E~~H~~KN~~L~~T~~G~~T~~A~~R~~V~~AS~~L~~N~~T~~H~~O~~.....GIE~~Q~~S~~R~~R~~D~~D~~L~~E~~S~~L~~G~~V~~L~~M~~F~~N~~R~~G~~S~~.....
DDB0216336 SGE~~V~~R~~P~~A~~R~~E~~S~~T~~G~~F~~R~~G~~T~~A~~R~~V~~A~~S~~I~~N~~S~~H~~L~~.....SKDL~~G~~R~~R~~D~~D~~L~~W~~S~~I~~F~~V~~Y~~L~~I~~E~~F~~A~~R~~G~~Q.....

Subdomain X

Akt1	PPFYNO	.....DVOEMYRKIMM.....	
DDB0220670	PPFYSE	.....DPHEMTKLILS.....	
DDB0216386	TPFVGD	.....NQNMIFEKITTNYT.....	
DDB0220701	PPFNDD	.....TPELIFOHLHRD.....	
DDB0220700	PPFOED	PNESINPKSDNDEKKNVRIIFNKITNHK.....	
DDB0185113	SPFNGS	.....SVQETFONILQ.....	
DDB0229452	TPFIGE	.....TPEEIFESILS.....	
NdrA	PPFLSD	.....NTTETCLKILNCKETL.....	
NdrB	PPFCSE	.....SIRETYHKIMNWKOTL.....	PK
NdrC	NPFCAD	.....TPNDVFINILRWKETL.....	
NdrD	TPFNGD	.....TPEEVFMNILDWKNIL.....	
DDB0231558	PPFDGD	.....SPEEVMETVLKWK.....	
DDB0216387	ALFVES	.....PDTTEQKIRENIGNWRGLL.....	
Pdk1A	VPERGK	.....TEFLTFOKVSNI.....	
Pdk1B	LPRKGF	.....NEYQTFLLITK.....	
PKA	PPFYDD	.....DTFAIYNKILLA.....	
pk4	PPFVSE	.....GSQNDIFRLIR.....	
DDB0185224	LPFNSK	.....ESLLNRKAD.....	
pk2	PPFYSQ	.....NVSTMYOKILN.....	
DDB0220702	PPFEHK	.....NRALMQEKIIS.....	
pk3	SPFLAS	.....NRNDMYKSMIQ.....	
Aurora	SPFTSD	.....EEKNIIFH.....	NI
MLCK-A	PPFYGD	.....TVPEIFEOIME.....	AN
DDB0216385	PPFYSD	.....DESEMFELITK.....	GQ
DDB0216309	PPFWDK	.....NNAVLYEKIRN.....	
pXi	PPFDET	.....TG.....	YV
DDB0216308	APPYAD	.....THHELFQKILD.....	LE
DDB0229351	PPFOGK	.....NNMIVMSLITIK.....	GEL
DDB0216307	PPFYAS	.....SQNLFEKILLT.....	AD
DDB0216312	PPFYSE	.....DIRKLFESILS.....	AS
Snf1	LPFDEE	.....SIPMLFKKIRE.....	GV
DDB0229364	LPFDEE	.....NIRRLLNKVKNI.....	GA
Lkb1	PPFSGA	.....NMFVLFENISK.....	CK
MARK-A	LPFDDG	.....NYVELFQKILLA.....	GN
MARK-B	LPWTLT	.....DGVOVEGMDRLLR.....	GE
MARK-C	LPWEGD	.....SQAEISFNSVH.....	GN
DDB0231454	LPFINV	.....TDMIVGKFLIP.....	
DDB0219986	NNSDGNENDNN	.....NNNNFLIREPFLLP.....	EE
FHAK-A	PPFDDD	.....DDEEMSTPQLFEKIVS.....	GN
FHAK-B	KPFIVDC	.....RDLYHSFIN.....	GN
FHAK-C	PPDFDH	.....TNNFNKLINQ.....	GL
FHAK-D	PPFGDP	.....OTKDFFEKIKN.....	GG
FHAK-E	PPFDDS	.....REVSIFFEQIRN.....	AK
DDB0220010	TPFISK	.....TNSLLDIYD.....	QI
Apq1	PAYNSG	.....SVPDLLN.....	QL
tsunami	PPFSAN	.....SLADLVHMTLES.....	NI
Cdk1	PLFSGD	.....CEIDOLFRIIFRVLGTPDDDSIWPGVTKLPEYVSTFPNWP.....	
Cdk5	PLFPGS	.....GTSDOIFRIIFKILGTPNEESWPSITELPEYKTDFFVHP.....	
Cdk7	PYLPGT	.....GEIDOLRKICCSALGTPNESNWPVGTCLPNYIK.FTDHP.....	
Cdk8	PLFPGKEKDPKI	.....PSLFQDDOVEKIIIRVLGKPTLDMWPDIKHLPEWKRLSMEAF.....	P
CDK9	TLEPGR	.....NSIDOLDKIYOVCGSEPNANNWPEAMDLPFWDALKPKRE.....	YNSLSLK
Cdk10	PLITCN	.....NEVDQIMRIFNLLGEPNEQIWPGFSSLPNFKRLNNIHQ.....	P
Cdk11	VLLQGS	.....SEIDQMDKIFKLFGTPTEKSWPAFFKLPLAKYFNLTDO.....	P
DDB0229294	NFLPGS	.....SEQOQTEAICKLCTPTDEIWPNVSQLQNFNQISHLPV.....	Y
DDB0229424	YMFACS	.....NDSLQLELIFKTFGTPTEKNWPGISKLSGYSPLYGSKSKKY.....	PSK
DDB0230050	YLFAGA	.....DETAQDILIFKLFCEPTEKSWPGVSSLPGYNDLNFNKQQQQQNE (38) YNNISTSCLOSPSSPPIGGYASSLSSDFNSNEYNGYNQTFNSNEDCLAISQK.....	
CK2	DPEFHGH	.....DNIIDOLVKIVKILGTEEFYAYLDKYGIVVDHTILSIGKHPK.....	KPWS
DDB0219953	DPEFNGD	.....NNNDOLKIVKVLGTDLDFNFDKFGLSLTDEQSSLIKP.....	ROKSNWE
ClkA	TLEFTH	.....NNVQHLAMMEKVMG.PFPNSMSNVSKKYFNDYGTLNRPQNSDE.....	IKSMERVEG
DDB0229841	RLFRSF	.....NSKEHLKSTYKLI GAPKASEGAYVVKGELLFFLMEYNRKN.....	SF
DDB0229333	OLFRCE	.....SKQSLIIEISELIGTPTYDECKESTNGFARNFILNIPLK.....	SR
DDB0229296	RLFKTQ	.....DFEDHILISISKLIENPTAEDLSIVLSKSIFOYMEKIPKST.....	LTP
Dyrk1	PLFSGQ	.....NEODOLTKIIEVLDLPPSHMIDSSPKAKKFFTKDPINSTYQLKKNEKLTNVEFC.....	KKKLSEIIGVETGGPQSRKN
Dyrk2	PLFPGS	.....DEPEOLACIMEVLCAPPKSVIDNSTRKDIFFEDDGTPKPVKNSTT.....	GELYTIG

