

Supplemental Data 2. Predicted protein sequences of the 125 OsWAKs.

>OsWAK1, AK065470, Chromosome 1, protein sequence
MHPTLLCLPLLASLLLLCHRARAEECPATCGNLTVRYPFWLGGPNFNQSNQSSPSSALAS
CGHPAFEVWCNGGVASLRGSQI LVLSI DYNSSSFVAAHKRVADGGDGVCRDFNI SSSLA
LSPFTI SSSNRAI CFLYSCNGTEPPEI DGLVNATI SSCSKPI YAYLGGI YDRDNPPAI KA
GNCTYSYLPVLPDSPANL TAGTNYSPQFKKGFVLEWQKNGFGDCDACNGSGGQCRYI ND
SAAAFACLCSDGKLRSTCPGSRKSHI I GI ACGSSGGI LLI VSI FI FAWHKRKRKQTR
DLKDLMHSSSSMQSYSKDLELGGSPHI FTYEELEEATAGFSASRELGDGGFGTVYKGLR
DGRVAVKRLYKNNYRRVEQFLNEVDI LSRLRHQNLVI LYGCTSRSSRDLLLVEYI PNG
TVADHLHGPRAGERGLTWPVRMTI AI ETAEALAYLHAVEI I HRDVKTNNI LLDNNFHVKV
ADFGLSRLFPLEVTHVSTVPOGTPGYVDPVYHQCYKLTDKSDVYSFGVLI ELI SSKPAV
DMSRSHSDI NLANMALNRI QNHEVDQLVDPEI GYETDSETKRMVDLVAELAFQCLQMDRE
SRPPI KEVVEVLNCI KNGECPAEKMNKNASPKEDSHLLKDSLOQSPDSVI HRFHSQSTNH
SVASNSSG

>OsWAK2, AK072170, Chromosome 1, protein sequence
MHPALLLLPLASLLHAAAAI GHNETSTSGNTSCTPARCGNLT I SYPFSLSGVQPVSCGYP
VLDLTCDNRTGRAFLSRTFRDHLFRVDSI FYENNSLVAAVETTFAGDADCPVPDFNVTSS
LSPYPI I SNTNKYLAFI YDCSI PEHVQGLQPCGNRTMGAYI SDKWNSTPPSGVGRGNCN
SVSVPVRGYDGMKPVSGHYEQLI KDGFLVLEWMRSVMGDQDCDGCRRRGGEQFLSFO
CFCPDGLLCSNSTRNTTSSHPSGKVNRI KI AAGTAAAVVCLGI LGVGSTVLYTRRKRK
RSASFGLI HGGTPLPSLTKEFSLAGLAYTHI FTYEELDEATDGFSDARELGVGGFGTVY
KGI LRNGDVTAVKRLYKNSYKSVQFQNEVGI LSRLRHPNLVTLFGCTSQTNSRDLLLVI
EFVPNGTLADHLHGGAARSSSLDWPTRLGI AVETASALEYLHTVEPQVVRDVKTNNI L
LDEGFHVKVADFGLSRLFPADATHVSTAPOGTPGYLDPMYHOCYQLTDKSDVYSFGVLI
ELI SSKPAVDMNRRGGDVNLANMAVHMI QSYEMEQLVDPQLGYASDGETRRTVDLVAEVA
FRCLQPEQDVRPPI GEVLDALREAQRMDKVGYYKDDAGLVKKS RDGSPDCVMYQWI SPST
TSNNS

>OsWAK3, 4748.t00012, Chromosome 1, protein sequence
MESCVCACAWPTAPTVALFATGYEEGVAEAPHDVPMTNGHVVFQVENNCSLRYFTEN
EI ROI TRGYSI LLGKGSFGKVYKGM LDGRCPVAVKRYI HGTRKEEFAKEVI VHSQI NHKN
VVRLGCGCTEENALMI VMEFI CNGNLNDI LHCSNTNGRVPFSLGKRLDI AI EVAEVLWCM
HSMYNPVLHGD I KPANI LVDENLSPKLSDFGI ARLLCANGAQHTNNI I GSI GYVDPAFCM
NGI LTPKSDVYSFGVLLLEI I TRKKAVDGTI TLAQRFTEAVEQGGKVMHLFDEDI NNTKN
MNFLEDI GKLA VKCLRREVEVRPEMVEVATSLRMI RKALEEEEEGNLI QQNI SAPS NSI PS
KNVKSSAQFGNLKI FKQEEI KLMTKNYSMKFREEFCERLYNGVI GTTHAVI VKQVRTSS
ESDRMMFLKTMSI LSQYHKNI ANVAGFHLGDSI SECVYESCCDL SQGNDGHVCF CNRNL
YDI I CTREKLPLHLRLSI AVQCAEGLVHI HSLLAENPDSHSTGLLGNFRSI NI FLDKNFV
PKVFNSNLSTFLGLSVMQKHTASVDRPNDRSQI YYLDGRDI SGQLFNPKSDVYSFGAVL
LELI TWKTVRYMSSGRVHMLTKDFLD TYRI DHSAAI SFGKKVYDEQASGDNKPNQHVAPP
LTKKFVKTPPTI VSI I PLNI LEKI TSNFSDALI GEGPDARVFFGELSDGQKSAI KKLDP
NEKI VVQVLT I SRMLKHDNI VQI LGYFI EGENRVLAYEYAPKGLHDI LHEGVRGAOPGT
PLSWEQRVKI ALSAAGLEFLHEKAVPPVI HTNI RSNNI FI FGNDVAKI GDLGVSKQLYP
ESDNDYYNTRLYPLRSFGYDAI APEYAMKDFHA*

>OsWAK4, AK064374, Chromosome 1, protein sequence
MNLFD E E I NDKQNMNFLEDI GKLA VKCLR RDVKVRPEMVEVATSLRMI RKDLEGEQGNLTQOHTSTPNNS
TPSKNEGSAGROFGNLNI FKQEEI KHMTRNYSMTFREEFHERLYNGVLGMVHAVI VKQVSTSSKTDREVF
LKT MGI LCQKYHKNVANVAGFHLGEYI SECVYESCCEL SQVNNNGHI SFSNRNLYEI I CSTEKLPLHVRLS
I AVQCLEGLVHI HSFLAENPESRGTSLFGNFRSANI FLDKNFMPKVFANLSTFLGLCAVQOCTASVDCI
HDORSQKYYLDPKDVSDHLFNPKSDVYSFGVLLLELI TWKTAKYKSGGOAHMLTTDFLD TYRI DHSATDF
FVKKVYDEEGKCFLEHAI AI GVECLKLDVQMRPEMSDVL SRLRI I SAAQSI RSKLMGPOAKDCGDNGPSQ
YI APTPVNNDVKI PSPPTSASTI SLDI LKKI TRNFSNNSLI GEGSHAKVFFGVLDKGKNSAVKKNPNEE
TI VQVSTI SKMLKHDNVVQI HEYFI EGENHVLVY EYAPKGLHDI LHGREGVTGAQARPLSWQRVKI A
I TAAKGLEFLHEKAVPPVI HTNI KSSNI LFLGNDVAKI GDLGVSKQLHVEDYDYSYTRVVPQI FRYEAP E
YATQCFHAFRLH

>OsWAK5, 2768.t00008, Chromosome 1, protein sequence
MASAI LLSI AI MAQLSSI SAQPAPGCQSHCGDMEI PYPFGI GTECAI EPGFVI YCNKTADGSMKPFLLI NV
EVLNI SLLHGQTRALNASTYCYNDVTKSMESSRSLDFSTWPYRFSNLHNKFFVI GCNTLSYI YNGEYT
TACASVCAKAPTNDSCDGVGCCQNNI AKGLNSYNVTFVTYNDSSNLQSNPCSYAALVETDTRFRKTEYV

OsWAKs-Supplemental Data 2[1].txt

TTMKFNETYNGQOPVVLWDWAI GKVGCKEANMTSYACRSKHSECVDSI NGPGYLCNCTLGHYHGNPYI TDGC
I DVNECEQNQSPCKGATCRNTEGWYHCSCPVGRKLAKETNTCNPDI SLI I GVSI GSI VLVI I I FVRI I
FERRKLTDVKKKYI QEHGGLLLFEKMKSDOGLAFKVFTOAELEOATNKFEKSOI LGHGGHGTVYKGI TKD
NI TVAI KKCALI DDRHKKEFGKEMLI LSQI NHKNI VKLLGCCLEVDVPMPLYEYFI PNGTLFDLI HGKNRT
LHI PFSSLLRI VNEAAEGLAFLHSYANPPI LHGDVKTNSI LLDENYMAKVSDFGASI LAPNDEAQFVTMV
QGTCGYLDPEYLQTCQLTEKSDVYSFGVVI LEI LTGQMPKLEGESELOKSLSSSFLAMKENNLEAMLDS
QI KGHESMELLSGLAELAKQCLDMCSENRPMSMKDVAEEI SRLRKLKSKHPWI QRDSETEGYLSGPSTSNFE
I EQSTEYTRKDEQMPI NPSTSYFI R

>OsWAK6, 2768.t00013, Chromosome 1, protein sequence
MTI PFPFGLQEECSANRKFLLNCTSKQAFI GGSYTOYQVTNI SLDQGLLFVNFSQHEEAY
SELVEI SRDNI SQWVESWI DEFNDFDVSQHYGI WKWFVTNMTCEKAKKSSAYACI STNDI
DECSI PNDCKGMCHNQAGGYSCTRCPHGTSFDPAERKCTSTKQHNI VLGI SHFNRSLFNK
I TVKWKRG I QKKI RRDYFHKNKGLLLEQLI SCDDSVAHKTKI FSLDELEKATNNFDSTRI
LGSGGHGTVYKGI LSDQRVVAI KKS I VEQSEI DQFVNEVAMLSQI I HRNVVKLFGCCLE
SEVPLLVYEF I SNGTLYDLLHGNLQSKCVLTWNNRI RI ALEAASALAYLHCAASVPI FHR
DVKSANI LLDNFTTKVSDFGASRSVSI DETHVVTI VOGTFGYLDPEYYHTGOLNEKSDV
YSFGVI LI ELI TRKRPI FLNSI GEKQNLCHHFLQRQNNNTTSEI VDVQVLEEADQWEI DE
I ASLAEI CLRLRGEQRPKMKEVELRLQLLRSKVAKKNRVESI G*

>OsWAK7, 2768.t00019, Chromosome 1, protein sequence
MSPKLLLSVALVMLHLASI SAQPNPWCKKQCGDVKI PYPFGI GTGCAI GEGFEI I CNRNA
DGI DQPFTGNI EVLDI SVVYGRSRVLGSI TTNCYNSSTGSANVNSWMMDLSTSPYRFSDA
YNTFVVI GCNTLAYI YNGLNRTSYTTACASVCGGPEDLTNGSCLGVGCCQNANAI PKGLT
RQDI YLYTI YNTSESDSWKFNPCSYAALVETESFSTSEYI TTMRFNDTYEQOPLVLDW
AI GDVSCEVAKNMTSYACHSGNSI CVDSKNGPGYLCNCSEGYQGNPYLPDGCTGKFSSSL
CNLSL SLYLQFNEI LNDVLSDYLGKVNLPKSPFPMKVI CNKRDDTSYI GGI SFFY*

>OsWAK8, 2768.t00020, Chromosome 1, protein sequence
MEMRGGRRERDVNECEQNPSPECTKGETCRNTI GWYYCSRPSCLGRKLAARETNTCNPDI N
LI I GI CI GSVALVI TI FFMRLMFERRKLT DVKKKYFQOHGGLI LFDKMKSDOGLAFKVF
QAELEHATNKFEKSOI LGHGGHGTVYKGI TKDNI TVAVKKCALI DDRHKKEFGKEMLI LS
QI NHKNI VKLLGCCLEVDI PMLVYEF I PNGTLFDLI HGKNRTFHI PFSSLLRI VNEAAEG
LAFLHSYANPPI LHGDVKTNSI LLDENYMAKVSDFGASI LALSDEDQFVTMVQGTGCGYLD
PEYLQTCRLTDKSDVYSFGVLLLEVMTGQMPKLFEGPEI QKSLSSSFLAMKENNLEAML
DSQI KDHESMELLSGLADI AKKCLDMCSDNRPSMKEVSEELSRLRKF SKHPWI QRDTEI E
SFLSGPSTSNLETEHSYLSGPSTSNFEI EHNTYRKRKDEEMPI NPSTSYFI R*

>OsWAK9, 2768.t00022, Chromosome 1, protein sequence
MKAERNNTVLF EI KFGRYNFNGVVI GLVVGTVLALSLVLT I LLRRWKRG I QKKI RRAYF
RKNKGLVLERLI SSDESVAHSTKI FSLEELERAPDHFNSTRI LGRGGHGI VYKGI LSDOR
VVAI KRSKI VEQGEI DQFVNEVAI LSQI I HRNVVKLFGCCFESEVPLLVYEF I SNGTLYD
I LHGDMSTEC SLKWDDRVI SLETASALAYLHCAASI PI FHKDVKSANI LLDNFTTKVS
DFGASRSI SI DETHVVTI VOGTFGYLDPEYYHTGOLTAKSDVYSFGVI LVELLTRKKPI F
LNCSEKQNLCHYFLQSLRDKTTDMLDSQVVEEGLNLEI DEFVSLAEACLRLRGEDRPT
MKEVESRLQLLRANI TKKI QDESQKNVEAMQLFPSVYDSTSFTQNVDI GMDADSLTQLAS
TCHTMEQELVSLTR*

>OsWAK10a, AK102164, Chromosome 1, protein sequence
MAHLPLLLLSFLLLI GVHASVSDGSPLPHTYNTSI CSKSYKCGGVNI SYPFYLSNATGET
YDYTFSCGYTDLNI TCSWDGSKQTPFI QLNGDNYTI LEI I YDSRTI VLVDTDALRGGSC
PRVRHNI TFSQADEWLQYTGPRDNL TFFFGCNLVPLPMDPGLTRFVDKNQI NCKDFSNW
PDGGDSFVFTSVELEAPMEYELASRCROVI VVPVNGSI LNSSSQSALPSGEYGOVLKKG
ELAWKSRKDKQCNLCEQSRGQCAYSQNRFTLGLCADGKVSSTDC T SRSNLKTKI I AGVV
GGGLSAVFALGLI ATVFVVRKRKHKVNVSSSKLLKYSGSGGT PRSMGGDMESGSVKDLQ
HLFSYEELEATDSFNENRELDGGFGTVYKGI LRDGRVAVKRLYNNSYRRVEQFVNEA
AI LSRLRHPNLVMFYGCTSSQSRELLLVYEFVANGTVADHLHGHRQAERALS WPLRLNI A
VESAAALTYLHAI EPP I VHRDVKTNI LLDADFHVKVADFGLSRLFPLDVTHVSTAPQGT
PGYVDPEYHQCQLTDKSDVYSFGVVLVELI SSKPAVDI TRORNEI NLAGMAI NRI QKSQ
LEELVDLELGYESDPATKKMMTMVAELAFRCLQONGEMRPPI KEVLEGLKGVODLCVMEK
DGGKDKKGPDPPLSPDTVHAQWDSRQTTNPNTSQ

>OsWAK10b, AK100606, Chromosome 1, protein sequence

OsWAKs-Supplemental Data 2[1].txt

MSRLCHHGRRVLLPLLLVAAACLGDPTGDTYDTAMCGAQASI TCGGVI VRYPFYLSNATR
ALPKYANSSTFCGYPLEI I CDGGGGGKAVMMLGNDSYTVSRI DYASLTVSLADADVANG
TCPVVSHNVTI PPAPSSLHLADTVGMLI FFFRCAF GPAANAPPKPSI HPLTCGENSEDA
PTQSFLLPASPLPPGDLWHRGCSAVYGVVPLGGSLPSDANDPAWRKDGVI ASLRKGFQMS
WDRSDRCSRCELTSGKCGYNQNGKFLGCLCANGLVSDACSKI SDSTLRLAGSNLTKTI I
AGVVGGGLSAVFALGLI ATVFFVVRKRKHKVNSSSKLLKYSGSGGT PRSMGGDMESGSVK
DLQTHLFSYEELEEATDSFNENRELGDGGFGTVYKGI LRDGRVVAVKRLYNNSYRRVEQF
VNEAAI LSRLRHPNLVMFYGCTSSQSRELLLVYEFVANGTVADHLHGHR AQERALS WPLR
LNI AVESAAALTYLHAI EPPV VHRDVKTNI LLDADFHVKVADFGLSRLFPLDVTHVSTA
POGTPGYVDPEYHQCYQLTDKSDVYSFGVVLVELI SSKPAVDI TRORNEI NLAGMAI NRI
QKSQLEELVDLELGYESDPATKKMMTMVAELAFRCLOQNGEMRPPI KEVLEGLKGVQDLC
VMEKDGGKDKKGPDPPLSPD TVHAQWDSRQTT PNTSQ

>OsWAK10c, AK066381, Chromosome 1, protein sequence
MGGDMESGSVKDLQTHLFSYEELEEATDSFNENRELGDGGFGTVYKGI LRDGRVVAVKRL
YNNSYRRVEQFVNEAAI LSRLRHPNLVMFYGCTSSQSRELLLVYEFVANGTVADHLHGHR
AQERALS WPLRLNI AVESAAALTYLHAI EPPV VHRDVKTNI LLDADFHVKVADFGLSRL
FPLDVTHVSTAPOGTPGYVDPEYHQCYQLTDKSDVYSFGVVLVELI SSKPAVDI TRORNE
I NLAGMAI NRI QKSQLEELVDLELGYESDPATKKMMTMVAELAFRCLOQNGEMRPPI KEV
LEGLKGVQDLCVMEKDGGKDKKGPDPPLSPD TVHAQWDSRQTT PNTSQ

>OsWAK11, 3783.t00017, Chromosome 2, protein sequence
MTGVVPMI LATTLLLATI SFAASRM APCRGRGTCGNLTI PYPFGI GAGCFYTDGFDVS
CEENRTYMHNSSNMEI YSLNLI GGQAQVSTFI ADKCSNNTDGTSTDGWVSTSTAPFFTL
SSRANKLTVVGCNTLAFLGGYNEEQNVGAGCFSMCPDKQSVSDSSGQCSGMGCCQTSI AP
NLTSLVNVTDFSRFNSEVNSFNPCSYAFVAEQDWRFE PDYLEGHKFTDKYKGVPTVLDW
VAGRESCAQAPKNRTSYACVSTNSSCI NSPNATGYLCACNNGFAGNPYLEGGCQDI NECE
SPGQYCHGI CDNTI GGYHCYCGPGTQSTDPKREPCNPI TASERARLTKTFI GI SVCAI I L
LSCTFALLI ECQKRKLMKEKERFFQONGGMLLYEQI RSKQVDTVRI FTKEELENATDNFD
SSKELGRGGHGTVYKGI LKDNRI VAI KRSKI MNMVQKDEFVQEMI I LSQI NHRNVVRLG
CCLEVEVPMLVYEFI PNGTLFEHI HGKYRTTSI SL DARLRI AQESAEALAYLHSSASPPV
VHGDVKS PNI LLDGNYI TKVTFDGASRMLPKDEI QFMTMVOGTLGYLDPEYLOERLTOK
SDVYSFGVVLLELI TGKTAI YSENTEEKSLASSFLLALKENRLESI LDRNI LGVGT ELF
QDVAQLAKCCLSTKGEERPLMTEVAERL KAI RSTWREQLI EGANEETVCLLENSSQYDPS
TTGRHGSLMALDI ETGR*