Subdomain X

Yaka PLFPGN.....SEYNQISRIIVEMRGIIFPSDLLDKGKSSSTRYFHRHLGNSDDNNNNNNNNNGKPYYYTLKSEEDYQRD.SKTTLLPSKKYFNYKTLPEIIQNYGFKKSMSP
 Prpf4B PLFPCK.....TNNDMIRLFMEYRCAFSKMKLKKSEFVSNHFNENLVFMKQEIDNIEKTVRKVPH.....DITKPTKDILQFLLPK
 GSK-3 PLFPGE.....NGIDQIVETIKVLGTFPTKEQIHAM..NPYYTSFKFPEIKA.....N
 GlkA PLFPGT.....NSNDOLGRIIEVLGSEPTKDDMEAMKPSKPYH.L.QLPNI.....N
 Erk1 PLFOCK.....DYHQITLTIETIGSESEEDICNLANEQARQFIRNMGNO.....P
 Erk2 AMFPGN.....STMNQDILLIEVTGRESAEDIEAIKSPFAGTMLESPP.....SN
 DDB0229430 PMFPGS.....SEIDOLFKICTIMGSEPTSATWIDGIKLANSMGTFPPNVOP.....PS
 Sky1 HLEKPKSG.....KGFKSDHIALMIELLCKEPRFIFAGGDESRYVFTHKGDLRKIPDLSL.....QWPLFSV
 DDB0230051 KLNNLNLDNNNNN(52)QLYSVLENNISTYKESAPKNGNLYFKENHNI I I KSKVERDFNGANLPT.....
 DDB0230126 PLFHGH.....NNKSVLESIVKIVGRPFQKIDIRMIANGNMTSDAIQLLOYAASL.....PVPFEDS
 Cdc7 YPFIS.....PDDMTSIAEIVSIIG..TKKIVDIAHLLLEKKISISHSIPPTW.....RDLRRL
 DDB0229971 PPFYDL.....NPLGAMYRIC.....
 DDB0229896 PPFYDL.....GOMPALFRIV.....
 DDB0229877 PFWDL.....GTMPAMFAMV.....
 DDB0231212 PPFYGL.....APAAALYKIV.....
 DDB0229915 PPFYTL.....QPMAMFRIV.....
 FNIPK-A.....LFEKD.....
 FNIPK-B LEETEI.....QIDGASFNNNNNKPK.....
 FNIPK-C...DPK.....IT.....
 FNIPK-D...CDCT.....KDENI.....
 FNIPK-Ea LKLLDI.....
 FNIPK-Eb NLCHSE.....RD.....
 DPYK4-a.....NPKKI.....
 ZakA-a.....DLSQK.....
 DDB0230002 EIKPIK.....LT.....
 DDB0229378.....LNQLCLQR.....
 Mek1 PPFYGSNLPHQQQP(83)SVPEGMGFVWLLDCIV.....
 MEKKalpha PFWNSI.....TELAAVMYHIA.S.....
 DDB0229911 PPFYAEY.....PPMKVLLLTLO.....PP
 DDB0230012 PPGYDL.....PPSKVFMNLLFGNSPS.....
 MkcA NKLK.K.....NPIKTMFMVGSEG.....
 MkcB PFMES.....AVKAMFTVATD.....
 MkcC PPHR.K.....SSLTAMFTTATE.....
 MkcD LPYHDS.....RLKAMVFVATNNL.....
 MkcE VPHH.K.....SKIKAMFLAGTVGVK.....
 MkcF PPHRDS.....RMKAMFYNAIN.....
 PakA PPFYLEF.....PPLRALFLITTO.....
 PakB PPFYMSF.....PPLRALFLITTK.....
 PakC PPFYMDF.....PPLRALFLITTK.....
 PakD PPFYAKY.....PPVRAFLITLLE.....
 Pake PPNRGL.....RSMNQLVEIPNM.....
 PakF PPHIDL.....PPMRAMKMPVNW.....
 PakG PPLYTM.....PPTRAMLIPNK.....
 PakH PPLSEV.....NPMRAMYMIGRR.....
 Krs1 PPLFNV.....HPMRVIFMIPNPSR.....
 DDB0216375 PPFYHDL.....HPMRVLFMIPTS.....
 SvkA PPRADL.....HPMRALFLIPKD.....
 DDB0216374 PPLFNL.....NPVKVIFVIPFR.....
 DDB0216379 PPRFDV.....PPSRVIFTIPHQ.....
 DDB0216377 PPFNSNV.....HPMRVIFMIPRE.....
 DDB0216378 PPLSEI.....HPMKVLFQIPYR.....
 DDB0230010 PPFYGKD.....SSLKALFYTAIH.....
 DDB0229972 PPFSHL.....GPMEALIEIINPSTTI.....LP
 DDB0229973 PPFYHQF.....QHLQSIEMIINGTC.....PP
 IfkA-a PPLQYQL.....QQQYDLIKEIEQ.....
 SAMK-A ESYSKK.....ENNQPNLQKLP.....
 SAMK-B PFWGGK.....RNHQSHSPPIPT.....
 SAMK-C...YII.....TTPIIILPSIPS.....
 SAMK-D TDFKED.....EGFEELKRTFAGVLT.....
 DDB0230038...RD.....IKLSDLKSNTVNGYT.....HYLRP
 DDB0230124 PPLFODI.....HVSRIITDITL.....NGVRP
 DDB0229871b KPFYHEV.....TLDFDFQIIHKTSK.....LNLRP
 DDB0229850 HPPFSEF.....KDIKNDFOQLL.SSK.....NGLRP
 ARCK-1 PPFYQEY.....NKMFNFAFQVALL.....VNSSKRVLRP

Subdomain X

SAPKalpha	RPFSEY	KNLQHDFOIIITQAK	KNLRP
DDB0229849	RPFSEY	SHIKMDFQIML	NSKEGLRP
DDB0229848	LPYAEY	PHLKFDYQILI	SSAKKDVRP
Phq2	RPFHEH	PISMDIOIILTSK	NKVRP
DDB0229847	KPFSEF	KHIQYDFQILVQTSK	FNLRP
SplA	EPQODM	KPMKMAHLAAY	ESYRP
DPYK4-b	YASPN	TIYSPKEMASMSD	EKLNYP
DDB0229872	DPYNGM	EPLRLAFLASV	EDYRL
DDB0229844	RPYEDN	TEISFDFQIVIMSSK	QGI RP
ZakA-b	APNTI	YSPKEMASMSD	PKONYRP
7TMK1	QPNQNL	QPLKMAHLAAY	ENYRP
rk1	DPYFGI	PPFQVIFAVGR	EGMRP
rk2	DPYFGI	PPFQVIFAVGR	EGMRP
rk3	DPYQGM	PTFQIVISVGQ	HKLRP
DDB0214883	IPYAGK	NTMQVRSIDR	GERL
Shk1	ELFPEF	DNFFKFVAAICEK	QLRP
Shk2	EPYMKL	YSSYPQLVEGVNK	KNRP
Shk3	EPFSSH	RELEKFREAVCVK	HERP
Shk4	APYSHH	KDYDIFFNAICNE	KERP
Shk5	ELFPEY	SEIDPPYDAICNK	KLRP
DDB0229963	EPYQGI	PPMNAGILVASK	GLRP
DDB0231199	EPFLEI	QSIVELARSVCDK	KLKP
DDB0229940	EPYENI	NSWSIPVLVAK	GERP
DDB0218878e	EPYENI	NSWSIPVMVAK	GDRP
Rck1	SAYDEN	ANINIPNMVMK	GERP
DDB0231197	TPYKNL	TRIEQALFVQS	GGRP
DPYK2	IPFSDL	DGSQASQVAYA	GLRP
DPYK3-b	IPFEGL	DGTASAAKAFAE	NYRP
Gdt1	ILVGD	RK	FQGEKP
Gdt2	IPYSE	PHWRIRELVLK	NERP
Gdt4	VPFREI	PKREIPRFVRL	GTRP
Gdt6	TPENLS	NLILE	GERP
Gdt8	IPFHEI	CYNDIPNRVQD	GFRP
Gdt9	VPFSEI	DEKWEIPSKVIS	GWRP
KinX	APYMRD	ASFGLAEDIVR	NO
KinY	VLERGP	QSAFEIDQDSA	RO
DDB0229853	RVVKTO	LKRTPMNAFDMNLEKA	EH
DDB0229863	ERFPQH	RFQFDAPAF	LK
DDB0229866	SLKYGL	DVDVL	LE
DDB0229851	NLTPRI	RNEDLGVDQKFF	LS
DDB0229865	SKLDER	LPQNNFDIDY	EELQ
GefX	RKPGV	DLWVRSPTCFDINP	EELKO
DDB0229867	LKRPGKD	YWVRSQNGFDINIEELN	VNI
HH498	VPFHDY	EQIAASFKIAN	AERP
GbpC	HPFDEF	QFGQWMSKLEDEIIR	GLRP
Pats1	DYFGEI	GFMTLIEEKVIN	GERP
QkqA	IPFDEY	SFGKMQFINLIR	EENLRP
Roco4	GPFDEY	SYGKIKFINMIR	EEGLRP
Roco5	LPFDEY	PVAHSSFMYLEDEI.T	NGLRP
Roco6	HPYREF	NYS.MVSLQEDAIAK	NGLRP
Roco7	LPFEEY	VDQLKWSIIEDKIMK	GLRP
Roco8	LPFDEF	DFKFMSTLEDNLS	GLRP
Roco9	RFFSNI	TFMSEVEGLIT	EGVRP
Roco10	IAFQDH	DRFSNIVI	SGORP
Roco11	CPFDEF	TSFGKMEFIRKIRE	EDLRP
DPYK3-a	LPFRKF	NDISVAAKVAY	ENLRP
DDB0229956	IPYKDF	AQIQWISMVLE	DSFRP
DDB0229957	LPYSHI	AFNCEVEDQVL	KGLRP
DDB0220138	IPFDGM	DPYEKELLK	SGKRL
DDB0220436	LPYESL	SREQVKQIKT	DMERES
DDB0230133	RPYOEY	DQLGYLELARVRE	EGLPP
DDB0229871a	QPSGNI	SATSLG	HP
DDB0229955	LPYSGL	DSVQLALAVT	TKSLRP
Bud32	FISTHP	NSEQLFQTILS.NYELTS	
DDB0231196	IPLFONE	VDFLIWIHKDYRFSFPVGT	