>OsWAK12, 4362.t00002, Chromosome 2, protein sequence
MQPSETCLRRCGDVEI PYPFGVSGCHLETGDWTFVLSCNRSADGRLRVYNYEI EVVDVS
VRRGQLRI YSAI NPWCYNGSTSAMNGOSNWWYDMSI TNFRI NDALNRF TVVGCNSLAYI L
SPNGTAGADRYMTGCMAMCPGAGRLEKENGSCAGVGCCQTAI PAGLNGYQVSFEKFNTS
AI AGFSRCSYAVLVEASAFDFRASYVTTDEFMASNGGQLPLVLDWAI GNKTCEEAKRNAS
AYACVSANSECVDSRYGRGRGYLCNCSAGYDGNPYLLDGCQDI NECDESFRYPCSVPGT
CVNTPGGFTCTCPDKTI GNAYNGTCGDNKSQLGWKI AI GI SSGVVI LI I TASCVYMI HAK
RRLAKI KREHFRQHGGLLFEEMKSROGLSFALFTQEELEQATNRFDERNVI GKGGNGTV
YRGTI AKDNGAVVAI KRCLATERQKKEFGKEMLI LSQI NHRNI VKLYGCCLEVEVPMLV
YKYI PNGTLYRLI HGEGGASARRI PFAARVRI AHQAAEALAYLHSWASPPV I HGDVKTS
NI LLDEDIAAKVSDFGASTLAPADAAQFVTFVQGT CGYLDPEYMRT CRLTDKSDVYSFGV
VLELLTCRKALNLEEEEEKYLSSQFLLAVGEGRLGEI LDPQI KGEQSMEVLEQVAELA
KQCLEI SGEKRPSMREVAEELDRLGKLSLHPWGPNSGELAALLGGSPSMAADSDQI ELS
TSTRNI SFSDTAYI GI RSPR*

>OsWAK13, 4362.t00004, Chromosome 2, protein sequence
MLLPLMAVLI ASAWPAAASTTTAAAQPAACORRCGDVDI PYPFGI GRGCYLYTGEGDVT
FGLTCNRTADGSYRPFWEYEVLDVSLRRQARVRNDI NRWCYNATTRSMDAESTWWWV
SDSWFHVSDEGNRLVVVGCNSLAYVTSVNETEYMTGCMATCPSVGRLENGSCSGMGCC
EAI PRGI NSYVVGFEFKFNNTSGAVGRCSYAVVVEAASFERTTYVTTGDFVESTGGKVPL
VLDWVVGKKT CREARRNATGYMCVSRDSECVDSRNGPGYLCNCSAGFEGNPYLLDGCQDI
NECEDSRFKYPCSVPGTCTI NTPGGFRCSCPDKTTGNAYFGTCEAKKSQLGVHI AI GVS I G
I ALLVI I MSSAYMI QOKRRLATVKRRYFNQHGGLLFEEMKSNQGLSFTVFTKDELEEAT
NKFDERNVLGKGGNGTVYRGTLDKGRVVAI KRCKLI NERQKKEFGKEMLI LSQI NHRNI V
KLHGCCLEVEVPMLVYEFI PNGTLYQLI HGGRHGSRI SFAARLKI AHEAAEALAYLH
SWASPPV I HGDVKSPNMLI DENYTVKVSDFGASTLAPTDEAQFVTLVQGT CGYLDPEY
MOTCK LTDKSDVYSFGVVLLELLTCRKALNLOALEEEKNLSSHFLALSENRLGI LDSQI Q
SEQ

OsWAKs-Supplemental Data 2[1].txt

SI ELI EQMADLAKQCLDMSSEKRPMSRQVAEELDRLRKLAEHPWGRHESEELEKLLVGRS
PSTFSEI ELSNGYVSLTDSAYLGI QSPR*

>OsWAK14, 2541.t00004, Chromosome 2, protein sequence
MSSSLLVAACAVSFVLLCSAATSPASAAVYGVGGGLLSI PSNDSLACPSRCGDVGI DYP
FGI APGCFREGFELI CRNTAKTPKFLGDTTEI TDLGYRYVLAQI YFNI TVRPGTDTYN
I SWVAPTEGI TI DHYNTFYVI GCNFDATLFEYGTEDLI GSCMSRCDGEKAPI GGPCNGMG
CCFI ELPRVLRGFQSTI I LRSDDGI PVAQTPVHPGI MAFMSSDYYI SNTSDLFLGWTNTS
NVEGTVLSFATI DQPSCERARMNNTSYACSPGNSCRNVSSGGYHCYCSGYEQGNPYLLDG
CTDYNPKYKEHCSTSCGDMKI PFPFVVEEGCFANERFRLNCTEGNLTVCELGEAQYHVTA
VSLDDGTLTVGNMMDNTNYEKEAI I VQTTDTGRDYSFSGPVEDRFDLSEYAI VI RWA
VNTLTCEVAVQKNTTYACRSSHSYCLNVTHRKEFMGYRCKCSPGFEGNPYI EDGCTGI AI GI
GCGLGSI VI VLGAMI LANKWRKGI QKRI RRAYFKKNQGLLLEQLI SNESATNKTKI FSLE
ELEEATNMFNFDGTRVLGRGGHGTVYKGI LSDQSVVAI KSKI VEQTEI DQFI NEVVI LSQI
I HRNVVKI FGCCLESEVPLLVEYFI SNGTLHDHLHTDLSVRCSLSWDDRI RI AVEAAGAL
SYLHSAAAI PI FHRDVKSSNI LLDGSFTTKVSDFGASRSVSLDETHVVTI VQGTFGYLD
EYYHTGOLTEKSDVYSFGVI LVELLI RKKPI FI NEAGAKQSLSHYFVEGLOEGSLMEI I D
PQVVEEANKKEI DGI ASLTMACLKVKGVDRPTMKEVEMRLOFLKTKRLRKFQLLPNGDGE
I EHLLSPNTSNSYAQNI YTNAGDLTSEGI PGSGCYSLEQELSSSI SLPR*

>OsWAK15, 2541.t00005, Chromosome 2, protein sequence
MSSSFLAVCATSFVLVCSAATPRVLASVYGVGGGLLI VPSNDSLACPSRSCGEVDGI SYP
FGI GGGCFRDGFELTCNTATKTPKLLVANSTTQI TAMEYDMALAPMYFNFTTROGMDTYN
I SWVSPAKGI KI SIDENTFYVCCNFATLFEFGTGDFVSGCMSRCDI EKAPI AI GQPCNG
NGCCSI KLSRDMRGFQSTLVQAEAAAQI SDPLHHGI MAFMSYTDYYVRNASDLFLSWTNV
SNVEGAELQFAI TDQPSCGSALVNKSSYACTTGSNCONI SSGGYTCECTNRYLOGNPYI L
GGCNMQDHI TVLETSEAQFI VTNVSVEDGTLTI SNLLNNTTEYGREI LI TQGHGTVYKGI L
SDQSVVAI KSKI VEQTEI DQFI NEVAI LSQI I HRNVVKLFGCCLESEVPLLVEYFI PNG
TLHDRLHTDVSVKSSLSWDDRI RI ASEAAGALAYLHSAAAI PI FHRDVKSSNI LLDGSFT
TKVSDFGASRSVSLDETHVVTI VQGTFGYLDPEYYHTGOLTEKSDVYSFGVI LVELLTRK
KPI FI NDVGTQKSLSHYFVDRLREGSLI EI I DYQVLEEAHREDI DDI ASLTEACKLRGG
DRPTMKEVEMRLOFLRTRKRLKRFQFLPVPVGGGEI QHLLSPNAGKSQAQNNYTSAGDLSY
EGI SSCYSLEQELSSSVSLPR*

>OsWAK16, 2541.t00008, Chromosome 2, protein sequence
MRSSFVAACAI SLVLVCSAATTPRALAAVYGDGGGLLSI PSNDSLACPSRSCGDVDDI AY
PFGI GPGCFREGFELKCNSTKTPKLYMKDGTQI LYVGDDDLWAPMHFNI TMKPGTDTY
NI SWVSPRKGVTI SQRTFYI I GCNI DVTLFEYGTDRDAVGYCVSRCDGEKVPTEGPCNGK
GCCSI KLSRDLRGFRSTLVQVDATAAQSYQLRHHGVMAFMSYNDYYVDNATDLFLSWTN
TSNI QEALVQFAI MDQPSCEI ARMKNTSYACSTGSNCLNMSSGGYTCECANYDLYYYYAE
QSPYLLEGCI I RGNI TLFNPRDARYNVTDVSI EEGTMVSNLLNDTEYGGEDI I SOVYGG
AEI KWAVANLTCDAAVKKDATYACRSI HSNCLNVTHGNI FMGYRCKCLPGFRGNPYI QDG
CEGI TTGI SCGI GSI I I ALGAI I LANKWKSI QKRI RRAYFKKNQGLLLEQLI SDESATN
KTRI FSLEEEATNMFNFDATRVLGRGGHGTVYKGI LSDQSVVAI KSKI VEQTEI DQFI N
EVAI LSQI I HRNVVKLFGCCLESEVPLLVEYFI PNGTLHDRLHTDVSVKSSLSWDDRI RI
ASEAAGALAYLHSAAAI PI FHRDVKSSNI LLDGNFTTKVSDFGASRSVSLDETHVVTI VQ
GTFGYLDPEYYHTGOLTEKSDVYSFGVI LVELLTRKKPI FI NDVGTQKSLSHYFVDRLRE
GSLI EI I DSHVLEEAHREDI DDI ASLTEACKLRGGDRPTMKEVEMRLOFLRTRKRLKRFQ
FLPVPPI GGEI QHLLSPDTGKSQAQNNYTSAGDLSYEGI SSCYSLEQELSSSVSLPR*

>OsWAK17, 2421.t00020, Chromosome 2, protein sequence
MTYSI RKLKYVDWFLMQVPPCNDNPKVATDNYSENRI LGPRWAEVYKGI LRNKNSTVFT
VFNESQVEQVNEI SI LSQI DHPNVKLLGCLETQVPLFDSYDNCSSRNWI PYSOLTEK
SDVYSI GVVLAELLTTEKPVSFARPELDRKLAMYLVMLVNKGC I LOAVKPI I LAEAREE
QLYDVAHLSI MCLSLKGEQSTMKEVASVLNGLRRSLAKDKAI KGKEVYPQNKNEEEYLL
PGSGVGSSTLHSSSEGRQCSMEVEMI ASCHLTR*

>OSWAK18a, AK105477, Chromosome 2, protein sequence
MSSKLCFSSGLASPLSQCSWYLLSI SSFSATSI I GRSSPLMLTHRI TRCVI SWSTSSV
I SFLTWLSI SSSWRPSLTAVMKQDTRLLSSSDPPK

>OsWAK18b, AK103831, Chromosome 2, protein sequence
MAEDGFRRRELLLVGDVSRWFLCLI QREYVRLVDVESAGHGVLAAAPRLAGALARQVTLRL

OsWAKs-Supplemental Data 2[1].txt

RPPARGCAASDVVI VGVNQVAKDGAPEHDKAVPRCGEPVGDAAAVVRRRAVPTDCFEAVV
VAVASRVDEDPDLAVGDGKAHQFLTI I QVVEVRSVAVALELEVFPGAAGANAEGVGDA
DVPALVGAARPWLSRRCRCHRROADEHDG

>OsWAK19, 2477.t00018, Chromosome 2, protein sequence
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NYTYVTGCTSTCRRSQSQDLPQOCTGESGCCQNTMPRALNVYKPYI LTLNKTEEPTRNV
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VGSCDI AGRRAPTAI RFEI *

>OsWAK20 9630.t05379, Chromosome 2, protein sequence
MALAPATPASAQPLPGCPDKCGNI SI PYPFGI GAVCARGPKFQLECNHTYSPRLI AVI D
SQSNLEI HLESLSLADGEARI YNNASRSLYNHSTGDLVRTNDVVYFLGREGPYRFSSAK
NRFVALGCPNLGLLLDATENYVTGCI SLCRSSPLAVSAGACAGVGCCQSSI PSGLHTYYV
NQDKPKNVTLOYYAATDYRYVFLADAEWLSTSYRGDFNRTGDFAVPVVLDWAI REVGSC
AAMRNKADYACRSANSDCVSTEGEGYRCNCSRGEYGNPYLDGGCODI DECERDKDACFG
NKCTNTLGGYLCMPPGARGNPLI EKGCVKTDLGLTI GI GVGSGAGLLAMAFGAVFLTRK
I KNRRANMLRQMFVKQNRGHLLOQLVSQNTDI AERMI I PLAELEKATNKFDESREI GGGG
HGTVYKGI LSDLHVVAI KKSVAI QREI DEFI NEVAI LSOI NHRNVVVKLFGCCLETEVSL
LI YEFI SNGTLYHHLHVEGPLSLSWEDRLRI ATETARALGYLHSAVSFPI I HRDI KSHNI
LLDGSALTAKVSDFGASRCI PAEQTGVTTVI QGTLYLDPMYSYTGRLTEKSDVFSFGVVL
I ELLTRKKPYSYRSPEDDGLVSHFTTLLTRDNLGHI LDPOVVEEGGKEVKEVALLAVACV
KLKAEERPTMRQVEMTLESI RSLFLOQEI HSMANKSSKENHVSMSYPANEGTSMESTKO
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>OsWAK21, 2477.t00014, Chromosome 2, protein sequence
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SDNSRNYTVYLSLLGSNTYRVSAARNRFVALGCPNLGYLSDDAGYI TGCTSVCRPSQWN
SVSPAAGTGVGCCQSR I PPNVTYYEASVQGFQEAQGR I FRENTTSCRYAFVVEDRWVDTT
YRDSADFNRTDDFAVPVLDWAI RNVANCDI AKRNRTDYGCRSTNSDCVDSTNGVGYRCK
CSNGYDGNPYLDGGCTDI DECOHLDKYPCHGVCTNLLGGYKCDCPHGFSGDAI KNDCRPN
DKFTLALKI VTGVSVGVFLSVFMCFWLYLGLQKRKLI RTKQRFQNGGVI LQQMHSGG
GTGGFKI FSTEELKATNNFAADRVLGRGGHGVVYKGVLEDNMVVAI KSKMMEEAQTKE
FAEMFI LSOI NHRNVVVKLGGCCLEVEVPMLVYEFVSNGLTYHYI HGKEPTTDI ALDNL
RI AAKSAEALAYMHSSASPI LHGDVKTANI LDDKLNKAVADFGASKLAPTDEAAI ATL
VOGTGCGYLDPEYLMTCQLTDKSDVYSFGVVLELLTRKKALYLDGPEEDMSLVSRFTTAV
KAGRHRELMDSQVRKEMNDEMATEI ADLLMRCLSMNGEERPTMKEVAERLEMLRRYQOHP
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I LRHPCSTPELI AGGRVLRCLALRRARR*

>OsWAK22, 2477.t00012, Chromosome 2, protein sequence
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SLNKSAEENRVEPI YHRLNSTACNYMFLVEDKWI DTTYSYRAYFNRTDDFDVPVLDWAI
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KEYGCGYDCTNTI GGYTCLCPRTGI GNVHEKNVCRPKDKFTFALKAVTGVGLGVFMSVF
MAFWLRRLRLOKRKLI RTROKFFEONGGI FLOQQMRSYGGAGGGVGGFKI FSTEELKNATN
NFAVDRI LGHGGHI VYKGVLEDNTVVAI KSKMMEEAQTKEFAEMFI LSOI NHRNVVK
LLGCCLEVEVPMLVYEFVSNGLTYHYI HGKDPEVDI ALDTRLRI AAESAEALSYMSSAS
PPI LHGDVKTANI LDDKFNKAVSDFGASKLAPTDEAEI ATLVOGTGCYLDPEYLMTCQL
TDKSDVYSFGVVLELLTRKKALYLDGPEEDRCLVSCFTTAVKVGRHQELLDQVRNELS
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>OsWAK23, AK108554, Chromosome 2, protein sequence
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YVNKDI TLVGSNAYRFAARNRFVALGCPNMGYFVDTYGYYVSGCTSI CRPSQNGASGA
STGGCTGEGCCQSR I PTNTDYYELYVQTFKPGEGDPI LRGGTTACRYVFLAEDKWI DTTY
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OsWAKs-Supplemental Data 2[1].txt

>OsWAK24, 4897.t00005, Chromosome 2, protein sequence
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GRCTGERCCQSI I PPTLNFYVPRMNFENGTAAVDNELRGGTTPCRYVFLVEHTWI NTVY
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COGYEGNPYLDGGCTDI NECLRPEKYGYGDCTNMLGSHTCVCPPGTSNWTDRNGCRPK
DNFPLALKVVTVGVSQVFLSVFMCFWLYLGLQKRKLI RTKQKFFEHNNGVI LROOMHSGG
GTHGFRI FSTEELKRATHNFASDRVLGRGGHGVVYKGVLEDKTVVAI KSKMMEEAETKE
FAREMF I LSQI NHRNVVLLGCCLEVEVPMLVYEFVSNGLTYHYI HGKEPKADI PLDTRL
RI AAESAEALSVMHSSASPP I LHGDVKTANI LLDDKFNKVSDFGASKLAPTDEAEI ATL
VOGTGCGYLDPEYLMTCQLTDKSDVYSFGVVMLELLTRKKALYLDGPEENRSLVSCFTTAM
KVGRHOELLDSQVRNEMSAEMLEEI TYLLMRCI SMNGEERPTMKEVAERLEMLRRYQOHP
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>OsWAK25 AK101690, Chromosome 3, protein sequence
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SSCDPOAAARLNSCSI PPEAYLEKSCNSI RCVLPSTKANVDGTNVTDPFLNRSEMRRLGS
DCRGLVSASI YSNTAGPALQLTALELDWVQGRGCSHA I CDGFTPPSTQKEAFRCECO
EGFEGDGYTAGAGCRRVPCNPSKYLSGSCGKLVQI GLLVAGVFFGAMVMGI TCLVYHLL
RRRSAALRSQKSTKRLLSEASCTVPFYTYREI DRATNGFAEDORLGTGAYGTVYAGRLSN
NRLVAVKRI KORDNAGLDRVMNEVKLVSSVSHRNLVRLLGCCI EHGQOI LVYEFMPNGTL
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DFGLSRMGMTSDVSSHI STAPOGTPGYVDPOYHONFHLSKSDVYSFGVVLVEI I TAMKA
VDFSRVGEVNLAQLAVDRI GKGSLLDI VDPYLDPHRDAWTLT I HKVAELAFRCLAFHS
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>OsWAK26, 4613.t00011, Chromosome 3, protein sequence
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RNLGLKVI FLTHFTMNSVAARFPYLLKNKLEEGDEGSQVI QLDWTI I EGD I DKPFVSSG
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FRI I PFACFKRKRKFHLLSSSSGVSSAAAAGRAI SLPGCPDKCGD VSI PYPFGVGDRC AA
VGLNYPYFI TCDDAVRPPVPKLGDPGMEAEVLDI TLERGEI RLTGFLSYVCTSSNSSYA
SLPGGI FVGGTQLRVSPSRNQLTVI GCRALGLLVGGAHAGGSGDGEYATGCTYCASLN
STDADGAPCAGTGCCQAPI SSDLAYVGGTFPSNWTNSGWRFNPCFYALI AEVGWYSFRRR
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SCSCNQG YEGNPYLDNGCQDI DECTLRROGRQYEDVYPCKHGI CI NTPGSYRCKCKAGTK
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GASALRSAMGEGESFI EYVQGTGLGYLDPESEFVSRHLTDKSDVYSFGVVLAEI TRKKAVY
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RGEERPAMKEVAERLQVLRVEMMEAAAGVEVVDGFGNGGGLVGRHGHLDTTTTTTTSYYO
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>OsWAK27 9631.t04035, Chromosome 3, protein sequence
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VVGTAAGGGDDDLATGCFTYCAELNAAGADGAPCAGAGCCQVPI SPDI PYLGA AFRT
GNWNTAWRFNPCFYAMVAEDGWYSFRRRDLVGVLAYYNETVDAGRGPVVI DWAVRDGW
CPATAEERARRKYACVSGNSYCVNSSNGMGYTCNSRGYEGNPYLAGGCQDI NECVLREQ
DPKYEEMYP CRHGI CI NTPGLSACAI LAMALSCLLVI QLQRRKHI OEKQOYFKONGGLRL
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TAARRRPVSLGLRLKI AAQSAEALAYLHSSASRAI LHGDVKSLNI LLDGALDAKVADFGA
SVLRSAMGEGESFI EYVQGTGLGYLDPESEFVSRHLTDKSDVYSFGVVLAEI LARRKAVYDD
DDASCSGHGGQKRSLSTFLAALRHGELWSVLDRELVRPDDDDGDDKA AVDVVRELAE

LAARCLGPSGDERPAMKEVAERLOVLRRAEMRAVAGAGRDSNGGEVDRSWI MCGGGGGA
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>OsWAK28 AK120279, Chromosome 3, protein sequence
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QVI SLYPSGTVLASI MYTI PMI HGVDTYNLSWSDSPGRNLSVVVYNYLAFLGCGI GVYLFH
PDTGNLVGHCTI KCASMEEMHMATEGGI CNGMGCCTVTFVLFGRFRVTI VKSNETI POP
FNNI TI KAFLTRPYI FSI ADLLSNKI NASTI GASMAYLSTVI ADEPNCPTARLDNKTOF
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LEPGCFAKRRFQLSCASNRTL GRPPAKYEVNTI SLDEGLLYVNKLSEFEDANTKYLSVY
YGGSGCFGQQLI YGLEKSDLSEYEGVMKWSVTNLTCEDAKSKSAYACVSTNSECLDVTHG
KLYI GYRCKCSLGFEGNPPYVQNGCTDI DECSI PNYCNGTCYNFKGSYSCCPHGMSYDRVR
ROCTSNKRQNI VLGLAI GI SSGFVGLALTLI AAI LFKRWKRSTRKKI RRAYFRKNKGLLL
EQLI SSSNNVTPNTRI FSLEDLEKATNNFDPTRI LGYGGHGTVYKGI LSDQRVVAI KRK
I VEQSEI DQFVNEVAI LSQI I HRNVVKLFGCCLESEVPLLVEYFI SNGTLHGLLHGDLS
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SI DQTRVVTI VQGTFGYLDPEYFYTSQLTEKSDVYSFGVI LVELLTRKKPI FLNCLGEQK
NLCHCFLOSLRDKTTMDI LDSQVVEEASHREI DEMASVAEMCLKTKGAKRPMKEVEI RL
OLLRAARSRAYKEDLQRSSEI KPLLTPKYKCTSLNSTKNVEMGLVANPESQVVSRCYTME
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>OsWAK29 AK102639, Chromosome 4, protein sequence
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FVNKPSNLGDI I TTPTVANELHDFDFSGSQI WRWAVANOTCHTARTDOLSYACVSNNSL
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DPAKRVC I YGHGLHPAGLLI GLSCGI GVLFLVVGLI LRVRRRRHMQRKI RREYFQKNKG
LLEQLMSSDENVAHDPKI FSLEELEKATDNFHSTRI LGCGHGTVYKGI LLDQRVVAI K
KSRI VEQNEI DQFI NEVAI LSQI VHRNVVKLFGCCLVSKVPLLVEYFI SNGTLYDLLHGE
QSTTFLTWEDSI RI SLEVASALSYLHSAASI PI FHRDVKSANI LLNDNYTSKVSDFGAS
RSI SI DETRVVTI VQGTFGYLDPEYFHTCOLTEKSDVYSFGVI LVEI LTRKKPI I VNCFG
ENONLGHCFLOTLQHG I MEI VDPQI AKEANESEI NEMASLAEI CLRI RGEERPMMKEVE
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>OSWAK30/31, AK058435, Chromosome 4, protein sequence
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YAYDAGCI TYCPSLSDAAADGAPCKDLGCCESPI TPGLTQFAVGWGRWPGASDDDYGELD
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SNHSKCANVTSGLDGYFCNCSEGYI GNPIYI PDGCKDVNECENNSI CGAGSTCKNTEGSYR
CDCNFGQRRDNSSDNMGNCEPI FSRAAI AVI GEVQYMNAMLI EI CSMPYI PHI I YNALI T
CSSAFHVYTI FALHYI QLEAQH

>OsWAK32 AK067041, Chromosome 4, protein sequence
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LSCGFSI LLLSLGI MLLI HRWKDI QKQLRRKHFKQKNOGLLLEQLI SSDENASENTKI FS
LDELEKATNNFDPTRI LGHGGHGMVYKGI LSDQRVVAI KRKHI EEEI SQFI NEVAI LS
QI NHRNI VKLFGCCLETEVPLLVEYFI PNGSLFGI LHSGSNNGFSLSWDDCLRI AVEAAG
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>OsWAK33 AK067467, Chromosome 4, protein sequence
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SI SHYNYSWNLSSFSI EYVI LNI TGCNFDTYI I NPDTDI RTRI CRNSCPKEEI TEAVARO
SCNGTGCCTYDI YGVANLQLSFVRGDEGLLGGNSSRNSLWNI I NI RSWYAYVTWSI I DQP
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OsWAKs-Supplemental Data 2[1].txt

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LI NVW

>OsWAK34 3230.t00010, Chromosome 4, protein sequence
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ASLNI TGCEFDTYI I NNKSYSPTTAI CKSSCPNKEI TETVARQSCNGTGCCTI YVGI DVA
NLHLRFVVRHGREGFLGVNSSRSSLWNRI NI VSSYASVMWGI NNRPTCASVKDQNDQDYAC
ASANSQCVDISI SSTDLGYRCECNSGYI GNPYVLDGCTRDEVLVSSASGEVYELCSLKAG
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>OsWAK35a AK108495, Chromosome 4, protein sequence
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>OsWAK35c
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>OsWAK35d
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>OsWAK36 5112.t00008, Chromosome 4, protein sequence
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I VTTKI YEEATEEEI NNVTLLAEMCLSPRGEERPTMKQVEMTLQSLRNVTQTTAVHRANA
SDQLSQRCSLEHEFI ASAELPR*

>OsWAK37 AK111580, Chromosome 4, protein sequence
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>OsWAK38 9632.t02788, Chromosome 4, protein sequence
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DQRVVAI KKPNI I REEII SQFI NEVAI LSQI NHRNI VKLFGCCLETEVPLLVDYDFVPNGS
LNCI I HADPSMREFTLSWDQCLRI ATEAAGALYYLHSAASVSVLHRDVKSSNI LLDANYT
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PGCYSLQEEFMLSGLPR*

>OsWAK39 9632.t02794, Chromosome 4, protein sequence
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FNTTDI YNWTRCAYAALVETSSFNSTVYNSLSRFNDNLGSQPPFVVDWAI GNSTCEQAK
TNSDSYMC I SSNSVCLNSRNGPGYI CNCQNGFEGNPYLNSDFGCQGKTKGVHMRCKLI NH
RHI VKLFGCCLETEVPLLVYDFVPNGSLNQI I HGATSNRESSLSWDDCLRI ATEAAGALY
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EVLEEATEDEI NTVASI AQAQLRLRGEERPTMKQVEMSLQSVRNKGFSSAGTSPESNHGM
QPALSETYVNLHQPLGVHTI GI I NLISSNCNSLQOEFMLSASFASPYTLCAGPGLLAHRA
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>OsWAK40 9632.t02799, Chromosome 4, protein sequence
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FGLKEGCFARKLFHLNCTEANSSTLRFDKYNQVTDI KI EEGVLI KYDAGGGGDQEFMAI
DGEPHLYDGSWDYSI SVGWAVANLTCLEAKQNASGYACVSTNSTCVPVNSTSGYVGYRCN
CTAGFHGPNPYMLNGCI GKEH*

>OsWAK41 4577.t00022, Chromosome 4, protein sequence
MI RSPHAANSLQLLLVLATTTLLTSAKDLAAPRROEGHGRVVPSTATLAGCOSSCGDL
TFVYYPFGI GSGCFRSPDFELTCDSTTSPRLLFHDGI TQI AGSI NI VSTEFMDTDNSVST
RFSHTI SMRNASVVSWSLSPKLEHSLDAFYLTWGLRFSGCDFDVYWLNRPSI NKATPN
CTATCPKGESTGMVSPMHCNGTGCCTI DFGAEI NAYSSTI EFKFVROAETNLESYHNRS
LSWDTI YI TDPASRGLSWKI PDQPDASARKNQTSYACVSNKSI CI DPDDVKQGYNCMCR
NGYI GNPYI LDGCSPPNDAKRNSSGYACI STNSECI TSKPTDTFVGYRCKCAQGYQGNPY
I TNGCVGMVVGGGQTTGDRRI *

>OsWAK42 4577.t00017, Chromosome 4, protein sequence
MRGDWKRPPMAMTRGRAHRRRPRKEELRRI SGEEGRPAEVLLVLADVREATARVDVDRSGG
ATRLGGGERGGGLGCAVGVVLEGWRRGNKRRPDFLWRWSRWRWLGAATAVAAGNGDRS
SPECGSAWVRGSEGEYAGLKGNGETDEGSTGMLFMGSGRRDRGRTWRNRPAKWGADV
WWRGOMKYLGS AI PRNHDAI DECKEPKPYCYGNCKNI PGHFDCTCPKGRGNAFVEGA
COKI I LTSGVRI AI GVVAGALVGLFGLGWGI KYKQRI KQOALLROADEFFQOHGGOLL
LEMMKVEGNAGFTLYERERI KI ATNNFNKAHI I GEGGQGTVYRAVI DGTMAI KRCKE I N
ESKKMDFVOELVI LCRVNHTNI VRLGCLQFEAPMLVYEFVONKTLQELLDLQSKRFH
VTLGTRLRI AAESADAFHLYSLRPI LHGDVKPANI LLAEGLVAKVSDFGCSTI DEKTO
VVPKGTGPGYI DPDYLLLEYQLTASNDVYSFGVI LLELLTSRRPFSKERKSLTSMFQEMAN
GTLVELLDSDI VDEASMRVI QAAVLANOQLVVPALADEVQOYPOPPLVLEDLSFTGI GR
TSMSTWYGGSKTNGVYGLSKKAVPSI EFAR*

>OsWAK43 4577.t00014, Chromosome 4, protein sequence
MTSHRGLTTTTLCLAI AI AAELLAGRAEGCQNTKCGDVEI PYPFSTSLDKCAASAFEFD
CNDTGNGVYKPFYGNVEVLSVSLQLGQVRVMNHI SSSCYNLSSKEMSDTWQLNMTGTPF
MLSDSNKFTVVGCRTOAYI ADQDYVGKYMMSGCVSVCRRGDVWKATNGTCSGI GCCQTAI P
KGLDYYQAFFDDSSMNTSGI YNRTPCSAYAVLMDSSNFTFSTTYLTTSEFNNTYDGRAPMV
LDWAI RSANSCEEAWKKMSYACKSTNSECFNSTNGPGYTCNCSKGYEGNPYLEGPNPCR
DI DECQDSKTHHCYGEARNKPGGFDNCNPAGSKGNATI PDGCRKDFRLPLKARLAI GAVI
CVLVGLFSFLGWEVI RHKRSI KQOALLRQTHEFFLQHGQLLLLLEMMKVEGNVGFYTERG
EI ETATSNFNKEHI I GEGGQGTVYRAALNGVNVVAI KKCKE I DESRKMDFVOELVI LCRVR
HPNI VKLLGCCLQFEAPMLVYEFVONKTLQELLDLHRSKRFHVTLGTRMRI AAESAEALA
HLHSLPHPI I HGDVKPSNI LLAEGLI AKVSDFGCSTI DENTQAVPKGTGPGYI DPDYLL
LEYQLTASNDVYSFGVI LLELLTSKKPLSKDRKSLTLMFQEMAEGTLFELLDSDMVDEASMR
VMHQAAVLASQCLVPGMTRPTMVLVAAELRRLALADEVQOCPQPLVLEDLSFVEMGST
TSGVYSLEKKAVLSI EFAR*

>OsWAK44 9632.t02820, Chromosome 4, protein sequence
MASYGELTI SCLTAI AVAGAALLAGGAEAOQLHTCGGI DI PYPFGI GSDGDCALPFYNI D

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CNNKKPFYRDVEVLSI SLQLGQI RVSTPI SSSCYNPFKRMYSWGWFNLSYTPFMLS
NKFTVVGQSLAYI SDPTSNYTSGCASSCPGGKVV SATNRTCSRI GCCQI TI PRGMEFCK
VSFGESMNTSGI YEHTPCSYAAI MDYSNFTFSTSNLTSLEFNNTYSGRAPVKFDWAI WG
PRDCVEAQKNLTSYACKSDHSVCLNYSSGAKSAYMCNCSKGYHGPNPYLOGSNGCEDI NEC
EHPESYPCYGECHNKDGGDFCFRDGVVACI LSI LFGFLGWEVI RHKRSI KROALLRQND
EFFQOHGGQLLLEMMKVEGNAGFTLYGRQEI ETATNNFNKANI I GEGGQGTVYRAVLGGI
AVAI KMCKEI DENRKMFEVQELVI LCRVNHPNI VKLLGCCLQFEAPMLVYEFVQNKTLKE
LLDLQRSTRFHVTLGTRLRI AAESAGAF AHLHLSLHPI LHGDVKPANI LLAEGLVAKVSD
FGCSTI DESTPAVPKGTGGYI DPDYLLLEYQLTAKNDVYSFGVI LLELLTGKKPF SKERKS
LTLMFQEA MVNGTLQDLLSDI VDEASMRVI HRVAVLASQCLVVP GTTRPSMALVVEELW
RLALADELQRYPOPPLVLEELSFLDTGSTSGI YSLDNKAVLSTTFAR*

>OsWAK45 9632.t02822, Chromosome 4, protein sequence
MAFQFHTLLSAVTI WLGVAAATARLHA AVAGARAPPPPPPGNCQKCGDVI PYPFGWV
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DMDYNDWQI NFGTGLTI SDADNKFTVVGQTLAYI TDDDNMGKYTSGCVAMCQGGDLTS
LATNGSCSGI GCCQTAI PRGLKYRVRFD TGFNTSEI YNVSRC SYAVLMESKAFSFRTSY
VSSLEFNSSNGGRVPLVVDWAI GNETCDKARRKVD TYACVSHNSKCFNSSNGPGYI CNCS
EGYQGNPYLQDQGHGCTDI DECADPKYPCSVPGTCHNLPGGFECLCPRSRPKGNAFNGTC
ERDOTLHTGGKVAI GI SGFAI VGLVFLVREVI QHKRSI KROALOROTDMYFOHGGQI L
LELMKVESAEFTLYDREKI EVATNNFAKENI VGKGGQGTVYKAVLDGTTVAI KRCNEVD
ESRRADFVQELVI LCRVNHPNI VKLVGCCLQFEAPMLI YEFVQNKTLQELLDLQRSRKFH
VTLATRLRI AAESANAL AHLHSLPRPI LHGDVKPANI LLAEGLVAKVSDFGCSTI DEKTO
AVVKGTGGYLDPDYLLLEYQLTAKNDVYSFGVI LLELLTGKKPLSKERTSLI PI FQGAMES
GKLVLELLSDI VDEANMGVI COAASLASQCLANPSSSRPTMROVAEQLRRLALADEVQQC
POPPLVLDGLI LTEMGSTTSSWYTGSGTSGVYNLENNVVLSTEFAR*

>OsWAK46 AK072627, Chromosome 4, protein sequence
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FGLSSSGCAMSPSFEVDCNNTGNGVQKPF LGYVELLSI DVQLSQARVRTRI SSSCYN I ST
REMNFDLWYVDLKDTPYRFSDSANKFTI I GCRTLAYI ADQDDVGKYMMSGCVSVCRRGEL
TSLI NGTCSGKGCCQTAI PKGLDYYQVWF EQSMNTSGI YNRTPCSYAVLMEASNFSFSTT
YLTSPFEFNNTYGG EAPVVDWAI NTANTCEEAMGNLTSYACKSDNAKCI NSSD TTGYI C
RCQEGYQGNPYLKGPNQCQDI NECQHG ENYPCYGD CYNKP GSFDCVCHAGSSGNAAI QGG
CRKDLLSPKTRLAI GVVASVLAVLFGFLGWEVI RHKQKI KROALLROTDEFFOHHGGQI L
LEMMKADGNDGFTLYKRGEI ETATNNFSKAHVI GEGGQGTVYKAVI DGVAVAI KKCKEI D
ESRKMEFVQELVI LCRVSHPN I VKLLGCCLQFEAPMLVYEFVQNKTLQELLDLQRSRRFH
VTLGTRLRI AAESADALSHLHSLPHPI LHGDVKTANI LLANGLVAKVSDFGCSTI DKRTO
AVPKGTGGYI DPDYLV EYQLTTRNDVYSFGVI LLELLTGRRPLSKERKSLTLMFQEARSN
GTLI ELLSDI VDETSMRVI KRAADLV SQCLVVP GTTRPSMTLVA AELRRLAEAYEVKRS
POPPLVLEDLRFMDMGSTTNTLYGESRTSGAYSLEKKAVLSI EFAR

>OsWAK47 9632.t02847, Chromosome 4, protein sequence
MPFHMLASLLWLCGGI AAYCSAASAATCVRSCGGVEI PYPFGLDPACALPGFNLT CNI KG
DGKPYKDV ELLNI SLTEGQVRMRMHI ANYCYNSTSGGMNGTGWSLNLTGTPFRLSDFGN
KFTAI GCRTLAYLLADDVLT TGCVATCKADDLLR LPDGVCSGI GCCQTAI PKGLOYYGVM
FDSGFNTTEI NNMSRCSYAALMEASSFNFSKNYPTSSSFNDHYRGRAPLLVDWAI GNETC
DVARYRCNCSQGFHGNPYLKPEDPDSCQDI DECKEYKYPCHGKCRNKVGGI CASLVVAL
TTLLGI EWI KYKQRI KRQDI MRKRGEYFHLHGGQLLDMMN I ENNI SFKLYDRDDI ELAT
KGFDKTSI I GEGGQGTVFKGYNLDQVNNPVAI KKCKGF DENSRTEFTQELLI LSRVNHEN
I VKLLGCCLQFEVPLVYEFVPNKTLHYLI HSQNDPSI RTLEI RLKVA AESAEAFSYLHS
LDHPI LHGDVKSMNI LLSNNFI AKI SDFGCSKI RAADGHDDVVKGTI GYLDPEYLLKFEL
TDKSDVYSFGV LLELLTRRTPLSKOKVSLASVFOEAMKEGLFLELI DTEI LHEDNMGLI
GDLARLACQCLAMTSESRTMCR I AEELRRI EKRV RQHRGVLTTI SSMSLLASSSADTSL
HFTGETNGYNSLR SVAAMSI EFAR*

>OsWAK48 9632.t02849, Chromosome 4, protein sequence
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LGDFEVVNI SLQLSQLRVLNKI SSFCYNPASKLMEPNTFQSDLDTPFMLS DTGNKFTVI G
CRTLAYI ADKDNV GKLM SGCV SACRRGDVTSATNGTCSGVGCCOTTI PKGLPYQVFFDQ
AFNTSDSI YNATLCSYAVLMDSSDFKFSTSYLTSPEFN TSYGGRAPMLLDWAI RTVNNCD
EAQKNLTLYACKSDKSECFNSSNGPGYI CNCTNGYQGNPYRQDGCQVETGLDGRGSRVK
TGLDGRNRRAAQHFFDSPSDFDDDDSHKNI CGETI KEYI GDRDLEYNTNDVI DAVVGDVAV

VAVVEDAVDVVDEASCRLI YQTRGRVHLCGRVSGKLMKTTDDVESAKTI VLESSAA

>OsWAK49 5443.t00017, Chromosome 4, protein sequence
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VWLGVADPREETAQSGVDRGGGATQMETANTAAI SGLVTCVVFVGLFGFLGWEVI RHRQNT
KKOALLRQTDEFFQOHGGQLLLEMMKVEGNVGFVTLYERQI ETATNNFNKAHI VEGEGQG
TVYRAEI DGTI VAI KRCKEI DESRKMDVFOELVI LCRVNHPNI VKLLGCCLQFEAPMLVY
EFVQNRVTLHELLDFQRNRSCHVTLGTRLRI AAESADALAHLSLPHPI LHGDVKPANI LL
TEELVAKVSDFGCSTI DEKTQVAPKGTGYPGLDPDYLLLEYQLTAKNDLYSFGVI LVELLTG
KRPLSKERKTLTSMFKEAMTDGTLI KLLDSDI VNEDNLRVI HQAAVLASQCLI I PGTARP
EMRYVAEQLOQLAFADVEVQODPQPPLVLAGLRF TAEMANTRTTSSWQTD SKTTGVYSLEK
NVRLCSRI T*