Subdomain X

DDB0229339 IALFONE.....VDFSIWTHKDYRFSFPIGTP.....
 DDB0231195 HPYHEYQI.....ADEPENLNIQNTGLIPTIPPNLP.....
 DDB0229335 NPFYEF.....KISKMEYFKTVVALENFLVPIVPTFLP.....
 DDB0216331 LPLTKRS.....FGQELIEGKFDRAKAFKQEFDDSD.....
 DDB0229344 LLSHNR.....IYLGEDMLNDRFDSMQFLSTFPEKY.....
 DDB0231281a TGFVYN.....RIYLKLFEMTNPFFETR.....
 DDB0230037aRVOQNOY.....
 DDB0219988a ..LVHSP.....MNSIFESLFQLCTLENFKIR.....
 DDB0231281b ..FNSS.....
 DDB0230037bFNITS.....
 DDB0219988b ..FNCNP.....
 DDB0231182 SPSSSS.....TTSTSTSOVLIKSDSDSSSSASSSSSSSSSSSSSSSSSSLP.....KSKNK
 IksA LPYRYSGDPF.....IDEDPNRNLPSLIDEIAGFSNNRILFPQIPQRS.....
 IreA HPFGHRY.....NREKNVLKGGKFDIDQIKHL.....
 IrlA HPFGNN.....KLLRVANIVYDKPDLEPLKFN.....
 IrlB HPFGND.....KLFRIVNIISNKMNLTPLSN.....
 IrlC HPFG.D.....KFYRIVNILTDPKPILEPLKHN.....
 IrlD HPFG.D.....KFFRMANILTDPKPILEPLKHN.....
 IrlE HPFG.D.....KFSRLRYITKSKYNLSQLSNLN.....
 IrlF HPFGND.....KLFRIYNIMLNKNVNLELLGHN.....
 DDB0216373 SPFEVC.....DNEPNGSVALKVLGS.....L
 DDB0229347 DPFDGG.....SLOIINN.....
 DDB0229350 TPFEDS.....GSLGILNS.....
 Nek2 PPFEEAT.....NQAOLTSKIQV.....
 Nek3 HAFNAA.....NLPALVLKILK.....
 Nek4 HAFDAK.....EMPSLIFQILQ.....
 DDB0229345 LPFDGR.....KETVMRNIQTESTIFKPVNHPN.....
 Ifka-b ..FQTO.....MERSNILRDLRDNLKFPFPGFESTK.....
 IfkB ..FQTO.....MERSNILRDLRDNLKFPFPGFESTK.....
 DDB0216407 ..VFSTG.....HERVIVLRNLREKFEFSPDFERNH.....
 DDB0229432 ..GFETQ.....FERTTHIKNLKNGIL.PSWFTSKH.....
 DDB0220611e ..PISTR.....MEKARVLTDLRNGVL.PKSFLQKY.....
 DDB0220652 TTMERS.....TTL SKLKKSLSVLKTN...PNLKQKY.....
 PLK PPFETS.....DVKHTYQRIKQNOYSFPDEPIIS.....
 Vps15 PPIFDG.....SOLLSYRKGEYSPEPIIRQRIQD.....
 TBCK CIWQDN.....NPSIVTNRILHLSGYSTTOSFNSISKSFEQCELKTTIINEKQHEEYEEYDDEDEDISEEEKEKRIKDIKLNRRDNMNNFINSLKREEKENS DSN SSGS
 TtkA PPFK.....SFSNIIISKYQAIINPHHKIEFPVHPN.....
 DDB0220004 PLPKSGM.....EWD SIRNGILSFEKEDS...IYDDNKNDFS.....
 DDB0229384 PLWEQL.....RSDKAIDFLEPGK.....YS.....
 DDB0216398 NLPQKGO.....WWRNLREGKIPFPENDDSIS.....
 Scy1 MTKAED.....IKNLDQIPQLHQAYQKS.....
 Scy2 LPKLGVISYYNT.....MIEQVRRQSTMNTQRSDSA.....
 SLOB1 VICF.....GHCLFEMIIIGIPLGDHSNINSFIPLFP.....
 SLOB2YEMENPHSVDISIPAHCY.....
 DDB0229334 ..SLNN.....IPDDL.....
 DDB0231326 FLFYDDD.....WVKFFIRVTOPGOELITPERKSKVANI.....
 DDB0231559 PPFGLD.....KYL R VASAVSNYLRPILHPVIP.....
 DhkG-a LPFQSS.....DLSELIHSHLAKKPPVLIDLNQNVP.....
 DDB0231198 YOYKHP.....TPLHRDFLTTDFQYIP.....
 DDB0231179 HPGTTLFEQN.....VLFLLKPHGIEIVPTGGPNNNYTTLKVAFSNDIRNFT.....SN
 DDB0231335 DTINHDKKEKIKNV(66)NLNSNQKILIDLNLIEDEEILIP.....
 7TMK2 YSCFDSKFDTSN.....YD DDKFNKSNKTIKKPDLDPYIKKDEKLW.....
 DDB0229381 VIFPNL.....NQTTVLAALVNLA KMIDNGDFQKGLDSIPNE.IR.....
 Bub1ELKLSLSQ.....
 DDB0230007 YPFYSN.....DATKLIESIYDNYLDPIIRLPSDNNDLIQ.....
 DDB0229337 LPEPTY.....PKIVNFTSSSQNVEIPP.....
 DDB0229346
 LvsG
 DDB0230125 AVKRTI.....KSIPNSEIGLFRTMWEFFNTECFPOYSTL.....
 DDB0204911e TVKRNI.....LSIPNSEFGLFRTMWEILKTEFYPOYSTL.....
 CK1 LPWQGL.....KAYTKRDKYEKICDKKAQTKIDTLCQ.....
 DDB0216336 LPWRKL.....KDKDQIGEMKQKYNTPD.....LVKDLP.....