>OsWAK50 AK111730, Chromosome 4, protein sequence
MVSSMVL AQLLLLLCLLSLSSSSSSSQI SPLKCPNSSVDI PFPFKI ATNSSLTSTPGFAI SC
RQTGPMI LLGGNYSVLSI SLLEGYVRVTGQTVYSSQCHNNSQGI I DLTATNYMFSHTQNK
FTAVGCDAMAMI RNSSDVVGNNTSTVMSRYSGGCVSFCASNGSI I SGECSGVSCCOSSVP
KGLNKLDFLEFTSI RDQLMPPTS AVGSGSTRCSKAFI AEQDSYVFSRHDLKDLGNLPMVL
DWYI QGGNCKEASRSRQTYMCKENSICYEVEDGAGYRCNCSSGGYTGNPYI GCVDI DECND
GNNYPCTHKCI NI AGGYNCTCPMGMTGDGKKQGI GCKRDTTMLSTVGGSLGLMAVLI VLG
FNTYWI VKKRRLAKQKQRYFLONGGLLQOQI FTHOAPARI FTTSELEDATNNFSDDRI V
GRGGYGTVYKGI LSDQTI VAI KSKLVDSQSQMEQFI NELI VLSQI DHKNVVKI LGCCLET
EVPLLVEYFI SNGALFHQLHNTNLVPI SWEHLRI ATETASALANLHLARKVPI I HRDVE
SANI LI DENYTAKVSDFGASRLVPSNQTHVTTLVQGT LGYLDPEYFYTSQLTDKSDVYSF
GVVLVELLTRQKPI SYHRQEEGI NLASHFTALAQONRLQEI VDCVVVKEAGMRHVNVVSH
LI LKCLKLKGEERPRMVEVAI ELEALRRLMKOHL SLKSEKALRELMEQSAEDCOEMOLL
QEESGOEKMSNI EPLKLYHRDSASDKCMESSPLLSMDLPW

>OsWAK51 9632.t04098, Chromosome 4, protein sequence
MAYTSNAAYRKGA I SKGTGCGRLI LEKTASAKHTI ATAAVPSQPCQSRCGDVI QYPFGI G
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FRFNKNTPRFSDVYNKFTVI GCNTLAYI ADDGGTGYQSGCF SQRDL SGLVDGSCSGM
GCCOTTI PRGMYYNVTDFKRFNTSQI SRFGRC SYAVLMEAA SFNFSTTYI NTKFNNGTN
GGRVPMVI DWAI REKSDI AKQNMTSYACLSSNSEC VASTNGPGYVCNC SHGYEGNPYLP
DPHGCHGVI I GFI VLMI I AFCGQLVI QRRKLTKI KKEYFROHGGMI LFESMKS KKG LAFT
VFTEAELI HATNDFDKSRI I GGGHGTVYKGTVKDNMLVAI KRCALVDERQKKEFGOEML
I LSPI NHKNI I KLLGCCLEVEVPMLVYEFV PNGTHLFELI HGKNOGLQI SFSTLLRI AHEA
AEGHFLHSYASPP I LHGDVKTANI LLDENYMAKVTD FGA I LAPSDKEQFVTMVOGTGCG
YLDPEYMQTQCLTDKSDVYSFGVI LLEI LTGOVPLKLEGP I ORLSSVFLS AMKGNLND
SVLVSDI KGOESMELI GGLAELAKQCLDMCGANRPSMKEI TDELGRLRKL SLHPWQVDA
EMAPENLLGGPSTI NSGLEI ETSSTGYLGEERENLPMNPGSTYYAR

>OsWAK52 AK111909, Chromosome 4, protein sequence
MHWLAVTAAGSEVDLFLVEMHWLAVTADFEDLLFLVEDEGCAAGAGHARRCLVELEGDLL
RVVQRHAVGVAAGRPGAQSVRVYSAVGCAASVSRPTMMV

>OsWAK53a AK111508, Chromosome 4, protein sequence
MAKMMLYLLLLPLLLTTCI FASYVHSMESSTSKCSNI PI PYPFGI LGGNPAPAQGF EI TC
ASSGPMVRI NNI MFGI LNI SLLDGFVSI LASATSQCKRNSSFSLEGTNFTFS DTRNKFT
ALGCDMVAMLLNGSSGYSGGCASFCSTKSNI I DGMCSGVACCOAPVPKGLKLELEFTNI
TGQLSRPKEVNNTPTCGEAFI VEQNSYVFSSVDLSNTNRNPNQYRPVVLEWSI DGGYCEE
ANRFMSYACKENSICYNSSNGI GYRCNCSLGFQGNPYLQGPDGCODI DECTI KRPCTHKC
I NTKGSFYCMCPAGMRGDGLKEGSGCNGI GTLLI GI VTGLALLLLLLVLI FWTHWLKRR
KLAKI RORYFMONGMMLLKQKMFSGAPLRI FTSSELEKATNSFSDDNI I GRGGFGI VYK
GI LSNQMVVAI KKAQRVDQNOQMEQFI NELVI LSQVNHKNVVQLLGCCLTELEPLLVEYFI
TNGALFSLQNTSVLI SWEDRLRI AVETASALAYLHLATKEPI I HRDVKSSNI LLDENFT
AKVSDFGASRPI PHNQTHVTTLVQGT LGYMDPEYFQTSQLTEKSDVYSFGVVI ELLTRO
KPI SDGRTDDVRNLACHFSMLFYQNQLLEI VDSQVAEEAGTKHVKTVAQLALRCLRSRGE
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>OsWAK53b, AK111662, Chromosome 4, protein sequence
MONGMMLLKQKMFSGAPLRI FTSSELEKATNSFSDDNI I GRGGFGI VYKGI LSNQMVVA
I KKAQRVDQNOQMEQFI NELVI LSQVNHKNVVQLLGCCLTELEPLLVEYFI TNGALFSLQ

OsWAKs-Supplemental Data 2[1].txt

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VRNLACHFSMLFYONOLLEI VDSQVAEEAGTKHVKTVAQLALRCLRSRGEERPRMI EVAI
ELEALRRLMKOHLVLQTEEDPLLCESGQHADVNI EASSEFEP

>OsWAK54 5380.t00019, Chromosome 4, protein sequence
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STRHNRVAMGCNLLANLVANDDDDDYI SVCAALCVRSALPRDAAAASSCSGFGCCQTPV
ARGLPSYGVHLNDLTQRSVTVGSYGAAFI ADGEWFAGEQRSLLQGFVADPRKLDSTAVP
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LANGCQDCGPCVDGPDCE*

>OsWAK55 5380.t00020, Chromosome 4, protein sequence
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SLPDGTVRVRKLSQSSI AGSSSSSSNASSSRSDLPADGPFTVSSAYNWLVAFGCNI VAD
LTPYGN I ADGSSCAATCI DGWQNFAGPSCSGI ARCRTSVGRGVHSYTI QVTSLI DRNSMG
ASTSTTWAFAAFVAEQWFSAENENAMLYNFTNWLPTVESVPVWLEWLDLI RDGAI LPLS
VGPNTTDFRCLSHSSSYNDLNYDRRCNCSSQGYEGNPYI RDGCRDI DECOOPDVYPCH
GTCI NMPGTYRCLAKKSVKSLPGLI TI I AVSAGFLLFSLLGVAKI TNKI KQRRAKKLRR
KFFKKNHGLLQQLI SSNKDI AERMKI FSLEELDQATNKFDQNR I LGGGGHGTVYKGI LS
DQRVVAI KSKI VVQREI DDFI NEVVI LSQTNHRNVVKLYGCCLETEVPLLVEYFI SNGT
LSFHLHGQENENPLKWKDRLRI ALETARAI AYLHSAASI SVLHRDI KSTNI LLTDTMTAKV
SDFGASRSI SI DETGI LTI I QGTGYLDPEYYYYSSRLTEKSDI YSFGVI LAELLTRVTPV
FSSETSERSTLASYFVSFI RDNRLSDI LDSQI VNEVGAEDAKVAKLAEAACLRLKGEERP
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FPR*

>OsWAK56 2968.t00014, Chromosome 5, protein sequence
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DYI RYVWSPANGFTI VNESTLFVI GCGI EAFLDLDTNETMGSCI TMCSDNLGI MEMHDG
DCTGI GCCHI I VRRELRRFWLKLDPDRRTTPRSYRVLRSRAQVFI LPTI NSYQFNTNDLV
SSSWMNTSSI GGTLLRGAI MDQETCPGASASKATYACTTNTNCFNATNGGGYCSNRNDVT
DGNPYVNLGCSDDPGI TI GI GCGLGSI I LALGAI VLI NKWKRGVQKRI RRAHFKNQGLL
LEQLI LDEKAQDKTKI FSLEELEKATNYFDATRVLGSGGHGTVYKGI LSNQCI VAI KMSK
I AEQTEI DQFI NEVAI LSQI I HRNVKLFGCCLEAEVPLLVEYFI SNGTLYDI LHSVSV
KCLLSWDDRI RI AVEAAGALAYLHSAAAI PI YHRDVKSSNI LLDNFTTKVSDFGASRTM
SLDQTHVMTNVQGTFGYLDPEYYTQGLTAKSDVYSFGVI LVELLVRKKS I FI NDQGTKQ
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SI NLPR*

>OsWAK57 4374.t00003, Chromosome 5, protein sequence
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KKOALLRQTDEFFQOHGGQLLLEMMKVEGNVGF TLYERGQI ETATNFNKAHI VEGGGQ
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TEELVAKVSDFGCSTI DEKTQVAPKGTGPGYLDPDYLLLEYQLTAKNDLYSFGVI LVELL TG
KRPLSKERKTLTSMFKEAMTDGTLI KLLSDI VNEENLRVI HQAAVLASQCLI I PGTARP
EMRYVAEQQLAFADVEQODPOPPLVLAGLRFTAEMANTRTTSSWQTD SKTTGVYSLEK
NVRLCSRI T*

>OsWAK58 4374.t00004, Chromosome 5, protein sequence
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MRYASACSAFCGPKGNLTS LMDGACSGTGCC EATI TEGHTSYNTMFDPDYNTTQI YNVS
SCSYAVLMESSRFSFRSYVMNSSQFI DTNGGRVPMVVDWAVQNASNCVEAQKDHSYAC
I SSNSVCVNSSSGPGYI CNCTHGYQGNPYLLHGCQGEYVKFL*

>OsWAK59 4374.t00007, Chromosome 5, protein sequence

OsWAKs-Supplemental Data 2[1].txt

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FVVGSETCKEAQTSPTYACLSDHSVCVDGAPGYVCNCSQGYTGNPYLPNGCVDI DECGPG
KHGCPDGM I CTNPPGGYNCSCPEGEYKSNKNGVLI CESDQKRSSLPVSVI I VI GVSGGV
I AVI AI LI TYLMRQRALADVKKRYFERHGGLLLYDELSTRPGNTFTI YMEEQLEQATNG
FDDGNI LGRGGHATVYMG I VPAGGDGLVVAI KRCKVMDETNKKEFGKEMLI LSQVNHKNI
VKLLGCCLEVDVPMLVYEFVPNGTLYHLI HGGGGGGGGDGGVI SFATRLRI AHESAESLAY
LHSFASPP I LHGDVKSSNI LLEDESMAKVSDFGASI LAPTDEAQMVTMVQGTGCGYLDPEY
MRTCOLTEKSDVYSFGVVLLELLTGKKPLCLDGPPEERSLSARFVAAMGERKVGEMLDEQ
VKREASGESLEE I TRLALECLOMCGADRPAMKEVAERLGGLRKLHQHPWTOHAVELEEAR
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>OsWAK65 9634.t04645, Chromosome 6, protein sequence
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MGLDVTLPYRFSYEDNQFVTVGCNVLVLLSGEEASVDPI LNVCMSTCFGNGSNI RNYC
SGAGCCEMAI PVGLKSYRLEFSGPLLFNNSWSPDNYTWCASHAVLMEAKSFSFERDYATTD
KFFRNKNGTVPVVLNFAAGSEKCKEARMKDTYACVSDHSACVGTADGYVCNCTSGYKGNP
YLPGGCTDI DVCAPGNDGCPDGM I CSNFPGGHNCSCPEGEHKSNSKGVLI CEPDLKRSLP
DLKFKRSYRLPVSAI I AI GVTGGI AI I VMSFLSSYLHRRALADI KRSYFKRHGGLLLY
EELNARKSNAFTI YTEEQLEQATNGFDES NVLGRGGHGTVYKGVVAAAASDDLVAI KRCK
LMDERNKKEFGKEMLI LSQVNHKNI VKLLGCCLEVDVPMLVYEFVPNGTLYQLI HGGSGAG
AI SFASRLRI AHESAESLAYLHSFASPP I LHGDVKSSNI LLEDESI MAKVSDFGASI LAPT
DEAQMVTMVQGTGCGYLDPEYMQTCLTEKSDVYSFGVVLLELLTGKKPLCLDGPDEGRSL
SARFLAAMRENADLI LDEQVKSEASGELLE I TLLALECLOMCGGDRPAMKEVAERLGGL
LRKLHQHPWTOVVVELDEVRCLLSDSPESI SFEVDATSSSGY*

>OsWAK66 9635.t00670, Chromosome 7, protein sequence
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RKL I RTKQKFFEQNVGVI LQQQMHSGGGARGFRI FSMEELKATNI FAAGHVLGRGGHGV
VYKGVLEDKTI VAI KKSMMKEAQTKEFARETSLVAALKLKCPCWSTNSSQI TPSTTTSM
GRTPKADI PLDI RLQI AAESAEALSYMHSASPTLHGDVKMANI LDDKLSAKVSDFGA
SKLPPTDEI EI ATWVQGTCEYLDPEYLMTRQLTDKSDVYSFGVI VLELLTRKKVLYLDGP
EEDRSLVSCFTTAVKVRH*

>OsWAK67 3459.t00011, Chromosome 7, protein sequence
MWWWVLRVAVSGALLLLVVVGSSAAGAGSGSCQTRCGDVIDI LYPFGI GPNC SRGVGFEI
ECNTRNGSGDLVPTLAATSLSI VQNLVSESPPMKVMLPVAYKCYNDPTKTQDFNGEVEL
NKTGVYRI SDELNMLVVLVCNTMVYTKNGNSEGGLYPYLYYTGC I AYCNDRSRAQDGKCA
GAGCCHVDI PGGLTDNTLVFDSWNRK*

>OsWAK68 3459.t00009, Chromosome 7, protein sequence
MKKMNEYFKKNGSI LQKVDNVKI FSKDELKKI TKNNSEVLGOGGFGKVYKGTLDNTI V
AVKTSI EVNEARKDDFTNEVDVPMLVYEFVFAANGNLQDI LHGDGNI PLPLHLRLDI AI ESA
EGLRYMHSSTNRTI RHGDVKPANI LLTDKFI PKI SDI GTSKLLTVDKDFTMFVVGSMGYI
DPVFHKTGHILTQKSDVYSFGVVLLELI SRKPTI YGENCSLI I EFQSYDKENSGRMMFDK
DI EI EEDI LI LEEI GRLAMECLKEKVEERPDMKEVAERLVMLRRSRKGGQGSYSI SPQNF
EEI SI EGTPKSFAGAEI SESSNAAVSAPATPAN*

>OsWAK69 2123.t00006, Chromosome 7, protein sequence
MPLGPMEGPSLLFLSLLRFVPPVEMVERSEVVI VVADKGVDLSGMRWNKLATTVLDRAR
PSKGGHAWLMAAI KKTQWRLRASARRROLI PFDVKPCMC I HEVGPQGGADGAVACSRMD
EEDPI DAAEAAAALQSVLQHDDGTAVFLLQWI KRQGVKRFVRODELSEMERKRDKDDRGL
VVNMI I VFI SSGDGI ETKEAAHACSLDVVSSRVESEMGRRSWEKTI AAATAATQYAGEAM
AQYNNI FCATHMGDWYEKLSQSFRTANEVLAKADI DPNVRCFTRROMKHI TNNYGTVLG
KGGFSVYKGLDNGRSVAVKQYNWRTQEKKEFTKEAI I QSQCShrni VRLLGCCVEADAP
MLVTEFVPNGNLSELLHGKSGQLPVSLERFQI ALDVAEALVYMHCSQNHPI LHGDI KPS
NI LLGDKHVAKLCDFGI SRLLCMDNDEHTGFVI GSKGYMDPVYCTGRLSPKCDVYSFGV
VLELLI TRKKGI DDQSRNLAGMFARSSRDKRHELFDKI AADENI DFI EEI ANLALDCLK
SEI EDRPQMKEVLKQLWSI KRSEI LRQERRLAELRERRI MTLREI KVMLRGSGFERFVTK
AT*

OsWAKs-Supplemental Data 2[1].txt

>OsWAK70 2123.t00010, Chromosome 7, protein sequence
MTSSEKHKYNHI FCVTDMDGDWYDKLSQSFRDTAKEVLAKTDI DPNVRCFPKROMKRI TNN
YSTTLGRGGFSVYKGRLLDDGRSVAVKQYNWRTQKEFTKEGVAKLCDFGI SRLLSMDSDE
YTGFVI GSKGYVDPVFCOTGRLSQKCDVVSFWVVLLELFTRKKGI DDMKVCLAEI FACSS
RKGDEHKLFDMDI VTNENMEFLOGI GRVALECI KFEVEERPEMRLVLEQLLSLKRSDKS
I HEMLVVRKEI EVFLRGCDFGRFI LSKEVDDLI CNLKI VLKECASGKAYI GKSRGTPLM
AI KMSTAVTEKWKDMLGNEI AVQSRI KHMNVAKLI GYCLDHSDDGTVLI YEYGA I SLYDVL
FGDAGKI YRPFTCDLRLKI AI GAAEGI AHLHPLGVVPGDVRI NELLVDHVSSSLEKI AGF
GTLGLPDI ERVLDL*

>OsWAK71 2123.t00013, Chromosome 7, protein sequence
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LDDGHSVAVKQYNWRTQKKEFTKEVI I QSQCASHRI VRLGCGVEADAPMLVTEFVPPNGN
LSELLHGI GOLPVSLETRFOI ALDVAEAVVYMHYSQNHPI LHGDI KPSNI LLGDKYVAK
LCDFGI SRLLCMDNDEYTFVI GSMGYMDPVYRNPKQVSTSEAFSGKSSVLI QRAI GKI C
MGHLKNI RFI VI KMSVEADEI WKEMFLYEMI KQSRI EHCNVAKLFGCCLDHVDAPVLVYK
YGD I GLHDALFGNAWQOQFCPFACEI RLEI AVGAAEGLAHLHSLNVDHVDVRTANVVDV
YSKSKLEMPGI TAFMAKI AGYGTQRLLSLDKAKHEI FLTENI HYKDPHFLKTGLMAKEYD
VYGFVGVVLELFAQNMVQMHVDMVNLKELDGI PARCHHLKEI KKLASWCLASKVTERPAM
DKVVRCLRAVLTNLQNLHDPNCCKSMYKNSAMQSEI TSAKSASS*