Subdomain XI

Akt1 ..EKLSPPHFTSPDARSLLEQLERDPEKRLA.....DPNLIKRHPPF
 DDB0220670 ..SPLKFPPTSKNAASLVSLNDRDPSKRLGSG..ESDVEIKAHPPF
 DDB0216386 ..NEINFPSTYSEVAIDLIOQLLOVDPLKRLGA...NGAEVVKRHPPF
 DDB0220701 ..REMEWPEETSEAKDLILKLLNPDYKRLGA...NGAYEVKTHPPF
 DDB0220700 ..KKLYFPKLYPVAIDLIEKLLDPNPSVRLGA...NGVDEVKCHPPF
 DDB0185113 ..RNISWPEDEMSPEARDLIDKLLALDPRORLGF...NGAEIKSHPPF
 DDB0229452 ..RN.TECIEIOKDAKDLIKLLDPNPSTRIG.....SKDIKNHPYF
 NdrA ...QIPTDMGLSKEVIDLIKRLVCEKDRIK.S.....ADEIKLHPFF
 NdrB IMEEAKAEVNLSPFAODLIERFIT.DPMTRIGF...NGVEIQSHPPF
 NdrC ..DWLFTQELVEAADLLKNM.M.EOPHRLGG...KGGKODFKNHPPF
 NdrD ..DWDLYSDYSEYAVDLLQKLLC.EPDKRIG.....IDEMKVHPYF
 DDB0231558 ..TMLQRPDGVSDLEWDLISGLLN.DGSTRIGSG..EKGVENIKNHIFP
 DDB0216387 ..NTAVQKNQPMKQAESLIRECTAPE.RKRPD.....ASTIKKHPPF
 Pdk1A ..RELVPINMNPVIKDLVEKLLVIKPTDRICSSSTPGCFDNLKHPFF
 Pdk1B ..REFSYPDNFDKCCMNLIDQLLDLDPYKRPT.....ISEIKNHEFF
 PKA ..GRITFPLGFDVDAKDLIKRLTADRTRRRLGAL..KDGALDVKNHRWF
 pk4 ..EARIQVPEVDOVARDLIEKLVVTDVEKRLGSL..EGGIEDIKNHPPF
 DDB0185224 ..FQLIFQNSYLSDIEIKDFIFQLISVDPSKRLGT...FDSCSIRNHKWF
 pk2 ..GELKIPTYISPEAKSLEGLLTREVDKRLGT...KGGGEVQOHPWF
 DDB0220702 ..EKAKFPKFSVSSARSILINGLLTKDPTKRLGA...NGAIEIKRHPPF
 pk3 ..GNLRMPMFLSSDAODLIEKLLVDPDNKRLGST...OGFBEISSHPFF
 Aurora QENDVYYPSSISPEAKDLISRLVSDPHORIT.....LKDVINHPWI
 MLCK-A YEFPEEYWGGSKEAKDFIGKLLVVDVSKRLN.....ATNALNHPWL
 DDB0216385 WEFPKSTQHKYSDQVKDLIKLLLENDPNKRLT.....VKQSLIAHKWI
 DDB0216309 VDYGWPEGLEVSNEAKDLVSHLEKNPEKRFIT.....FEQCLIHPPWV
 pXi LEFFSPEWDNISDSAKSLIKGLLNNDPSKRFIT.....IDQTLKHPWI
 DDB0216308 YDFPEPEWNGITDLAKDFISOLLINPEERWT.....ASQCIKHPWL
 DDB0229351 NFDSSVGVWNVSESAKDLIRKMLNPDPEKRLT.....AQQVLLHEWI
 DDB0216307 YDFPEPEWTHVSEHAKAFIRNLIKVDPDORHT.....AKQCLDDLWL
 DDB0216312 YDFPNDYWGNVSKBAKHFINCLITVEPTKRYIS.....AKQALEHPWI
 Snf1 FSTP.DF...VSPSCADLIKMLVVDVVKRIT.....IHEIRNHPWF
 DDB0229364 FSMF.PY...THKDAODLLTKMLTVDPKRLT.....IKEIKHPWF
 Lkb1 IEEF.ND...LDKDLVNLIKGLLOVDHIOQRF.....LGOIKNHPWC
 MARK-A YTFP.SY...LTHECKSLISRMLVVDVDPKRAF.....MEEILNHPWL
 MARK-B FKYP.SHV.IISDDVKDLINRMIVAEPEVERAT.....LDEIKTHVWV
 MARK-C YEDP.TH...LSAAVHILRRMIVPNPKDRAT.....IOELKNHPWT
 DDB0231454 PSTP.....LDLQDLIKMLTVDREHRLN.....IMNVLNHPWL
 DDB0219986 NNLELIPANH.SDORLISLSSIFORNPKLRPT.....AHQIIVHPYF
 FHAk-A YRVEKLEKSLISSAADLVKGLLTVDDPKRLT.....VEQALNHPWI
 FHAk-B LGFTSKKWAKISNYAKDLVRRLLVIDPEHRT.....IKEALNHPWF
 FHAk-C YNFSLPVWDVVTEAKDLIKLLNVDPTKRLT.....TKGALSHDWF
 FHAk-D FSPSPYWDEISDEAKSLIKNLIKVDVEKRFIT.....IDQALNHPWF
 FHAk-E FEFDPEDWSSVSEAKDLIKRLICVDPHKRYIT.....CNNLIQHPWF
 DDB0220010 VNHEPTYPREISNDLMDLFRLLDKNPLTRIQ.....IAEIKSHKWT
 Apq1 QNKKIKLPSHISSDCONLTYSLLOIDVEKRIS.....WEDFFNHKWL
 tsunami EIPKELNKY...PDLVSLFROLICKNEDKRIG.....WPDLLYHPFV
 Cdk1 GOPYNKIFPRCEPLALDLIAKMLQYEPSKRLS.....AKREALHPYF
 Cdk5 AHQLSSIVHGLDEKGLNLSKMLQYDPNORIT.....AAAALKHPYF
 Cdk7 ATPFKQLFTAASDEAIDLISKMLQFNPSNRIS.....AADALNHPYF
 Cdk8 NSLAKCVGIDENSQAYDLISKMLLYDPSKRLT.....ASEALDHPYF
 CDK9 DFYQHENPSFFTKEAFDLDKLLCMDPKKRLT.....ASEALDHOYF
 Cdk10 YNNLRELVPITSDTAFDLDLNLQTYDPTKRLT.....ASDALKHPYF
 Cdk11 YNNLKSFKPHITDNAFDLILNKLLLELNPEARIS.....ASDALKHPYF
 DDB0229294 PSRLRTVFKNFSNDFIELLEGLLTLNPKKRLT.....AEQALQSPFF
 DDB0229424 SLKDISKFKFSNSTLDIILRMLTLCPKNRIS.....TKREALNHPWF
 DDB0230050 KLIDKFPHLVLLPSVLDLASKMLTLDPKRLIN.....SLEALHPWF
 CK2 RFITKENQHIAVPEAIDFLEKLLRYDPAERIT.....TREAMEHPPYF
 DDB0219953 RFIPIYENDDIAQPDADIDFLDKLLRYDPTERT.....AKEAMKHPYF
 ClkA LKQLKEYFHPCHDSFFDLASRLLEYQPSKRLS.....ASDALSHPFL
 DDB0229841 QPTFNNTFIGCNOIQIDLLKNMLCWDPRDRYS.....VNEILHSPYF
 DDB0229333 HGGIKKRIPNATEEEIEIELEGMICWNPKKRWV.....IERIIQHPYF
 DDB0229296 SVGIKRRFKGASKDQIELLOGMICWDPRKRLT.....IDQLAHKYF
 Dyrk1 EPGHALVDY...LKFLDLIEKMLIYDPOKRLT.....PLEALQHSF1
 Dyrk2 TKSFKDSIRSGDEDFDNFILDCLKWEPSORIT.....AEQGLKHDWI