>OsWAK72 AK069794, Chromosome 7, protein sequence
MGDWYEQFSQSFKDAKEMLAKTDI DPNVKCFTRKQMKRI SNNYRTI LGEGGFSVYKGR
LNDGRAVAVKYNWTKQKKEFTKEVI I QSQFSHKNI VRLGCGVEADAPMLVTEFVPPNGN
LSNLLHSNSSQFPVSLGTRLOI ALDVAEALVYMHSSQNHPI LHGDVKPSNI LLGDKDVAK
LCDFGI SRLLCMDNDEYTFVI GSRGYVDPVFCOTGRLSLKSVDVVSFGVVLLELI TKKKG
I DDKKVCLAETFARI SRKGNHELFDMDVVTNENMEFLOGI GRVALECI KFEVEERPEMK
EVLERLWLSLKRSDRRI REMQVMRSEI EVLWRRCGFGRFMI SKERMDDMTYYFKTVLKE
CASGKAYI GRFCNAQLLVI KMSI SVLDQWNI VVNELVQSRI KHWNDAKLLGYCLDLWE
GLVLVYEGAMSLYDVLFDHARKVSPFI CGLRLKI AVGAAEGLAHLHSLGI VHGNVSTVN
I LLDLVLVVKVI SRNYPVKI AGYGTSGLPDI DKAQHTGFFMEDSLVTSHGKEHDVYCFGL
VLLTLFTWKKVSLQEAADVFEQLWDI GPPHDVNSEPEKPGOOLKEAI LRCRHLEEVKSLV
SRCLTSEVTKRPSMVEVAKHLKNI NDLHDSTACHELAI YQSRMLSG

>OsWAK73 gi |42407754|dbj |BAD08900.1| putative wall-associated serine/threonine
kinase [Oryza sativa (japonica cultivar-group)]
MAIHPACTSRPMKI HDFCKRTLADFDRRQTAI LPPSHLACGI VVQQLQAGAAAAAAGGI SI EYPCFVEP
GCYHPGFNLTCHNSYPPRLFGLDGTVOVLEI AI POATVRI NSGRMVFNSTGNHAVNRSLLDOVGRPYFV
AASNRI ALLSCNARVDVRAAGRNNTSTKLLSCTAI CPTDDGGGATTI LDI GPEGPCSGI GCCETSML
LAGSSTAAYSI QVQNLQEQAVVLRNRTDDLVLVDERFNITLDMSTFGYSSPEELPARLDWYI NSSSACPLP
ASAPECRSAHSYCDSTYDNKAYI CRCSEGYEGNPYPVDPGCHDTDECSSGYCSYGECRNTPGSFI CNCPRG
YEGNPSPKDGCKDI DECARHDI YPCYGKCI NLPGDYI CLCNNGTYGDAKKKEGCI PMKQARDLGLRI GLG
VGGGTI LLLLALSAPFI SSKMKLRKMKRMKETFRRQNHGLLLGLRVSONADI GORMI MTLQELEKATDNF
DKSREI GGGHGVVYKGI LDLOVVAI KKSRI VVKREI DDFI NEVAI LSQVNHNRNVVLLGCCLETEVPLL
VYEFI SNGSLDHHLHVDGPI SLPWDDRI RI ALEVARALTYLHSATTI PI FHRDI KACNI LLDENLI SKVS
DFGASRYI PI EQTEVTTAVQGTI GHLDPMYYYTGHLTDKSDVVSFGVLLI ELLTRKRPYMRTDHGESLVL
YFASLHRQGVVEI I DPOVMTEGDGDI QEVASLAATCTKLNQDRPTMRDVENTLENLRVKKKLASHSV
KSSRCNASEI TKHYMLVTGQGSKEMSRQYSMEEEMLLSERYPR

>OsWAK74 9636.t03854, Chromosome 8, protein sequence
MRVVFSLVLA VLLLQLLLGVATAAAANCSTHCGNI GI SYPFGVEPGCYHEGFNLTCDRS
HKPPKFLFLGDGSVEVLEI SI PSGTVRI NSSSI VPVSTSSAVGTGSVNKTGKYHTWGGLRK
GGPFFI SPYKKNFLVLSVSNVQVLLGGDNSTVNACATYCPPAPKKGQPFQFPMRNECSG
I GCCSAAI PKGYTSYSI QI QPANEI SEFDAESSVYI AEEGSYNATRLI FETVSALPALLD
WAI SNSTCGTKPSAAPACRSSNSYQNYTSYVYNGYQCRCNAGYQGNPYI PNGCOGLS
I GLVVSQVTLVLLLALCAPLATRKI KLRKMKKTKERFFKQNHGLLLQQLI SOKVDI GERM
I I TLDLEKATNDFDKSREVEGGGGHGI VYKGI LDLHVVAI KKSKI VVQREI DQFI NEVAV
LSQI NHRNVVLLGCCLETEVPLLVEFVSNGLTYDHLHVEGPMSPVWDDRLRI ALEVAR
AVAYLHSASSMPI FHRDI KSSNI LLDDSLTA KVSDFGASRYI PI DOTGVTTAVQGTFGYL
DPMYYTGRLTDRSDVVSFGVLLVELLTRKKPFVHTSSNGDALVLFVSLHTENNLVDI L
DPOVMEEGDGEVQEAALATCI KLGDDRPTMREVEALENI RVKKKHATLGTTSNRCD
GDQI VCDYLSTRGI TDESTROYTMEEEI LSSGTYPR*

OsWAKs-Supplemental Data 2[1].txt

>OsWAK75 9636.t03855, Chromosome 8, protein sequence
MHVFATLHLLQFLAAI PLI LSYNI ALPGCTDTCGNTTI PYPFGI GDRCFREGFKLVC
DPAYDPPKLFMNGPGYEVHKI KLARRVLHLDTGI TQMLGGDSYNQKWI LDLDDKLFVSA
DMNVFI TLGCGFHFFI GSSPAAAGDNATSSSNVCVSNCRPGYPI LATDGTCTYGI GCCNASV
VEDHNSYTI KLLSLQSSPRAVPFNASMVVVKGEWRRADNAMLQOEVLRSRLGAI AGAPD
AARNVGVRTVVNWMLGNSSCVEAKKLSDFGCLSDNNI NECMLPNPPLCFGKCI NTVGSYE
CI CPGGTSNGNAHI QNGCVSSKLFSGLI I GI GLGGSLI I VVLI LTGI VVRRKFKSRRRAK
LKEFFFKQNRGLLLHQLVDKDI AERMI FSLEEEKATNNFDESRKLGGGGGHGTVYKGI LS
DORVVAI KKSRYAI KREI DGF I NEVAI LSQVNHNRNVVKLFGCCLETEVPLLVEYFI PNGT
LHEYLVNSAQSVPWKERLRI ALEI ARSLAYLHSAASVSI I HRDI KTTNI LLDDRFI AKV
SDFGASRGI PI DQNI VTTTI QGTFGYLDPEYYRKSRLTEKSDVYSFGVI LAELI TRRRPT
SYI SPEGFNLTEQFI LLVSEDRLLEI VDSQI TKEQGEAAEVAEI AVMLCLNLKGEDRPT
MROVEVKLEGLQAVNTI RGRRAVQLNSPLTEESDSNI VAVGDAGYHNSSRRLSMEEEFW
SSMSFPR*

>OsWAK76 AK067363, Chromosome 8, protein sequence
MRDKFFMONHGLLLQQLI SRNTDFAERMI I TLQELEI ATNNFDKSREVTGGHGVVYKGI
I DLHVVAI KKS I VVQREI DEF I NEVAI LSQVNHNRNVVKLFGCCLETEVPLLVEYFI SNG
TLYHHLHVEGSI SLPWDDRRI ALEVARALSYLHSSASMPI FYRDI KSSNI LLDDNLTAK
VSDFRASRYI SI NETGI TTAVQGTI GYLDPMYYTGRLLTSKSDVFSFGVLLMELLTRKKP
I GGTFDNGDGLVSHVI SLLSKGNLYNI I DSQVKEEEDGEVLEVATLATTCTKFKGEERPT
MREVEMALESI VSKKSSFCNKNSQSSSRSDENRI LALYMSI EGVTKDKTI TI TESSTEGE
I PLSSRFSR

>OsWAK77 3081.t00013, Chromosome 8, protein sequence
MEKRRMLRAKQRF FEQNGGLLLQQQLGSLAASGVAFKI FSEEEVSKATDGF AEARVLGRG
GHGVVYRGLADGSTVAVKRSRVVEEKQLREFSREMLI LSQI NHRNVVKLFGCCLEVOVP
MLVYEVVPNGSLHRYI HGGGAGAGEGLSPADRLRVAASADALAYMHSSASPP I LHGDVK
SANI LLDAGLTAKVSDFGASRLAPAADAEVATLVQGTCTGYLDPEYLLTCQLTSKSDVYS
FAVVLELLTGRKAFCPPPDSAAGSQDDDDDDDRSLAFFFLTAHKGGRHREI MDGWVRE
EVGGEVLDNAAELVMQCLSMAGEERPTMKEVADRLAGMRSRASDS*

>OsWAK78 3081.t00017, Chromosome 8, protein sequence
MDRFAMPCQVSVLDVHRHSPI GVAMLLADRSVMAI QOPRALNYEGSRNHTQREREGATR
MEVFLVWRALVWLALI TPAAALAQEEAAGCRRRCGNVTVPYPFGI GSERCYRGGVGRFR
LDCDDARRPRLTVAGYGHVTSI SLAAA ETVLLNASRACYGGGDYGRGRRGREEQPM
LNGSAYFLSSMKSFVAI GCPGLAYFVDDGGDYVTGCI ATSRSGLASYPRLRSFGRROG
GAFLANATACAYAFMVDAWFWYAGSNFNRTGDFAVPVVLDWAI RPDAGSGSGSGSAAA
SRTPLPSYACRSAHSVCI DSSNGPGYI CNCTAGYHGPNYVVDGCTDI NECEHKDEYPCY
VCTNTAGSYACSCP KSGSSGNASVEGGCRRDDKFTLALKTVTGNI TFYTSRNLSLEKAVT
DKPAA*

>OsWAK79 9637.t01754, Chromosome 9, protein sequence
MAGGMSDGAATTAGGVGDGSDAGGNSNCVDDI KGGYRCKCSHG YEGNPYI KDGCKDI
NECLDNATYPCMG I CKNTI GSFDCSCYPGSYMKNGFCLPNQKSTFFPARHVI GASVGFVI L
VI AI TFACYVQORRKH I KNNYFOQHGLI LFEEMKSOQHAFKI FSEELQOATKKFN
EQEI LGQGGNGI VYKGLLKSNEVAVKKCMTI DEQKKKEFGPMLVYEFI PNGTLFHLI HE
NHGNI SLI TRLRI AHESAEALAYLHSCASPP I LHGDVKSNI LLDNNFSKVSDFGASI
LAPTDEMQFVTLVQGTCTGYLDPEYMQTCQLTDKSDENKLEDMLNDQI KNNENMEFLEEMA
ELARKCLDMSSI NRPSMKEI GDELGRLRKVMEHQCARQNPEEMESFLGDSSYVI NSTVES
TKSFSI EKNAMKRLKSGR*

>OsWAK80 9637.t02571, Chromosome 9, protein sequence
MASRPPLLLQYSSLLLLCLAVSAPPAAGNVPAPVAAVSKPGCPTKCGAVDI PFPFGI GE
HCGLEAPYTNYPFKFDCKPVDGTSKPF FRGMEVTKI SMEDGKAWMKMNI SKNCYNQSTGT
REDNTNTTSVFSRSPFWI SDRDNKI I VI GCETFSYMQI NNVSKTTLTCELEVLTGCVPS
CRNDPKDGI CSGEAGCKLDFPNGTWYYSTYFSKRNNNSSPCSF I TVMETTTTFNFKNYF
NSTTFYDYNGLAKVSLDWI I TMDSCDRVKRNTTSYACI SGKSRVDDPKGGYRCKCSDG
YEGNPYVKDGCKDI NECLDNATYPCPG I CKNTLGNFTCSCYPGNYMMNGI CI PNQKSGFP
KNLVI GASVGAVLLVI I VTYACFI REKRKLOYVKRRYFRQHGGMLLFEEI KSQGI SFKI
FSEELQOATNKFDKQOVLGQGGNATVYKGLLKGNTI AVKRCI TI DMKQKKEFGKEMLI
LSQTNHRNVVKLFGCCLEVEVPMLVYEFI PNGTLFSLI HGHNHNI SLDTRLRI AHESAE

OsWAKs-Supplemental Data 2[1].txt

ALAYLHWSWASPP I LHGDVKSSNI LLDKDYVAKVSDFGASI LAPTDESQFVTLVQGTGCGYL
DPEYMQTCQLTDKSDVYSFGVVI LELLTRKKAFLNLESPEDERSLAMRFLSAMKEKRLSDI
LDDQI MTGDNLEFLEEI AELAKQCLEMSGENRPLMKEVADKLDRLRKVMQHPWAOQNPEE
MESLLGDSSYEI NNSTVENTGNFSI NSELQCLESGR*

>OsWAK81 AK060211, Chromosome 9, protein sequence
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EFGKEMVI LSQVNHKNI VKLLGCCLEVEVPI LVYEFI ANGLTFHLI HDGHRHI SI STRL
QI AHQSAEALAYLHWSWASPP I LHGDVKSSNI LLDGDF TAKVSDFGASI LSPTDDAQFVTF
VQGTGRGYLDPEYMQTWKLTDKSDVYSFGVVVLELLTRKKPLNFDGLEDEKLSVRFLSAV
KENKLEEI LDDQI KSEENMEI LEEI AELARRCLEMCGENRPSMKEVAEKLDLRLKVLHHP
WALHNLEEAESLLGESSI VSSEVSTGNFSI EKKS LI GLESGR

>OsWAK82 AK111541, Chromosome 9, protein sequence
MLVYEFI PNGTLSNLI HGNHGQHI SLVTRLRI AHESAEALAYLHSYASPP I I HGDVKSSN
I LLDVNFMAKVSDFGASI LAPLDKSQLVTLVQGTWGYLDPEYMQTCELTDKSDVYSFGVV
LLELLTRKNVFNLDAPGNEKLSMRFLSAMKENKLENI LDDQI SNEENMEFLEEVDLAK
QCLAMCGEDRPSMKKVAEKLDRLVKVMQHPWTOQNPEELESLLGESSYI I SSGASSTGNF
SI EKKVVKDLASGR

>OsWAK83 9637.t02576, Chromosome 9, protein sequence
MAKLLLSALLI CI SAI WVVAADVPAGRRGCQTRCGNLDI PFPFGI GDQCAI HGGFGLDC
KNDSGTYRTFI GPFEVTKI SVPDAKAWMKMGI SWQCYDPVTKOMNDSMVGONFTNTPYRF
SYEDNKI FVI GCNTMAYMRGVSYVI GCLSTCSDEPTNGSCSGAGCCSVDVPPDLGYVEAY
FNKDYNTSQI WNYSRCGYLVVMEKAAFRYSTTYI PSI NFWNDYNGTVPVAVMDWVI RRET
EEAKRDMSSYACVSDNSDCHNSTNGHGYLCKCKSGFDGNPYI KDGCKDI NECLDNTTYP
AGLCQNTMGGYDCSCHQGHKVEDVCPDQKNQKSSWEMPVVGASVGFVI LVI I ATCSYL
I HERRKLOHI KQKYFKLHGGLLLFOEMNSNERKSFTI FSEAELQHATNKF DKNQI LGHGG
HGTVYKGLLDKDNTEI AVKKCMTMDEQHKKEFGKEMLI LSQI NHI NI VKLLGCCLEVOVPM
LVYEFI PNGTLCNLI HGNHGQNI SPVTRLRI AHESAEALAYLHSYASPP I I HGDVKSSNI
LLDVNFMAKVSDFGASI LAP I NKSQVLVTLVQGTWGYLDPEYMQTSLDLI ELLTRKNVFN
DAPENEKLSMRFLSAMKENKLENI LDDQI SNNENMEFLEEVDLAKOCLAMCGEDRPSM
KEVAEKLDRLI KVMQHPWTOQNPEELESLLGESSYI I SSGALSTRNFSI EKKVVKDLASG
R*

>OsWAK84 AK119296, Chromosome 9, protein sequence
MKLOYTRAVLASLFCVCLSAVWVAATADI PAGORPGCPERCGDVEI PFPFGI GKHCAMQ
TKYPFDLDCLDVNGTKKPFYNNNEVTKI SVOEGKAWMKLGI SSORYDHVTGHI LYDSNAT
AEFGDSPFWLSTENKI I VI GCOTMAYMESNAYVI GCFSTCNGSTPVNGSCSGGGCCQMDV
PGHI YSYDGYFDEYNDSKI WRSSPCS YMAVMEDKAFQFSTTYLNSTVFI DTYKEGVPV
LDWVI TLDTCEKAKSKTTSYACVSTNSI CNDDPSGGYRCNCSHGYEGNPYI KDGCEDE NE
CLDNVTPCPGI CNNTMGSFTCSCHQGNMENGTCI PNRKSGFLALPI VGFWPSSVI TRT
NDNANHLCTPI

>OsWAK85 AK071360, Chromosome 9, protein sequence
MEVAVKRCMTI NEHQKKEFGKEMLI LSQI NHKNI VKLLGCCLEVEVPMLVYEFI PNGTLF
DLI HGNHGQOI SLATRLOI AHESAEALTYLHSCASPP I LHGDI KSSNI LLDRNLI AKVSD
FGASI LAPTDESQFVTLVQGTGCGYLDPEYMQLCQLTDKSDVYSFGVVLVELLTCQKAFNL
NAPEHEKLSMRFLNAMKNNKLADI LDDQI KSENMPFLEEI AELAAQCLEMSGVNRPSM
KHI ADNLDRLRKVMQHPWAEQNSEELESLLGESSMVSSRYTSTGNFSI ERKGMELDSGR

>OsWAK86 9637.t01417, Chromosome 9, protein sequence
MPGNYVVVVVLSLALVLLLPLFAAVDDGMRS GGKCTNSCGNVGF EYPFGVEDG CYRG
GGFNLTCHNTYQSPRLFLGDGVSQVLDI SVPHGWALI NNTGMVFNSTETRVVLRNRTWDQL
VGGPYLSGNSKI ALVGCNARVDLRRVVKKHGGRRGGDDDTGSNLI SSCTAVCPLDLEDM
TPVFAI GSGSSAACSGVGCQADI NLDI PSSYTI QI HNLQELGCSI SPTDLVFI SKEEF
SYTNDMAFGNNI POALPALLDWYI SSDPSECTYESAPDCLSANSFCHAYDLGKCHCSDG
YQGNPYI RGGCHDI DECKSPODYSCYGNCNNTPGSHI CDCPRGYERNASTPNGCKDI DEC
GHRETYQCYGECI NFPGGFDCLCYHGTGDGPRKEGGCLPVKHHLSARDLGLFI GLGVGSG
TI LLLI AVGAPFLSRKMKDRMRI AVEVARALTYLHSAATVPLI AKVSDFGASRYVPI NQT
EVTNAVQGTI GYLDPEYYTGHLMKSDVFSFGVLVI ELLTRKRPTYRTDQGDLSVLHFA
SLLRQQLVGI LDPQVLTEGGGEVMEVALLAGMCTRMTGQDRPTMREVEMGLENLRVSKK
LASHDTASSSLVSQMAEHRMI ATGDMEESSI QYSMEK*

OsWAKs-Supplemental Data 2[1].txt

>OsWAK87 AK099582, Chromosome 9, protein sequence
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AI GGTI GI GI PSV FVI GMAMTNMI KARRAKKLRAVFFKQNRGLLLLLQVLDKVI AERMVFT
LEELEKATNRFDEMRKLGSGGHGTVYKGTLPDRRVVAI KKSNI TVRKEI DDFI NEVVI LS
QI NHRNVVRLFGCCLETVPLLVYEFI SNGT LSDHLHVEGPTLLSWKNRLRI ALEAASAL
AYLHSSASVSI I HRDVKSANI LLDGRLTAKVSDFGASRCI PVDQGGVTTVI QGTFGYLDP
EYYQTSRLTDKSDVYSFGVI LVEMLTRKKPTVFESSDNVSLI ALFNLLMVQDNI YEI LDP
QVI SEGMENTVKEVAALASACLRLKGEERPTMROVEI RLERLLGGDI LOGLSAELHCLPPO
LSNTDTTSKLYNMERDFLLSSSFPR