Subdomain XI

YakA	QDIEKEKQHR..IVFTDFINGLQLDPNERWS.....PMOAKEHPFI
Prpf4B	NVSIPDQDMKKLIQLKDLIEKCTILDPEKRTT.....PFETLNHEFL
GSK-3	PWPRVFKAKDVPAESIDLISKILLYDPSSRLK.....PVEITCAHPFF
GlkA	PKFFESLHNVEDKTVVDDLKSTIFIDPVKRAS.....IDETIAHPFL
Erk1	KVNFANMFPKANPDAILLERMIFYDPSKRLT.....VEEALAHPPYF
Erk2	PRSLSDMYPASVDALDILKLLQFNPDKRTT.....AEALAHHPFV
DDB0229430	INPLSTLLPNANQDAIELITDILLOYDPLKRPET.....PLOALQHRFY
Sky1	LTEKYKFLSQEAKDFEAFLLPMLNYLPEKRAT.....AKDCLNHTWL
DDB0230051	.....DAYNLICALLSFNPTTRTK.....ANQAAFHKFF
DDB0230126	IDNLRSHCSLASDSDLTOMLQFVPHKRIS.....IEQALSHPFI
Cdc7	RSESSCDKQDVPVELYDLLERCIDPNPLTRIT.....ASEALHHPFL
DDB0229971	QDDRPPPLPDDISSELANFLERCFCKSTEERAT.....AKELLSHPWI
DDB0229896	QDDCPPLPEGISPLPKDWLMOCFOKDPENLRIS.....AQKLLKHKWI
DDB0229877	NNPHPPPNNISADLKHFLACFVRDINKRPET.....ASOLLEHPWI
DDB0231212	QEDHPPIPPGISAALKDFLLNCFKKDENIRSS.....AKOLLHHPWV
DDB0229915	SDQHPPFPPTDISKEFLDYFOQSFKKDPTORPT.....AQEQLLOHPIF
FNIPK-A	IHGKPKIPDHLASACKNFIOQCTIDPNHRDD.....IINLISHNFI
FNIPK-B	NIWPKIPPHASKFLQNFIOQCFEVEVLRFD.....STITLIDHPFL
FNIPK-C	TNFEPITPYHLNCKNFIOQCTIQDPEYHRWD.....TNLILLTHKEFI
FNIPK-D	DFLFSKIPNHLVEKFKKVISQLSKNINNOIL.....TDIISNKITT
FNIPK-Ea	.NGIPLIPDHLNLFKNTIOHCTQINPNARFN.....ANETLYNYVIK
FNIPK-Eb	DKGIPSIPHTLSNSEKNIIQNCIKFDTNARHS.....VESTLITLSN
DPYK4-a	FDGPIIIPNHVSEIMVDFIKRCLIIDPNKRSH.....MEBLLTHRLI
ZakA-a	LNGIPIIPDHLSDTLKDFLNHCLVIDPKKRSY.....MEBLLSHKLI
DDB0230002	HIYEVVEKSQISPLFLNFIKKCT...GRYLD.....IDVLEIHPFL
DDB0229378	PNNIPVFPVN.SLFTTEILNLCFOTEPSKRIK.....SHOLLKHPFF
Mek1	KEEVPILPSTFSKEFRSFISECTOKEPTERTPT.....ASNLLNHEFV
MEKKalpha	SNSIPNIPSHMSQEAFFDLNLCFKRDPKERPD.....ANOLLKHPFI
DDB0229911	PSLEGDGESKWSHSEKDLVEKCTOKDPSKRPL.....PSKLLHHRFF
DDB0230012	.LQEEEDKGVCSHLYKDLVDKCLQKEPSKRPN.....ASKLLEHKVF
MkcA	IKDPFEDPHKWSDEFFHDIINKCLQMDPHKRPS.....AQEILLKHPFI
MkcB	GATGFDDPALWSDCFKDFLSLCLKODPAERAT.....AEBLLKHPFI
MkcC	GCAGLDKPERWTEHFTHFLNLCLEMDPKRSRT.....AEOLLKHPWI
MkcD	NLPLLLSTTTSLSEERDFLTNCLQFDPKRLT.....SSOLLQHPFL
MkcE	FSKEKKYSCHWSPFLDFLNVCLQMDPTKRPET.....PTOLLQHPFI
MkcF	GI..DFPKIRCIDLKDWLWOCFESNPEKRSRT.....VDKLMRHPFF
PakA	GLPPIRDAAKWSKEFNDFLALCTEKDTEKRAS.....SSSLLHHPFL
PakB	GIPDLKDONKWSDDFKDFVVKCLDKDVENRPE.....AKVLLNHPFL
PakC	GIPPLKETTKWSKTFODFFSKCLDINVANRPD.....ATDLLKHPFM
PakD	GVPDFKEPNKWSSEDFIEFVNLCLNLDKRRPD.....AHYLLRHHPFL
PakE	PPPKLSNPKDWSPCFNFLATCLVKDPVORPS.....VIDLLSHDFI
PakF	PPPTFAEPKWSPLLNDFLARCLVKDPEKRAS.....PIDLLCHPFL
PakG	PPPTLSKPHHFSKELNDFIGOCCKDPEKRPS.....AIELLTHPFL
PakH	PPPTFKDPKWSPEFVSVVDKCLTKDINERWS.....PSOLLDHPFI
Krs1	PPPKLTEPEKWSPEFNDFLAKCLTRKPELRPS.....AEBLLKHPFI
DDB0216375	TSPTLKEPHKWSPEFSDFLALCLAKEQSORPS.....AKDLLKHSFF
Svka	PPPTLE..GNFSKGFKEFCALCLNKDPNORPT.....AKDLLKHKFI
DDB0216374	QAPTLEVPGNWSPFNDFISVCLNKEADKRPS.....AVDLLNHPFI
DDB0216379	PPPSLKIPSDWSPFNDFVVKCLSMNPALRPS.....AQOLLSHPFI
DDB0216377	ESPALTKSISWSDKFODFISKCLTKDPAERPET.....AKELLNHEFI
DDB0216378	DPPKLNQENYSKDFINFIQSCLQKDPNQRKT.....ATELLKHPFV
DDB0230010	.QYKLPNPKKYTKEEVDFLYLCLNPDPPFKRPET.....PEMLLHHTFL
DDB0229972	NCLDENEOSLFSLELNQFLLELCKKEPSDRAS.....VHDLRHHPWL
DDB0229973	LPTDLIQPKLL.OPLIELLVTCILDLPNHRPN.....ASOLLVOKLTK
IfkA-a	...KTHPSSPISNNAKDFLSLCFTINGNGSTNDS..LEAGILLKHPFL
SAMK-A	.....DNLTISCRALGDIIGLEQNFKEP.....SKDILOKLSWF
SAMK-B	.....YLTLECKEVLNETIKYNONFRAD.....SKOLLFAQWF
SAMK-C	.....GMSLEQCILFNETTKIDSCFRPT.....SKOLLNFSWF
SAMK-D	.....SRDKVSDFYRSLFTEINKDEPCFRPS.....SKBLLKSWFW
DDB0230038	PLP.NCP.....FTIEKLIKLCSTDPVSRPT.....FTTILKILRO
DDB0230124	ETPDNVP.....SVFSRLIKACWSADSSARPS.....FLTISKILSQ
DDB0229871b	TISNNMP.....NEISKILQGWFSDSVLRPS.....LDTLIKELLI
DDB0229850	SIPNICP.....EPLKLYKQCVDSQPLNRPS.....CEEVVISLNO
ARCK-1	TIPIGVP.....QVLKDLTYCLWDHVDVSSRPT.....ATEAMTALAV