>OsWAK88 4967.t00009, Chromosome 9, protein sequence
MTMLPATAAALLVVLVQLMWSAEQAVVAVGSGPPAGCPDRCGNVSVFPFPGI RDGCSLEGF
GLTCNTTNSPPRLMI GNSTLQVVNI SLANSTLRAVDI DGAVNI TYGOI DNGT VWGVVAV
PYI VNETLNQLLVGTGCVNI QVTLVSGGNNVI SGCSSFCSI NDMYTTGGVFRSPGNKCAGI GC
CQQQVSI GRPSYRVELTNLDRDREFSGRVPEAVRI AELGWFDGLAADLLNVSLADTSRRN
PVPVVLWDVAVASTGLDVTLNAGLNKQAANNWSCPTAASGRKSACI SSNSFCRNI ADNYRS
GYVCRCDKGYDGNPYVAGGCQDI NECERAKENGCFGECTNTPGAFLCRCPHGARGNATI P
NGCTKSNLGLTI GVGI GSGAGLFI LALGAVFLTRRI KQRRARTLRQKFFKQNRGHLLQOL
VSQKADI AERMI I PLAELEKATNNFDESRELGGGGHGTVYKGI LSNLHVVAI KKSNTVVO
REI DEFI NETEVPLLVYEFI SNGTLYHHLHVEGPTSLPWEDRLRI ATETARSLTYLHSAV
SFPI I HRDI KSHNI LLDGSLTAKVSDFGASRCI PTEQNGVTTAI QGTLGYLDPI YYYTGR
LTDKSDI YSFGVLMELLTRKKPYSYRSAEDESVAHFSTLHAQGNLGD I LDAQVI EEGT
KEVNDVATLAVACAKLKAERPTMROVEMTLESI RQEVLSVSTKKSKELVSWNHAI SE
GSI FYQAVDTSI VI VSDVGSDDLCDGAVI GRNRFPGTQCRQ*

>OsWAK89a gi |52077053|dbj |BAD46085.1| putative wall-associated kinase 4 [Oryza
sativa (japonica cultivar-group)]
MATSPSALHMQAVALGAAVFLSCLASAAQPPAPGCLDKCGDI NI TYPFGVGGAHCFRDKSFQLECNVVV
NNSHPRLI MPAYNQQLLSLSPDGEALAALDI QHEAYYYNCNASHPTASASSQPNNMTFATLNKSTVYRFP
VSTYRFNATTNSYVVPVALDWAI RDVHNCSAAKLNATNYACRSANSKCSDDTGDAGYRCRCSSGGYEGNPY
LHAGCOGLTTGSI I GI GVGSGAGLLVMALGAAFLTRNI KNKRARI LROKFFKQNRGHLLLEQLVSONADI A
ERMI I PLAELEKATNNFDESRELGGGGHGTVYKGI LSDLHVVAI KKSQVAVQREI DEFI NEVAI LSQI NH
RNVVKLFGCCLETEVPLLVYEFI SNGTLYDHLHVEGQPSLPWEYRLRI ATETARALAYLHSAVSFPI I HR
DI KSHNI LLDVSLTTKVSDFGASRCI PAEQNGVTTAI QGTLGYLDPMYYTGRLTEKSDVFSFGVLI EL
LTRKKPYSYRSPQDDSLVAHFTALLTHDNLSDI LDPQVKEEGGKEVNEVAVLAVACVCLKADERPTMROV
EMTLETVRSSLLRQELVPSVAAEESKEKHVSWSYVPVSEGTSI ESSROYSNDEEYLLSSRYPR

>OsWAK89b gi |52077054|dbj |BAD46086.1| putative wall-associated kinase 4 [Oryza
sativa (japonica cultivar-group)]
MAVALAI LLVGLAPATPLSSAQPPGCPSTCGNI SI PYPFGI GAGCARDEGFQLECNHTSSPPLLI VSNS
TGGRHRQQLLSLADGEARTFLTAKRRCYNSSGTDMVSENDQATEMSLSGTPYRFSRSRNLVALGCP
NLAYLVDGRGSI SSCTSI CRTPEVAAGSTVGFTGEGCCQSSI PYSVDVYKPD I GFKQGOAGDSVLLN
STAASSI LOSSTVCRYMYLAEDRWI DAAYRDGAVDFNRTDDFAVHVLDWAVRNAGNCSAARRNLAANY
ACRSADSVCDTGDGDGYRCNCSKGYEGNPYHDGGCKDI NECERAKEYPCFGVCI NTLGSYQCSCSPGTS
GNATI QTGCVKTNQALTTGSI I GI GVGSGAGI LVMALGATFLTHRI KNRRARMLRQKFFKQNRGHLLLEQL
VSQKADI AERMI I PLAELEKATNNFDESRLKGGGGHGTVYKGI LSDLHVVAI KKSQVAVQREI DEFI NEV
AI LSQI NHRNVVRLFGCCLETEVPLLVYEFI SNGTLYDHLHVEGPTSLPWYRLRI TTETARALAYLHSA
VSFPI I HRDI KSHNI LLDGSLTTKVSDFGASRCI PAEQNGVTTAI QGTLGYLDPMYYTGRLTEKSDVFS
FGVLI ELLTRKKPYSYRSPEDDSLVAHFTALLTHGNLGD I LDPQMNEEGGKEVKEVAVLAVACVCLKAD
ERPTMROVEMTLETI RSSLQOEVVPSVAAEESKEKHVSWSYVPVCEGTSI ESSROYSYEEENLLSSRYPR

>OsWAK90 4967.t00013, Chromosome 9, protein sequence
MVMLFSPATAALLVVLVLLLQQLWSAEQAVVAVGSGPPAGCPDRCGNVSVFPFPGI RTG
CSLEGFGLTCNTTNSPPRLMI GNSTLQVVSI SLANSTLRAVDI AGAVNI TYDVSSTTGN
GTWGGVAATSTNPYVSGELNQLLVACNI QVTLVSGGNNVI TGCSSFCSI NDKYTTGGVF
RSPGNKCAGI SCCQTPSI GRPSYSVKVTI MDNEYRGEVPEAI RI AELGWFDGLAANLLK
KPAANDTSLRTPVPVVLWAVASTGLDVTLDAGLNQAANNWSCPTPGEARRSACI SNNS
YCHNVTDNYRSGYVCRCDGDDGNYVAGGCQDI NECERPKEHGCFGECTNTPGAFLCRC
PHGARGNYSI PNGCTKSNLGLTI GVGI GSGAGLFI LALGAVFLTRKI KQRRARTLRQKFF
KQNRGHLLQOLVSQKADI AERMI I PLAELEKATNNFDNSRELGGGGHGTVYKGI LSDLHV
VAI KKSNTVQREI DEFI NEVAI LSQI NHRNVVRLFGCCLETEVPLLVYEFI SNGTLYHH
LHVEGPTSLPWEDRLRI ATETARSLAYLHSAVSFPI I HRDI KSHNI LLDGSLTTKVSDFG

OsWAKs-Supplemental Data 2[1].txt

ASRCI PAEQNGVTTAI QGTLGYLDPMYYTGRLEKSDI YSFGVVLMEELLTRKKPHSYRS
AEDESLVAHFHTLHAHGNLGD I FDAQVMEEGKKEVNEAVLAVACVKLKAERPTMRQVE
MTLESI RSSLQOQEVLSVSTKSKELHVSWSHAI SEGTSLDSTROYSLLEENLLSSRYP
R*

>OsWAK91 AK107166, Chromosome 9, protein sequence
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AGAGPYVSEQRNRLVVTGCVQATLAGENTNI I GGCSSFVSEMFVTSVAATVPVPPGA
GADNATDGGFI CSGTSCCETPI AI GRPSYLVQFLSLDQNELTGKLPVAVRI AERGWFEF
VAGELLNTSSDSAAALRTPVPVLEWVVSPTLEAVLQGVGTQFADDRNWSCPADAARSAC
RSSNSFCSNVTGNRYRGYVCRRCRGYGGNPPYVAGGCLDI DECKLAGRCYGECTNTPGDYQ
CRCPRGARGDPRI PNGCVKTNLGLSVGI GVGSGAGLLVMGLGAAFLKRKVKKQARMLRQ
KFFKQNRGHLLOQLVSOQADI AERMI I PLSELEKATNNFDRSRELGGGGHGTVYKGI LSD
LHVVAI KKSKEAVQREI DEFI NEVAI LSQI NHRNVVKLFGCCLETEVPLLI YEFI SNGTL
YHHLHVEGPMPLPWEDRLRI ATETARALAYLHSAVSFPI I HRDI KSHNI LLDGSLTTKVS
NFGASRCI PAEQTGI TTVVQGTGLGYLDPMYYTGRLEKSDVFSFGVLI ELLTRKKPYS
YRSPDDESLVTHFTALLTQGNLGD I LDPOVKEEGGEEVKEI AVLAVACAKLKEERPTMR

>OsWAK92 AK102702, Chromosome 9, protein sequence
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GRGAWRGLDGGPFALSEDRNELVVVWGCDDVALLTDGGGSGNSSNVTI SGCASFVPGTD
AGGOAI AAPAGSTMSLTEDRRCTGVGCCQMPI SVGRDSYQVRLRRLNPSPPQPPPPQAG
DPTVLI AEOGWVAEASRSTRGYPLVTFDEAVPVLGMMI ASTRVGGADGEVVDSTCP
ADAARSACKSSHSSCRNVSSSARAGYVCDGAGFHGNPYLATGCQDI NECERAEEHGCFCG
ECI NTAGSFLCRCPAGMOGNYTQRNGCFRPPPLPARSSTGLSI GVGVSSAASLI LI VI MAI
FI I RKQKRRRAKKI RQKYFKQNRGQLLOQLVAQRADI AERMI I PLGELKATNNFDRARE
LGGGGHGTVYKGI LSDLHVVAI KKSKI AVQREI DEFI NEVAI LSQI NHRNVVKLFGCCLE
TEVPLLYEFVSNGLTLYSHLHVSIGRSLPWSDRLRI ATETAKAI AYLHSSVSI PI I HRDI
KSTNI LLDLTLTKVSDFGASRCI PVDOTGVTTKVOGTGLGYMDPAYYYTQRLTEKSDVYS
FGVI LVELLTRKKPFSLHTPEGEGLVAHFVTSFTEGNLVGVLDLQI MEEADMKVVEVVAT
LAVTCVNLRGEDRPTMRQVEMALEGI QASRENVSGNLSAEKLGESNNVARDFMPSQEGRS
MTEGTRQYSLEEEFLSSRYPR

>OsWAK93 gi |19551099|gb|AAL91604.1|AC099400_10, Chromosome 10
MI FSKDELKKI TKNNSEVLGQGGFGKVKYKGLGDNTI VAVKTSI EVNEARKDDFTNEVDVPMPLVYEFAAN
GNLODI LHGDGNI PLPLHLRLDI AI ESAEGLRYMHSSNRTI RHGDVKPANI LLTDKFI PKI SDFGTSKL
LTVDKDFTMFVVGSMGYI DPVFKHTGHLTQKSDVYSFGVVLLELI SRKPTI YGENCSLI I EFQKSYDKEN
SGRMMFDKDI EI EEDI LI LEEI GRLAMECLKEKVEERPDMKEEERKMKKQTTNNVI VFPSRKKKQKRKED
GRRFSGDQTAARVRLKFALNDRQQRNTYPLLVPE

>OsWAK94 gi |19551100|gb|AAL91605.1|AC099400_11, Chromosome 10
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TLAATSLSI VQNLVSESPMAKVMLPVAYKCYDDPTKTQDFNGEVELNKTGVYRI SDELNMLVVLGCNTM
VYTKNGNSEGLYPYLYYTGCI AYCNDRSRQAQDGKAGAGCCHVDI PGGLTDNTLVFDSWNRTK

>OsWAK95 3135.t00009, Chromosome 10, protein sequence
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VYRI SDERNKFVVLGCNTVAWNKHGDSEGKGLYTSLYYAGCVTYCSDLSAKNGKAGVG
CCHVDI PPELTDNVVTFQOWPRGEQVDFSPCDYAFVLDKEEYQFORSDLNMDRKORMPVW
LDWAI RDVASCPAPEVETSKKNMPAGYACVSVNSTCVNSTNGLGYCNCSSGYEGNPYDD
DPNKGCKDI DECAHPNKYPCHGVCNTPGDYECRCHTGYQPSGDGPKKQECSSKFFPPAR
LAVGI TLGLSFLI VVLFITLMLLQKRKMNKYFKKNGGSVLQKVDNI MI FSKDEVKKI LKN
NSDI I GEGGFGKVKYKGRKDDTLVAVKTSI EVNEARKEDFTNEVI I QSQMMHNNI I KLLG
CCLEVDVPMPLVYEFAANGSLKDI LHGDANRLVPLSLDLRLDI AVQSAEGLRYMHSSI SHT
I RHGDI KPANI LLTDKFI AKI SDFGTSKLLTADKEFTMVVAGSMGYI DPI FYMTGHLTQK
SDVYSFGVVLLELI SRKPTI YDKNYSLVI EFQKAYDRENSGRALFDKEI AI EEDVLI LEE
I GRLAMDCLKEI EERPDMKEVAARLMLLRRSRNLGOENYNRFSKSRLLLEVYHEGPSAGL
AETKNLGNRLRPEASGEGREENHMGESHVRVAVARHYTGLTSQGPARRASRAETVROKPR
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>OsWAK96 3135.t00011, Chromosome 10, protein sequence
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STGVLVPTLAAARRHAI QVQKLVFPRPEVKVMLPVAYTCYNSGGNVTRQFDGDVELNNE
GVYRI SDERNMFVVI GCNTVAWNQHGDsGGKGLYRNLYYAGCVTYCSDSRsAMDGKcAGV
GCCHVDI PPELTDNVVYFEQWPRGEQVDFSPCDYAFLVdKEEYRFRRSDLKMElnRRMPV
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NPYDNDGCGKNCVCSCI *

>OsWAK97 3135.t00012, Chromosome 10, protein sequence
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SLYAPMYADI NECDPSNKDKYPCYGVCKNI VGDYECsCHTGYQPSGGPKKQECNPkFPV
AAQLALGVSLGFSFLVvvvLFTLMLLQRRKMNEYfKKNGGSI LQNVdNI VI FSKDEMKKI
LKNNSEVI GGGfGKvYKGRlKDNtlVAvtTSI EVTEAQKEDFTNEVI I QSRMMHNNI I K
LLGCCLEMDVPMLVYEFaANGSLKDI LHSdASHLVPLTLdLRLDI AI ESAEGLRYMHSSI
SHTI RHGDVKPANI LLTDKfVAKI SDFGTskLLTVdKEFTmVvAGSMGYI DPVfYMTGHL
TQKSDVfSFGVlLELI SRROTI YGKNRSLI I EFOEAYDOANSGRLLFDKDI AI EEDVLI
LEEI GRlAMECLNEKI DERPDmKEVVARLMLLRsRKLKQENYNI SRQOFFEENSI DELP
KSFDDNSSSSSAELLSNLATKNSLTyrSTTGRD*

>OsWAK98 AK105108, Chromosome 10, protein sequence
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I GCADALSYMHSMLsNGSLI CHGDI KPANI LLDSNLTSKLSDFGVSRLLSGGVTOYTVH
I KGSVSYMDPI YFHEGCLTPRSdVYSFGMVLELI ARKRVrKGD I NLI GGGEI FDAEI AN
RSNMKI LKEMRKLAI ECLTLDI HKRPQMNvVAKRLRtlKkELKDMHGrySEHI LASHRSW
RKNDNOGPSYNSRMOLKKSLSI fKRnLSNSSKI LLGLGNMRI FTOEELNEI TONYsCLLS
GGTSGKvYKGTLEDNTVAVRI FSEALEGFEEAFI NGGMI LSQI VHKNI I RLLGYCLNAD
CPAFVYEAARGTLSDI LDGREDfPLHLRVKI AVETAEALEYLHSSAAGMI RHGYVAPSK
TLVDDsFTPKLTGfSWAQRlNNDSDAI HDHDKYCVSLKlKTDVYQFGVLVLTlI SRKNFA
FYADHEHLVSQFLAAYKADNSGRAFFDDDI TTRSEDVALLEEI GKLLLKCI CLEI DQRPT
MKQVAQHLRI I RRCWKNnCTADGASLVTN*

>OsWAK99 3164.t00008, Chromosome 10, protein sequence
MAAMI LI AVAVVVQOALI LAARAI GDGQPI TLAGCPDRCGDVSI PYPFGMAPGCFLDGFE
VTCNRTFDPPRAFLawGSPSPFQGNADGYyLSDNDSVTLKDYWSLPVELVDVTLsRGEA
RAYGAVTTDCAATNGTYHEfRRQLTVLSGSPFVfSASRNVLtGVGWDMEaQLTtSLASTG
YRLNCASRLMFPEtAENGsCSGMGCCEANvTAGLRI ASVTFaHKKNvFWSSNpCSyGMI V
QKNWYNfTKEDLYGNQTLsRKHPRGVfVLDFAI ANVSCPAQGOPLDNYACrSSNSfCV
NATSSPGYI CKCSdHYDGNPYI ADGCODI DECQLRI QPELrDVYPCSSDGI CKNRPGGY
DCPCKPGMKGDGKAGTCTEKfPLVAKVI VGvVAGLLVlATLVfVfLLRKEKQKMREFFI R
NGGPI LENAksi KI FRKEELKRI TKTYSHVlGNGAFGMvYKGFLEQHPVAVKKSmkVdK
TQKQDFANEVI I QSQVI HKNI VRLI GCCLEVDVPI LVYEFVSNGSLQDI LHGENKVPLTL
DKRLAI AAESAEGlAYMHsKTSTSI QHGdVKPANI LLDDQfNPKI SDFGI SRLI ARDVTE
HTNDVI GDNNYMDPVYRETGLLTnKSDVYSfGLVLFEl I TGKKAyVYGESSfVRNYLDTY
LTEI RANKMLfGKEAEeEKDI EHLHNLVVI SKECLDNNVDQRPEMTDI AERLOGI I RSRKF
LN*

>OsWAK100 3830.t00015, Chromosome 10, protein sequence
MEDKLGLPENKLrDFI QGADKAKWI AKNNHNI KYFTEDEI KRtTSNYSTSLGNGSfGKVY
NGI I DDNTAVAVKRYsRI DSEEEfAKEVI VHSQVNHKNvVRLI GCCTEKNAPI MVfEYVS
NGTLcENPHGSNVpVYLDKRLSI AI QCAEALEI VLHI LPT*

>OsWAK101 AK111067, Chromosome 10, protein sequence
MSSVRHSCSNFPI TTKTFMllSLQI LGSSNSVTPfPSARA

>OsWAK102 3178.t00025, Chromosome 10, protein sequence
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HAVVVVKYI HMDSEEEfAKEVI VHSQI NHKNI VRLI GYCTEKNNLMMVMEYMSNGDLdYH
LHVKNSLDSLDI RLNI AI DCADALGYMHsMCSPVLHGdVKPSNI LLDDSFNAKI SDFGI S
RLLSTDKtHTENMI TCYMDPLYyQEGRLTSKSDVYSfGI VLMEli TKKRATCLtQALAEg
QEMTELLDPMI ANESNMKVLEI EKLvQEClaEDI DRRPDI CDVAAYLRMLRKMSQQAPO
ENFGWHLFAETQNDfKKQSHQGTNI I SSI KMFfPRMMGI LNVNMAKsENKGTPLYVSGKR
I FTALEI KKI TGNYSRI I GKDMFTVvYSGI LEDNTQVAVKThNMfERGKwRCANELNSLS

OsWAKs-Supplemental Data 2[1].txt

ELI HKNI I NLLGFCYEMDAVI LVYELI ERGHLJNI LHGNDTKRFLPLDLRLDI AI GLAE
GLSYMHSRSKPI LHGNI RTVTVLLDDKFVPKI SGFGSSKI GEDGKCRI VGSEMGYMDETF
VNTRVLTRKSDVYSFGVLLLELI TRKRI YYNGKDNNTAI NFAKVYEKEGSGRAMFDNEI S
ADKNI PTLEDI GI LAMKCFNPDI DKRPEMKEVCEQLLMLKRSSKKGKGI *