Subdomain XI

SAPKalpha	TIPNACP	ESLVSLLIQD	CWDPNLENRPT	CTDTLSRLVT
DDB0229849	TIPQNTIP	PGLEALYKOC	VNQEOTLRPS	CEFTIETLNR
DDB0229848	TIPENAP	ESLKNLITART	LVKDSLRLPT	TLEFYEELLK
Phq2	KIPSENC	EQLKTLITR	CWDPNPKRPN	CDEITLEILLT
DDB0229847	TIPQNC	EAFSNLISN	CWESSPDNRPS	CEFTLDSLLD
SplA	PITPLTTS	SKWKEILT	CWDSNPDSRPT	FKQILVHLKE
DPYK4-b	OIPFNVP	LKFKEKIT	CWDRNPLNRPK	DFSEITDKLKD
DDB0229872	PLNGFP	PYWVELISK	CWNITPSLRPS	FKETLQILNQ
DDB0229844	TIPFNVP	PKLSYLIQK	CWNQDPNERPS	COQILLAIT
ZakA-b	OIPFNVP	LKFKEKIT	CWDRNPLNRPK	DFSEITIEKLKE
7TMK1	PMPQMDPMW	ENLGKLIEM	CWKKSPERPS	FSFTLDFLEA
rk1	PVPONGP	PKYIQLLID	CLNENPSHRPT	MEQCLERLES
rk2	PTPKYGP	PKYIQLLKD	CLNENPSORPT	MEQCLEILES
rk3	IIVPQVS	APFTRLITE	CWSEDPQORPS	FOETIVKRLEA
DDB0214883	PMPAWCP	PKYAALMNR	CWETDPTHSPS	FPEITLPIMEG
Shk1	STPDDCP	KSLKELIQK	CWDPNPEVRPS	FEGIVSELEE
Shk2	TIPDYFP	TRLKDLLAR	CWDHYPSSRPS	FAGITSKORIL
Shk3	PITPNDCL	DSLRRLLTEK	CWDKEPISRPS	FKETLSALDH
Shk4	PITADTL	PSLRHLIQT	CWDHNPQNRPS	FSEITLFRLE
Shk5	PITDSFP	KSLKTLIQK	CWDHDPNKRPS	FNEVTQORMNE
DDB0229963	ELPDNCD	PNWKKLVVW	CWSEDPNKRPS	FEEITNYLTK
DDB0231199	KISSSVP	NFISSLIKD	CLHNSPKKRPT	MNOITQKLCN
DDB0229940	TIPADCP	SEYSKLKKA	CWTDKPKKRPS	FKETCDTLKK
DDB0218878e	TIPADCP	SEYSKLKKA	CWTDKPKKRPS	FKETCDTLKK
Rck1	ELPKDMO	TSISNIIKK	CWQOKPSNRPS	FIKIVAYLES
DDB0231197	TIPPTVP	TTIANLIES	CWVQTPHLRPT	FTEITLVFYF
DPYK2	PITPEYCD	PELKLILT	CWEADPNDRPT	FTYIVNKIKE
DPYK3-b	AIPDPC	VSLRKLITK	CWASDPORPS	FTEITLTELET
Gdt1	SLGLDKI	PNIKNFHKK	CWNPIDGFT	FNEITLTKLKD
Gdt2	SLDQEIFKD	TDISDIVTR	CWSKNPSORPT	FDYLSKYLKH
Gdt4	RLDQDVFAD	NDISLILLA	CWNPNPRGRPT	FDTLIDLLEK
Gdt6	TLDLEKL	ADIRNITER	CWNONKRST	FSEITISILKE
Gdt8	TADLDTI	DDIRKIIEC	CWIKESKRPS	FSEITSLHLEI
Gdt9	TKGLNSL	RDIKNLINIC	CWPHSLPS	FDEITVFSLVK
KinX	LITPDC	ESLIDLTFN	CWSDPNNRPS	FKETISQTLKQ
KinY	LITPDDIP	VLYSDLALD	CIKYQPEERN	FSHILHVLKQ
DDB0229853	LAPESCP	RAFMDLAKW	CCSYNPKDRPT	FKIVVEGLKV
DDB0229863	KVPEKCP	PDFSKLCVD	CTKYNPKERPS	FIKVLDTIQN
DDB0229866	LVPKDCP	PPFLKLVLD	CTEYDPPDRPT	FKETITERIKS
DDB0229851	KVPADCP	KELLRLVSE	CKVAPSGRPS	ASNITLGLLEY
DDB0229865	KITPSECP	REFLELSMK	CWNYDPNDRPS	FDTIVQTLDD
GefX	KSLPGCP	SELISVCVE	CCLYEPLTRPK	FDEITLSQLKV
DDB0229867	PSINDCP	IOFYDLALK	CCSYKHTNRPM	FSTIVTILES
HH498	PITPOTID	HRWSNLIQI	CWQONPNNRPS	FDOITLTIQON
GbpC	TIPPTCP	PEYVELIQS	CWTHEPNSRPT	FSTIVEITLGO
Pats1	KITPDC	EMYSKLIVE	CWOTDASORPK	FSEITEDRLIK
QkqA	TIPFDCD	PRLSNLIQL	CWSTNPKKRPS	FTEITIKELLE
Roco4	TIPEDCP	PRLRNVIEL	CWSGDPKKRPH	FSYIVKELSE
Roco5	TIPONSVC	PDFITLITD	CWQNDPLKRPT	FIDITHSRLLI
Roco6	TIPSPYQTV	TGHEYCGLI	QDCWSDIDRRPT	FNKIVKRIKQ
Roco7	TIPNECP	PDMKQLITD	CWSGDPKKRPS	FNSILERLST
Roco8	SINONCN	RMYSLLITK	CWNADPNLRPS	FNSITLKTLE
Roco9	SITSHNL	PEYDSLNI	CWAQDPTCRPS	FTEITTKKLEE
Roco10	SITPLDCL	PSFADLIKD	CWSGEPLNRPS	PSKITLSQLYT
Roco11	TIPSDCP	PTISNLIEL	CWSGDPKKRPH	FSYIVKELTN
DPYK3-a	KITPSCP	LIIRKLIINR	CWAPLPSDRPT	FNDITLKLFDH
DDB0229956	PITPDSCL	PEFRDLITM	CWTSNPDDRPS	FOQITITYLEN
DDB0229957	PITPMHCN	KNYTDLMEO	CWDDDPENRPT	FDTIHSISK
DDB0220138	EITPENCN	EVLKNIITQD	CWNOQSEDPRPT	FLSITYHRLN
DDB0220436	HITPLDHL	KGIDLIRL	CWKHDESI RPS	FIEITRSRLSE
DDB0230133	MITPEIE	GDLRKIIIEA	CFHRDHTKRPN	FENITEQFLDA
DDB0229871a	EITPNSCP	QSFSDLIKE	CWNRNPDORPN	FSQITLLKLL
DDB0229955	PITPNAWP	YQLSHLIQA	CWHDPLKRPS	FTEITLNLLE
Bud32		SNSKIVITQ	KLNOVRLRGRKK	TCFG
DDB0231196		QSFVKLIT	TRMCLPFRDRRPT	VROVITDNVKA