>OsWAK103 3970.t00002, Chromosome 10, protein sequence
MAFWLLADLLI LLASAAESVAGQPAASCOARCGDI DI PYPFGI GPNCSTRGKGF EI ACNPR
NDSGEMVPTLAAANGTI HVQSLLVAPI PEVKVMLPVAYQCYYSNNSI TDSFYGEVDLNTT
GVYRI SDSRNMFFVI GCNTLSYTONGNSGGKGPYAGLYTTGCVSYCNDSSSARDSMCAGV
GCCHI DI SPGLSDNVVDFGPKWGRGFQVDFSPCDYSFLVDKNEYEFRSADLKMDLNRTMPV
WLDWAI RDSVTCPPLEVQEKPKAGYACMSDNSECVNSTNGPGYYCKCKQGYDGNPYVDKD
QGCKDI NECDVSNKKKYPYCYGVCNNI PGDYECHCRVGYQWSGEGPKKQEC SAKFPLAARL
ALGI TLGFSFLI VAVLFTLMMHKKRKMNEYFKKNGG SVLQKVDNI KI FTKDELKKI TKNN
SEVLGQGSFGKVVYKGTLEDNTPVAVKTSI EVNEARKDDFTNEVI I OSQMMHNNI I KLLGC
CLEVDVPMLVYEF AAKGNLQDI LHGDANI PLPLGLRLDI AI ESAEGLRYMHSSTSRTI RH
GDVKPANI LLTDKFI PKI SDFGTSKLLNVDKDFTMFVVGSMGYI DPV FHKTGHLTQKSDV
YSFGVLLLELI CRKPTI YGENCSLI I EFQAYDQENSGRI MFDKEI ANEEDI LI LEEI GR
LAMECLKEKVEERPDMKEVAERFVMLRRSRKCG*

>OsWAK104 3970.t00008, Chromosome 10, protein sequence
MAFWLLADLLI LLASAAESI SGRPAAGCOTRCGDVSI PYPFGI GPNC SHGKGF EI AC DTR
TRNGSGELVPTLAAANGTI HVQSLFVAPI PEVKVMLPVAYQCYNSSDSVTESFFGAVDLN
NNGVYRI SDKRNMFFVLGCNTMAYTNNGDSHGKGPYAGLYTTGCVSYCNDSSSAODGMCA
GI GCCHVDI SPGLSDNVVTFGEWSRYFQVDFNPCNYAFLVAKDEYNFQRSDLQKDLNRTK
PVWLDWAI RDGGNSSASSSCPAPPEVREKMPPEYACVSDNSECVNSTNGPGYYCKCKSKGYE
GNPYLVGGCNDI DECARSDEYPCHGDCRNTVGDYHCKCRTGYOPRGGGPKI DECSOKFPL
PAQI ALGI SLGFSFLI VAALFTLMMMLQKRKI NEYFKKNGGSI LQKVDNI MI FSKDDLKKI
TKNNSHVI GGGGFGKVKGTLEDNTPVAVKTSI EVNEARKEDFTNEVI I QSRMMHNNI I K
LLGCCLEVDVPMLVYEF AANGSLQDI LHGDANRSLLLTLDI RLDI AI ESAEGLRYMHSST
NCTI RHGDVKPANI LLTDK FVPKI SDFGTSKLLTVDKDFTMFVVGSMGYI DPI FHKTGRL
TQKSDVYSFGVLLLELI SRKPTI YGENFSLI I EFQKAYDEVHSGRAMFDKEI AVEEDI FI
LEEI GK LAMECLKEKVEERPDMKEVAERLVMLRRARKHGQGSYNLSPRHHEEI SI ETTPT
SFGADFSTNSSVLSATCTPERKELYKL*

>OsWAK105 3970.t00013, Chromosome 10, protein sequence
MATCWLLASLLLLASAAGDES VVTGRPAGCOARCGVDI PYPFGI GPNC SRGEGF EI ACN
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NNGVYRI SDSRNMFFVI GCNTLSYTONGNSGGSTHYSGLFYTGCVTYCNDSSRSQAODGRC
AGVGCCHVDI SPGLTDNVVDFGPKWTRGFQVDFSPCDYSFLVDKNEYEFRSADLKMDLNRT
MPVWLDWAI RDSVTCPPLEVQEKPKAGYACVSDNSECVNSTNGPGYYCKCKQGYEGNPYD
KDQGCKDI NECDVSNKKKYPYCYGVCNNI PGDYECHCRVGYQWSGEGPKKQECSSKFPLAA
RLALGI TLGFSFLI VAVLFTLMMHQKRKMNEYFKKNGG SVLQKVDNVKI FSKDELKKI TK
NNSEVLGQGGFGKVVYKGTLEDNTTVAVKTSI EVNEARKDDFTNEVI I OSQMMHNNI I KLL
GCCLEVDVPMLVYEF AAKGNLQDI LHGDANI PLPLGLRLNI AI ESAEGLRYMHSSTSRTI
RHGDVKPANI LLTDKFI PKI SYFGTSKLLTVDKDFTMFVVGSMGYI DPV FHKTGHLTQKS
DVYSFGVLLLELI CRKPTI YGENCSLI I EFQAYDQENSGRI MFDKEI AKQEDI LI LEEI
GRLAMECLKEKVEERPDMKEVAERLVMLRRSRKCG*

>OsWAK106 gi |19881772|gb|AAM01173.1|AC113336_25, Chromosome 10
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RRARRVPHNEGTDLTATI AREGFDSYVLAVLRRSHRECRGGRSRPGK KAVAATAGDRARHPEAPPPDGSG
LPGLDPLAGGDI DECALPGI MSNCSFN SVCVNRPGGFDCPCKRGMTGDGKRG TCTENFPAAKAAVGLSS
FI VFI VLI FMVKOHLK LKKFYEQNGGPVLKGV RNI KI YTKKELKQI TSNYSSDI GEGASGK VYMGTLKGG
QQVAI KKS KKVDEERKSEFTQEVI LQSEM KHKNI I QLFGCCLEVDVPMLVYEF TVKGS LHDVLFKCDENM
KGNLHDVLPKYNDNKKGKGGKGVHDALVECDGNKNVSLHDVLFKCGDKI AI DTLLEI AI GSAEGLTYM
HTARETPI RHGDLKSGNI LI DNNFVPKI SDFGTSRSLVAGHKFRPDKFI PADMNYI DPVYMEDGMLTEKS
DI YSFGI VLI ELVTRKPAKYDDDRSYVRNFI QAYLDREREKCHKEI TPDVEI NI LEMVSEVAVACLEPV
ODKRPDI EVERQLHRI RHI AGQRI EEKKEEFQRAFPR TGSVI SNGFKASSLSGRVPVTQRSLM

>OsWAK107 gi |22711562|gb|AAM01174.2|AC113336_26, Chromosome 10
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FLAGDPPLFGDKLPPNVNSSKPFVTANFYYSGT DAGMPSEM VNYTRGPLELLDI SVNQSKLRVYAAI NS
DCSTNETHHI LFEQSI KLQPSGPFTLSANDNSLVGVGQ NVI AMFADSYAGEEY STI CLSFLSSVSKARNG

OsWAKs-Supplemental Data 2[1].txt

PCENATGLGCCQOTLPPGVNTTLVRFQHRNNSKWRTPCSYAMLVEKSWYNFSTEDLFEYPAFPNKYPRG
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CQGTPEPTGDGS

>OsWAK108 3650.t00001, Chromosome 10, protein sequence
MLMI LPCRLLLRLVLATLLI LAASTDQHVATLPP I TLP GCI DKCGNI SI PFPFGTKQSSC
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MSI NLTEGVARAYGPVSSDCSLNDTYHLVKRQMTGLAGPFLI STRNALTAVGWNMEANLA
RSVRGSGFLKTCGVRLGQPEFATNGSCLGGGCCQGEI TQGI GSI AKDWYNFTSPDLYSDN
FSKKYPKGVPLVI DFAI RDGFCPAAGQAPPANYACVSSNSSCVNVTNGDGYI CNC SKGYD
GNPYI PNGCHDI DECALRDSHPELRVLYPCSRNGI CMNRPGGYDCPCKRGMSSGDGKAGTC
SEKFPLQAKI VVGAI GGLFI VAVLVFLALVHREKRKMRFFEKNGGPI LEKVNNI KI FKK
EELKPI LKASNI I GKGGFGEVYKGR LADNKLAVAKSI KVNAAQKQDFANEI I I QSRVI H
KNI VKLI GCCVEVDI PI LVYEFI TNGSLDDI LHGSNGEPLSLDLRLDI AAESA EGLAYMH
SKTTNTI LHGNVKPANI LLDNDFVPKI SDFGI SRLI AVDKNQHTDKVI GDMSYMDPVYLO
TGLLTKKSDVYSYGVVLELEI SRKKATYSDNNSLVRNFLDAHKEKRKATELFDKDI TLAE
DLVDLGLVRI AVECLNLDVDQRP EMTKVTDLFI LMKSRACKETKO*

>OsWAK109 3650.t00008, Chromosome 10, protein sequence
MRSKFLPTLLPAI TVLLVMOAI SRMTTVAVDQSPRRRI ALPGCPDKCGDI SI PYPFGTK
EGCYLDI NFI VLCNLSTTPATAAGTI I LKNGYFFGDOENPVGVQTNKSWWTVDLI DI D
VTRGEVRVAVPVSSDCSTNESYHEL SI FTQSLNFSTTFLFSATRNVLGQSVRARI DG
VMSGTNYSAACNSLFDTPAKAENGT CMGLGCCEAE LAPELGM I TVSMYKOSNSMMWETFPC
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SLCVNTTNGQGYVCKQEGYEGNPYLPDGCQGNLI LRE*

>OsWAK110 3650.t00009, Chromosome 10, protein sequence
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ATLGI I GLTSI VVVVLFKLLFDERRKTKEFFI KNGGPVLEKVDNI KI FKKEELKPI I QS
CNVI GKGGFGEVYKGLI DDKLVAI KCSI NVDKLQEKQFTNEI I I QSKVI HKNI I KLI GCC
LEVDVPM LVYEFVPRGSLHDI LHGNRKESLPQKRLNI AAGAAEGLAYMH SKTSTTI LHG
DI KPGNI LLDENFDPKI SDFGI SRLI AI DKTHTKCVI GDMCYMDPI YLQSGLLTKQSDVY
SFGVVLELEL LRQKASSGEDTRLVTTFLDAYTEDHKGAI DLF DREI LLEGDTEVFNNLAI
LVVDCLKFEVERRPEMTDVEERLQTMKRSYVPKSI SDASSI DT*

>OsWAK111 9638.t00862, Chromosome 10, protein sequence
MLPLLSFVLLGI AOVKRSFALSPVLSYGH LI TPYPEGMTRRLEKRFLLDHGTNPSPSNAS
LPSTSTLARCPKRCGKLSFDY PFGI GQGCFRHVD FSLTCDMATOPP KLF LNNGSTEV LGD
I GVDGLNI YFI HFNLI PI TSTHVI PI NSGGDVY NFSWK NPGDSFT FARQGM T FVVTSCDL
DVYMV DQEKSTPI LLGTI ACPSKEI AEMVYRQDSEGPWYTI DSLPARTVQLOFVRHKTG
NTQKYFNLTMLWDRI NI TVKANLAWNI VDQTRCLN NMEDDRKNHACI SNHSSCVSSQYI D
VGYACRCNDGYVGNPYI MDGCKLDDGYNPRPQKHNC SRQCGTI VVPFPFGL EEGCAAREV
FQLSCLGKPNVLOYNDFI GVQYI NVSEGLVGI KYNSSFVEI LFNMF SQFRFSSQGVVSN
I FGKGNLYVDPTESASVQWAVANLTCQQAQNTSTYACVSTNSSCSRVI STMQGYVGYR
CTCLPGYDGNPYI PDGCKGI I I GLTI GFGVLI LSSI VI AI I RRWKRDVHKKI RRKYFQKN
QGLLLEOLI SDESASEKTKI FSI EELKRATN NFDSTRI LGHGGHGTI YKGI LSNQHVVA
I KKAKVI KEGEI NDFI NEVAI LSLI NHRNI VKLFGCCLETEVPLL VYDFI PNGSLFELLH
HDSSTFPLSWGDLRLI AAEAAGALCYLHSAASI SI FHRDVKSSNI LLDANYTAKVSDFG
ASRSVPVDQSHVVTNVQGTFGYLDPEYYOTGOLNEKSDVYSFGVVLELELLRMOPI FTTM
SGMKQNLCTYFLSEI KTRPI I DLVDPVPLDKANEEDI RQVASLAEMCI KLGKEERTMRO
VEI TLQLLRTEKMT PSHVSPDRNQEI ESLLTQGA I DQVI HALVNVDRANVASQRSQTSY
SLEKEFLSSASLPR*

>OsWAK112a AK111815, Chromosome 10, protein sequence
MLM LLLNI RROVQTYLRESSI SVARVQMGHLNI MLAFLSFVLLGLAEVEGTVALS QI LS
NSHLI TPYREVTARKFERRSLLDHSSDDRRSSNASLPSAATLANCPKRCGNLSFDY PFG
I GDGCFRHPDFSLTCNATTOPPKLLLI NESVEVI DNI EVVGKDI AEFFYFNFFMVAFNH
LI PI KAGVDVYNTWKAPGI SFTI SEMMI I TVVSCDL DVFLI GODNTPKLLCMVACPNKE
I ADMVYMQDCEGPGCCTVLS ETPVQAVQLQFVRHETS NAGKI SNLSMLWDRI NI TI GAPL
VWSI VDQTRCSRNMEDNFACVNHSGCI TSVFRDI GYACQCNSGYKGNPFI LDGCKHDSGY
NPRPEKHN CARCGTI TVPFPFGL EEGCSARKRFQ LNCSDKTNSVLKFNDYFQVYI NVS
EGLLGI KHNSLLEEQLFNI MMEMM TSDNEPDLFVDPLESVSVQWAVANLTCQEAQHNTSG

OsWAKs-Supplemental Data 2[1].txt

YACVSTSSSCLNLVSSMDGYVGYRCSCPLPGYRGNPYI LDGCEDI DECRETPI CKGVCKN TVGNYSCTKCPDHTEYDI LRMQCTPI RKKS FYLGI I I GLSSGFGMLLLGLSGI VLI RRWK RHAQKRLQTKYFRKNOGLLEQLI SSDENASEKTKI FSLEELKKATNNFDTTTRI LGRGGH GTVYKGI LSNQHVVAI KKAKVI RECEI NDFI NEVSI LSQI NHRNI VKLFGCCLETEVPLL VYDFI PNGSLFGLLHPDSSSTI YLSWGDCLRI AAEAAGALYYLHSAASI SI FHRDVKSSN I LLDANYTAKVSDFGASRSVPI DQTHI I TNVQGTFGYLDPEYYQTRQLNEKSDVYSFGVV LLELLLRKQPI FTI NSGMKQNLCSYFLSEI KTRPI TDMVDAQVLEEANEEDI KEVASLAE MCLKLGEEERPTMCKVEMTLQLLRRTKTMNSSQVDPTI DQEI QTVLTEGASDPEI QPLVTN LDVDRANAASQRFQI SCYSLEQEFLLSSASLPR

>OsWAK112b, AK111496,

MPANAI LASKGNPFI LDGCKHNSGYNPRPEKHNCARQCGTI TVPFPFGLLEEGCSARKRFQ LNCSDKTNSVLKFNDFYFQVYI NVSEGLLGI KHNSLEEQLFNI MMEMMTSDNEPDLFVD PLESVSVQAVANLTCQEAQHNTSGYACVSTSSSCLNLVSSMDGYVGYRCSCPLPGYRGNP YI LDGCEDI DECRETPI CKGVCKNTVGNYSCTKCPDHTEYDI LRMQCTPI RKKS FYLGI I I GLSSGFGMLLLGLSGI VLI RRWK RHAQKRLQTKYFRKNOGLLEQLI SSDENASEKTK I FSLEELKKATNNFDTTTRI LGRGGHGTVYKGI LSNQHVVAI KKAKVI RECEI NDFI NEV S I LSQI NHRNI VKLFGCCLETEVPLL VYDFI PNGSLFGLLHPDSSSTI YLSWGDCLRI AAE AAGALYYLHSAASI SI FHRDVKSSNI LLDANYTAKVSDFGASRSVPI DQTHI I TNVQGT FGYLDPEYYQTRQLNEKSDVYSFGVVLELLLRKQPI FTI NSGMKQNLCSYFLSEI KTRPI TDMVDAQVLEEANEEDI KEVASLAEMCLKLGEEERPTVKKVEMTLQLLRRTKTMNSSQVDP TI DQEI QTVLTEGASDPEI QPLVTNLDVDRANAASQRFQI SCYSLE

>OsWAK112c, AK111989,

MEMEMMTSDNEPDLFVDPLESVSVQAVANLTCQEAQHNTSGYACVSTSSSCLNLVSSMDG YVGYRCSCPLPGYRGNPYI LDGCEDI DECRETPI CKGVCKNTVGNYSCTKCPDHTEYDI L RMQCTPI RKKS FYLGI I I GLSSGFGMLLLGLSGI VLI RRWK RHAQKRLQTKYFRKNOGLL LEQLI SSDENASEKTKI FSLEELKKATNNFDTTTRI LGRGGHGTVYKGI LSNQHVVAI KKA KVI RECEI NDFI NEVSI LSQI NHRNI VKLFGCCLETEVPLL VYDFI PNGSLFGLLHPDSS STI YLSWGDCLRI AAEAAGALYYLHSAASI SI FHRDVKSSNI LLDANYTAKVSDFGASRS VPI DQTHI I TNVQGTFGYLDPEYYQTRQLNEKSDVYSFGVVLELLLRKQPI FTI NSGMK QNLCSYFLSEI KTRPI TDMVDAQVLEEANEEDI KEVASLAEMCLKLGEEERPTMCKVEMT LQLLRRTKTMNSSQVDPTI DQEI QTVLTEGASDPEI QPLVTNLDVDRANAASQRFQI SCYS LEQEFLLSSASLPR

>OsWAK112d, AK111809,

MWPI FYLVHKYSFLFKI I YCLTEMCLPVTDI DECRETPI CKGVCKNTVGNYSCTKCPDH TEYDI LRMQCTPI RKKS FYLGI I I GLSSGFGMLLLGLSGI VLI RRWK RHAQKRLQTKYFR KNOGLLEQLI SSDENASEKTKI FSLEELKKATNNFDTTTRI LGRGGHGTVYKGI LSNQHV VAI KKAKVI RECEI NDFI NEVSI LSQI NHRNI VKLFGCCLETEVPLL VYDFI PNGSLFGL LHPDSSSTI YLSWGDCLRI AAEAAGALYYLHSAASI SI FHRDVKSSNI LLDANYTAKVSD FGASGSVPI DQTHI I TNVQGTFGYLDPEYYQTRQLNEKSDVYSFGVVLELLLRKQPI FT I NSGMKQNLCSYFLSEI KTRPI TDMVDAQVLEEANEEDI KEVASLAEMCLKLGEEERPTM KKVEMTLQLLRRTKTMNSSQVDPTI DQEI QTVLTEGASDPEI QPLVTNLDVDRANAASQRF QI SCYSLEQEFLLSSASLPR

>OsWAK113 3170.t00013, Chromosome 10, protein sequence

MELLLLVLFLLLAAMSAAVESI TSTAVKTGCQERCGVDI PYPFGI GPGCSRHGFE LSCV S NGSGAGPI AVLAGTSI QVTRLSVEPAESQVMLPVGWQCYNTSQPTRTYPDWSRAKTEMNR GGVYRI SNTHNMLVVLGCNTVGYTESLRSEGGAYSSTYYI GCMSYCNSASAOQGOCAGV GCCHVDI PPGLTDSSVNFVYDHTGMVDYSPCDYAFLTDRTNYSFRRADLI KMDKRNVP VWLDWAI RENGSMSCAEAKGKPGYACVSVHSECVDSTNGPGYNCKCTAGYEGNAYAPDGC TSK*