Subdomain XI

DDB0229339 QSLVKLITSMCLPCRDRRPT VHQITDEVGI
DDB0231195 SRLKRLLFLMMSKMPERRPS IKECTIEEIQK
DDB0229335 DSFKEFLFSTMNRIYTCRPN SEECVERLIT
DDB0216331 EPIADLILDLMLNLDQNLRP IDLILONKLF
DDB0229344 EKLAFLVLSMISKNPTFRPS IESTIETLQK
DDB0231281a PNVNQLIEFMRHHENLKYT LLVSDFOH
DDB0230037a NKINKILFEMMCSNESTERPT VDQLIEFMVC
DDB0219988a PSIDQLIEFVCRQYDQSRVT ISLSSYTHPN
DDB0231281b SSKLKEIVKMGFFNYDDRIS LKELIECLNK
DDB0230037b TYLNDFIDNM T OPHVCKSFKK
DDB0219988b PSLVQIVKMKIKHKAF LTKOPTL
DDB0231182 SNRSKDNQSKLDPKRLTKLKKSMKDLPT PYKLLDHPFF
IksA RDLKDMITILLRAKPHERPT ISQILSTHFI
IreA PDIHQLVHSMIQEPEKRPD IGECHNHPFF
IrlA APALDLVRLMISQDEKKRPT IDTILNHPLF
IrlB QLACTLIKSMISKDESIRPT IONVNLNHPLF
IrlC LVACDLISQMISKNESDRPT IEKILLHPFF
IrlD LVACDLISQMISKNESDRPT TENILLHPFF
IrlE LVATHLIELMISYDESKRPT LSSVILKHPLF
IrlF LLACDLIKSMISNDESKRPT IENVNLNHPLF
DDB0216373 PKPFPPSQTNYSNQFNQLIIDMVNLDKDERLH LNQVIERINO
DDB0229347 NYKIPDNSKYSNFHKLIOFILVADPTORPS INDLINYLNE
DDB0229350 NYTIPPNHTHSNDLISLIKIMLNPDPINRPN IFETINQLNL
Nek2 GRYNPISQYSEHLSKVIISLMINVDPKSRPN VNELIGYSFI
Nek3 GTYPPIPSHYSNDRNLISSMLQIDPKNRPS VNDIELPFI
Nek4 GQPLPISPNYSDLQNLVYQLLEKOPTKRPS IFDIFOMPYI
DDB0229345 EELSSLLFKLLNKNPESRFS TQQLIEQVFI
IfkA-b PDQTOIIRSLLSRDPTORPS TKQLIESGLL
IfkB PDQTOIIRSLLSRDPTORPS TKQLIESGLL
DDB0216407 SRQATLIRMLIDKDKPAKRPS AQQLIQSELM
DDB0229432 PEESNLILRMIDINPDNRPT SDQILSELLP
DDB0220611e PKVSELILLMMKTNPDERPS ASDILKSDLF
DDB0220652 PNDTDFIDH.LIQSFATRPF SNQISTDYDN
PLK HYGKSLIISILNPVPEORPN LTQILIEHDF
Vps15 PNIQTLILHMIQKDPDQRYT PEKYISKWNT
TBCK NSNIGLGNLGGKELIEIEQCLIPNPMDRPD SETLIDHPYF
TtkA ENLLKVLKLCILRNPHERP IPTLLNHDFL
DDB0220004 TEFWQLIKSMIHPDPSVRPS AEQLIEHPLI
DDB0229384 DSLYQVILDMMKSNITERIS LDQILLNENI
DDB0216398 QDLKDLIILMMNPDHTRIT IQSILKYDKL
Scy1 FAVKTESRLN POKFIESPYF
Scy2 KVCTILLG DPMLRGD LENFIRSSFF
SLOB1 DKVFLLLQOIFS EKTEPT LEEVLKNPWF
SLOB2 PEVRKVLEAIFKPFYGTPT LEELSKMDF
DDB0229334 TEQDFLHSLATNLSDRLD AQTLLHHPFI
DDB0231326 PAILDYLDYVFIIRDPPYRPT LRDLLTKFIA
DDB0231559 QPLSDLIYSMLNHNEYDRPT SFEVFOKLKK
DhkG-a LILSNIVNKLKQSPDDRYO SAYGILKKDLE
DDB0231198 TRIKTLIASLLAEQSQRKOS FNEVYNDLQD
DDB0231179 TQFTTITFDKFNPIISQIINYIQ.YYRNRP SSQVIESLIN
DDB0231335 HSKSYNDERQIEYIFAKRDNDKF LLNDKTF
7TMK2 EPVIOIYKSCTSDDPNKRPS SLGVKFHLAN
DDB0229381 KYGLVDPDIELGISFITSLQLDPKRLP LKELIHNHPFL
Bub1 TGKLEIINQSIIQK.DSFS ELDTLWLPFL
DDB0230007 QHFNDLISKILEKNPQKRIT WPKLFIHPFF
DDB0229337 QFYKPENSLLIQLITCCLFKNPAORIS WNEIVNHSFF
DDB0229346
LvsG
DDB0230125 FQQAQNINYE EL.KNEFI
DDB0204911e FQQAQDKNYE EL.KNEFI
CK1 GFPSEFATFLNYTRFLKFEDKPD FLYLRKLLRE
DDB0216336 PQFSQFMKHLKSLNYEDRPN YVFLQTLND