>OsWAK114 3170.t00015, Chromosome 10, protein sequence

MHTENHTI FVGI TLGI SFLI VGLLFI LMMRQKRRMNEYFRKNGGSVLQKVENI KI FTKDE LKKI TKNNSEVLGQGGFGKVKYKGI LEDNTLVAVKASI EVNDARKEDFTNEVI I QSQMI HT NI I KLLGCCLEVDVPMVLVYEFANGNLQDI LHGDNNRRVPLPLDLRMDI AVEAAEGLRYM HSSANRTI RHGDVKPANI LLNDKFKPKI SDFGTSKLLTVDKDFTMFVVGSMGYI DPVFK TGRLTQKSDVYSFGVVLELEI TRKPTI YDANCSLLI DFQKAYEQENSGRAMFDKDFTI EE EI FI LEEI GRLAMECLKEKVEERPDMKEVAEQLVI LRRSRKSRQGNYSI SPOQFEEMSTE GTPLSLETAVSVSSSVLSAPSTPANNDFSNA*

OsWAKs-Supplemental Data 2[1].txt

>OsWAK115 3580.t00004, Chromosome 10, protein sequence
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MEVFLVWRALVWLALI TPAAALAOQEEAPGCRRRRCGNVTVPYPFGI GSERCYRGGVVRGFR
LDCDDARRPPRLTVAGYGHEVTSI SLAAA E V T V L L N A S R A C Y G G G D Y G R R R G R E E Q P M S
LNGSAFLFSSMKS K F V A I G C P G L A Y F V D D G G D Y V T G C M S V C R P S A R A L P G S C R G D D G C C Q
SNI PLGLASYRPRLSFGRRQGGAF LANATA CAYAFMVD A W W F W Y A G S N F N R T G D F A V P V
VLDWAI RPDAGSGSGSGSCAAASRTPLPSYACRSAHSVCI DSSNGPGYI CNCTAGYHGNP
YVVG D C T D I N E C E H K D E Y P C Y G V C T N T A G S Y A C S C P K G S S G N A S V E G G C R R D D K F T L A L K
TVTGNI TFYTSRNNLSLEKAVTDKPAA*

>OsWAK116 7185.t00001, Chromosome 11, protein sequence
MEVPESKLGDFI QGDDRKWI ADSNHNI TKFTEDEI KRI TDNYSTVI GKGGFGQVYKGV
DDNRVVAVKRYI FEDSMEDLAKEVI AHSQVNHKNVVRVVGYSI EQNNALMVVTEYVSKGS
LHDI LHQSDTPI SLDTRL CI AI QCAEALGYMHSSMYTPI VHGD I KPSNI L L D D N L D A K I S
DFGI SRFLYGGKTRHTKNVKGSI DYMDPI LFRDGTQSSKNDVYSFGAVLLELI TRKRI KE
EGKVS LI TSFTEHDSEGKRMKDLFDANI ASVSNMKI I NQI GK L A T K C L A M D M K K R P K M N I
VAEHLRKLREYRNGGHDNTTLWRFSV T O D L F E K Y K O S T R N A S Y G S T K H P K K K K K S F A I
FKHNSGSKLLEKLGAVRI FTKKEVKKFTMDYSC L L L K D G L A E Y H R G I L E D N T L V T V K T P
YDGD E S L Q K L F S H G N D D L V S H L P Q E H G Q T V G L L L G G *

>OsWAK117 AK102853, Chromosome 11, protein sequence
MELLQEKNI HVSQRDDKAKWI I DNYSNI RSFTEHDI EKI TSNYSTLI GKGGFGEVFRGV
DDEDDVVAVKRYI RGD L R E E F M E E I R I H A Q M S H K N I V K L I G C C I G K N R L M M V T E F I S N G N
LEDALHNSDI FI PLSTR L G I A M G C A K A L S Y M H S M H L S S S S L I C H G D I K P A N I L L D A N L T A
KVSDFGI SKSLSGGI TRWTSNVK G S I A Y M D P I Y Y R E G R V T S K S D V Y S F G A V L L E L I A R K S
MKEGGI SCEAFROACAKGKGLRELLDI EI AEECNMNI LEEI AKLATKCM I V D N I K K R P O M
NDVAEHLRTWI FQVRNNGHEKPAWESTLDKVHDALKKGTSSNFVWI VPMLI I FLFSYMSM
LLKGASMTFCTLKKI SH

>OsWAK118 7185.t00014, Chromosome 11, protein sequence
MELPEDI MTGDHSQWDDNSNI RSFTK HDI ERI TGNYSI PI GKGGFGEVFKGFI DDYDRD
VVAVKRYI HTDLRKEFMEEVS I HSK I N H K N V V K F I G Y S T G E N T L M L V T E F I S N G N L E D A L
HKSDI SI SLDTRLGI AI GCAEALSYMHSMLSVLDLSLVYHGDI KPANI LLNDSLTA KVS
NFGLSRHLSGGI TRCTNTVKVWI TWI LYI FTLGGLPERVMSI VLG*

>OsWAK119 7185.t00017, Chromosome 11, protein sequence
MRKVHDNNNVRI FTEDEI KRI TKNYRTLI GKGGFGEVFSGD L D D D D G Q V A V K R Y I R G D L R
EEFMEEVRI HAQMSHKNI VKLI GYCI GENTLMMVTEFI LNGSLEDVLCNREI SI PLNTRL
GI AVGCAEALSYMHLSSDSL V Y H G D I K P G N I L L D A N L T A K V S D F G I S K S L S G G L T R Y T L H
I M G C E D Y V D P L Y V R D G R L T P K S D V Y S F G I V L L E L I A R K R V K Q D G V N L I I S F G Q A C A N G K G
L R E L F D A E I V E E C N M N V L E E I A K L A I E C L T L D I E E R P K I N D V A Q R L R T L O T H R E G O E S A A
R K S S S S R M L N A L R K G Y K Q S T S I F S S T P T A N H R R N A I S E I K S E M A K Q H N F R S F T K E N L F E V
M G R Y K S P L G D K G S G I G R Y N K G T L E D N M L V V V K S H L S D E D V F M I F Y E A S I V S Q I V H E G I I K
L L G Y C F D A D F P M L V Y E Y V D R G S L Y D I L N S A O D I P L G L R L K I T V K T A E A L D H L H S S P F C V R
H G D V R S T N I L L D K N L M P K I S G F T S S R R L T K G N L S F D N V E K Y C D L M P K K I I R D D P S Y I D P K
F L Q S D V L T T E S D V Y G F G I I L L E L I S R K K L L Y Q D K K H C P V R L I P E F I K A Y K T E G S G N A M F D
K G I T A K K D I V V L E N I G R L A L R C L S M E I R P T M K D V A E Q L G M I R R A W K Q H A P O G H G C T G C W H
L*

>OsWAK120 9639.t03169, Chromosome 11, protein sequence
MPYPFGTI DGCFRGPFRVYCEDDHAVYLQEHK KLV LRFELA QGEVLI QKRI ATSCGVN
LTGKAVGI PWVVHDGGLADDYPYLT I STKNQFAVVGCGI TAI I VGQGENQPDYTVGCRSF
CDDVDSNI VEDNSTQCNGNTGCCOASI PGNLKA F Q P S F L K I S G V N Y S G V P C V Y A F V V E Q N
WFKFKTSYAKSMELYSKYRNKGTGVPLVLDLVVGNETCDEAKRNALS YACKATNSSCI DR
PSRSGYLKNCSSQGYEGNYPYLHGQCQDI NECDYPWLYPCKGLSI GI VGGSATGFI CI VLI A
MFLTRRI KHRRI KLROKFFI LNRGQLLQLVSORADI AERMI I TLDELEKATNNFDKAR
ELGGGGHGT VYKGI LSDLHVVAI KI SNI VVPKEI DDFI NEVAI LSQI NHKNVVKLI GCCL
ETEVP L L V Y E F I S N G T L Y H H L H G E G P R S L S W S N R L R I A A E I A N A L S Y L H S S V T I P I I H R D
I K S S N I L L D D N L T S K V S D F G A S R Y I P I E K T A L T T A V Q G T V G Y L D P M Y F Y T G R L N D K S D V Y
SFGVMLVELLT*

>OsWAK121 9639.t04303, Chromosome 11, protein sequence
MATNKRVELERCMLI GVCLLLLCLLHTAE AQLMQHPPADCPETCGNI AI PYPFGI GNCC

OsWAKs-Supplemental Data 2[1].txt

SLLGPAAGDDFTVVCNDSYNPPRFRGDYEI TGI VLEEGVLNASYTAVPYI CYSSPNTSQ
FTMSFDLAGSPFLI STTGNKFTAI GCNTLAMI I GKEDMTYFTGCI SYCGGDVQKAAPDGS
PCSLGLCCQTELTPELSFLNVTWGVGDHNDTTNSAWDYSPCSYAFI ADKNWYSFKREDLV
GNANYFDKKG I PLVLDWAI RSNSSCPHESGKMANPVVYPYACVSSHSYCVNVTNNGHGY
LCNCSDGYHGNPYLPEGCI DI NECDPSTYKENPCPGGTCHNLEGGYKCKCNFGRRKDRKN
NNSCQPVLSKATALI ATI CAI AI SSI VLI FLRMEYEKRLRDHFNKNNGGOLLKNI GI KI
FTKEEVGKI TNNYSI I LGKGGFGEVYKGTNDNDNQAVKRSI AVDDEARKKDFANEVTI Q
SQI NHKNVRLVGCCLLETNPMLVSAYI PKGSLHDVHLHGNGNHVAKYNLTLOVRLEI AI E
SAEALAYMHSSASQKI LHGDVKSSNI LLDDDFKPKVSDFGI SRLI SI EKNHTNFVVGDI N
YI DPVYMKGTI LTEKSDVYSFGVVLLELI TRKKARYDGNNSLPI NFVKS YMTDSQAREML
DDD TSPEVMDCLHMI GRI AVQSLKEDVDERPTMKHVLEHLHLARSMI PKSTSGQSGRI
LI ASGI NOAI VRFLTSC*

>OsWAK122 6324.t00019, Chromosome 11, protein sequence
MAVKKHNAMQLQVVVLWLVGVALFSVMASAPAAVAAAAPPAECPSKCGDVIDI PFPFGV
GDDCAWPGPDDFNVTGNHSFTPPRPYYSNMEMKDI SLPKGEVRVYTSVLQNCFDLSNTSS
SSESDVGSPLDLAGTFLVSPERNEFTATGCDTLGMMYGREDSYLTGCVTTCASLDA
ANDGDHCAGLGCCQI QSI PTNLTLRLI VLSANI TDRKI AAWNPCR YAFI TDRDQFRYNF
SRKDLGRSGNKI FANRDGEMVVPTELDWAI RGTNRSCSVCVSDQSDCANATNGDGYLCKC
SEGVDGNPYLKGNGGCTDI DECKEPRCSTGSRCHNTEGYYYCKCRFPRRGDGVNGKGC
HLPKYI VPTLATVCSVI SLTVLVCLYKRRKRRMFANNNGRLLKDMNI VLI TEKDLNKMT
KNRSTKI LGEFSFGKVMETHKNQPVAVKYSKGRKLAQTTHGKDI KCMNKNMFQNAFCW
SKVPSSPEEDSSSRVSGPELVDELRVOSLI OHENVRLDI AI GSAKALSYMHSSSLMHGDV
KPANI LLDDNLNPKVSDFGSSELI LKFKHVCVDKNYVDPVCI LTNKYTMESDVYSYGVV
LELI TRKRAKYDDERSI RVEFVNQYKDNERRKMYDQDMLSSTDSLYPYCMECLDRMAAV
AVRCLKNKVDKRPMTMAEVVEELKQLREOI STRMS*

>OsWAK123 6324.t00020, Chromosome 11, protein sequence
MAVKKHNAMQLQVVVLWLVGVALFSVMASAPAAVAAAAPPAECPSKCGDVIDI PFPFGV
GDDCAWPGPDDFNVTGNHSFSPRPYYGNI EI RDI SVAAGEMRVYTPVVYQCYNTSDHVD
SSTSFLQLNI TDSPFLVAPGRNEFTAI GCDTLAWLQGRDDWSFLTGCI TTCVSLDEAAHD
GEQCSGLGCCQVPSI PPNLALVELNWNGLTKNYAWRYSPCS YAFVAEKAWYKFSRGDFSR
AGSKSFMNRA GDRSVTVLDWAI RSDGSCSSTSRVAPACVSPNSYCVNTTNGQGYLCKCS
PGYDGNPYVTGDSGCTNI NECKLRREDPAK YSELYPCYGGSKCHDTEGDYRCKCRLGRRG
DGKI DNGCQPI I PPPVI GI LVI AGVVLFGVLVCLRKKWKLKGCYDRNGGOMLEKTSVKI
FTKQELDKI TNNKSNKI GKGAFGVVYKGTHTDDQPVAVKYSI E KSI SRTRGKDEFVKEI TV
QLQVSHDNLVCLI GCCLEVEVPMLVFEFV PNGSLESV LHGAERCALPLLKRLDI AI GSAK
ALTYMHSHSRRCI FHGDI KPANI LLDDNLMPKVSDFGSSEVLKTKHRSVCADMGYI DPV
YMTGNFRLKSDVYSFGI VVLELI TRKKAVYD GKSLPI EFTNICYEDDNARRNMYDODI LS
AEALQPHCMECLDRMAGI AVQCLEYNI DKRPTMAEALQELI QLRKAVAGK*

>OsWAK124 AK066290, Chromosome 12, protein sequence
MI CPWSVAAAVALLLLSPGENQMVRVSAQPTKTRCAAGVVDTCGDVGVYPYLFGI DGGSC
SFLPGFNLTCDRTKQPHRLFLGDGSHLQVTEI SLANYTVRVLNGVGTVNFTFAGHNDSTA
KWAGVSVGQDDGPI VSEEHNQLVVTGCNI MASLLGNSGSNVI I GCSSFCSI TDWWGADP
I VHSGAGGACSGLGCCDVNI TI GRPSYELQLRWLDWDHNYDDLPI AVRI AERGWFDGMS
TKLLRKNRSRAVPVPLEWAVASVHKPPTPVDVNSTCPKDPARSECRSSNSFCRNI ANM
YRSGYVCKCDDGYQGNPYLTGGCQDI DECSLPGKCFGECTNTPGNYSRCRPRGARGNPYT
KDGC I KFPLGPGLRQKWI GAGWI CFGVSPNGPFSRLLGMLMRNQRGGRDGI TLNRNASDA
GAKRNVYL

>OsWAK125 1894.t00003, Chromosome 12, protein sequence
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DGTVQVLDI SI PNSTLRVNATAMAFDPADDVQRGVI NATTTWRAAAAADDDGGPFVVSRR
NTI ALMGCNARVDLPGGDRRHSNLSVSSCTAVCPPVGGGDDAAAHDGDDGGDGTI AI I D
AWNGKCSGVGCCQANI MLGYPSYTI QI KQLQEKNLHSFDFQYI AYI TDETLNFTEEI AGR
I ATPAALPATLDFVI RSNSSCSTPANSTAGGECRSEHSFCEDYKGGGNTLLGYSCVCSSEG
YRGNPYVAGGCHLNC*

>OsWAK126 5650.t00002, Chromosome 12, protein sequence
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I SSYFNLTCSNTFNPPRPMVGDSEALVEVTDI SLEHGEMRVLSPVYI CFTANTTFTKFT
EGYELKHTPFLPSPSRNRFTVI GCNTLGLI GGYKGTVSHYVTGCYSYCESI NSTSDGAPC

OswAKs-Supplemental Data 2[1].txt

AGMGCCEAAI PTDLTAWGAMFEMNQSKVWSFNPCFYAMVSEVWYSFQQKDLVGHGFI D
DRAQRGAPVVADWAI RNSGSCPEEGKGI PGDYACI SANSYCMDANNGPGYLCQCSKGYEGN
PYLLNGCODVDECALRKQDPKYEDMYPCRKGI CHNTPGGYLCKCKLGKRSDGTNYGCRPL
RTTAEKVVI VQRKRHKKDKDEYFKONGGLKLYDEMRSRKVDTI RI LTEKDI KKATDNYSE
DRV LGI GGHGMVYRGI LDDNKEVAI KSKVI NDEWREEFVNEI I I LSQI NHRNI VRLI GC
CLDVHVPMLVYEFVSNGLTSEFLHGTDRRSSI PLDI RLKI ATQSAEALAYLHSSTRAI L
HGDFKSANI LDDQHNAKVADFGASALKSMNESEFI MFVQGTGLGYLDPESFI SHRLTDKS
DVYSFGVVLLELMTRKRAI YANSI NEKESLSYSFLLMFDQNI HRNMLDREI MDKETMVVL
EKLSI LAANCLRPRGDDRPTMKEVLECLQMI RRHPMHGASDHKGD SYAHHNYEGSPSMVV
HLNETI YESI ETSRLVDDLVR*

>OswAK127a AK100110, Chromosome 12, protein sequence
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CRRSATSFI VGLSSPLGFRQCMASASFCSTTI TFSSI MSKSNI SQCLFWWNI KGKI

>OswAK127b, AK066039,
MNQLI VNLKKLI SFTQSLWEDKDSLHI LOSI CTGAI PDGPVMDRNTSVGPPI DKPEVPI
EVLLPEAVPSGLHKHGV EAVVEFPHRALVHHQDRCEVLQVWDDGGLAAAHPSAGSTVGC
VDALAVGVAASHI

>OswAK128a AK067120, Chromosome 12, protein sequence
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AI VVTAMACMLI MOLQRRRHKKEKI EYFKONGGHRLYDEMI SROVDTI RI LTEREI KRAT
ENYNEDRVLGSGGHGMVYRGTLDNKEVAI KSRVI NDDCREEFVNEI I I LSQI NHRNI V
RLLGCCLDVDVPMVYEFVFAHNGTLSEFLHGTDRHSPI PLDLRLKI ATQAAEALAYLHSST
SRTI LHGDVKSANI LMDDQYNAKVADFGASTLKSMDSESEFI LFVQGTMGYLDPEFSFTSHO
LTERSDVYSFGVVLLELLTRKKALYTNDFNKNESVVOI SVDVSAEQTPSHARP

>OswAK128b, AK064574,
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NLMCNDFHPPRPQI REPEAHI EVTGI SLERGEMRVLSPVNI CFTSNTTSTKSSGVGYD
LSRTPFLPSPSRNRFTVI GCNTLGLI TGYRGASGOYVTCYSYCEGI NSTSDGAPCAGMG
CCEASI PANLTAFAVTFDLNHSKVWTFNPCFYSVVAEVGWYFNKKQDLVGHGFI KERAQ
NGVPI VADWAI RNSGCPKKEPSSYACVSANSYCTAVI NSPGYLCNCSQGYGPNPYLS
DGCQGS AI TQI YLNFVTY

>OswAK129a AK119448, Chromosome 12, protein sequence
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NPYLLNGCODVDECALRKQDPKYEDI YPCRKGVCHNTPGGYLCKCKLGKRSDGTNYGCRP
LRTTAEQVVI GTSVSAI ALMALTCVLAMQI QRKRHKKDKDEYFKONGGLKLYDEMRSRKV
DTI RI LTEKDI KKATDNYSEDRV LGI GGHGMVYRGTLDNKEVAI KSKVI NDEWREEFV
NEI I I LSQI NHRNI VRLI GCCLDVHVPMLVYEFVSNGLTSEFLHGTDRHSPI PLDI RLKI
ATQSAEALAYLHSSTRTI LHGDVKSANI LLDGQHNAKVADFGASALKSMNESEFI MFVQ
GTLGYLDPESFI SHCLTDKSDVYSFGVVLLELMTRKRAI FANSI NEKESLSYSFLLMFDQ
NI HRNMLDREI MDKETMVLEKLSI LAANCLRPRGDDRPTMKEVAECLQMI RRHPMHAAS
DHKGDSSAHHNYEGSSSPSMSAHFDETI YKSI EASRLVQDLVR

>OswAK129b, AK062773,
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>OswAK129c, AK119304,
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