

BjtTCP19MESNL
 AtTCP19MESNH
 BjtTCP9aMATIKKH
 BjtTCP9cMATIKTH
 BjtTCP9bMATIKHH
 BjtTCP9dMATIKKH
 AtTCP9MATIQKL
 AtTCP11
 BjtTCP21b
 BjtTCP21d
 BjtTCP21a
 BjtTCP21e
 BjtTCP21c
 BjtTCP21f
 AtTCP21
 BjtTCP7a
 BjtTCP7e
 BjtTCP7b
 BjtTCP7d
 BjtTCP7c
 AtTCP7
 BjtTCP22a
 BjtTCP22c
 AtTCP22
 BjtTCP22b
 BjtTCP22d
 AtTCP23
 BjtTCP8a
 BjtTCP8b
 AtTCP8
 BjtTCP15a
 BjtTCP15d
 BjtTCP15c
 BjtTCP15e
 BjtTCP15b
 BjtTCP15f
 AtTCP15
 BjtTCP14a
 BjtTCP14bMDGGDNVGGGGG
 AtTCP14MQKPTSSILNVIMDGGDSVGGG
 BjtTCP20a
 BjtTCP20c
 AtTCP20
 BjtTCP20b
 BjtTCP6
 AtTCP6
 BjtTCP1aMSSSNNDYNGG.NSGVYPLSLYLSSLPGHOGIIRNPYN.....
 BjtTCP1eSNNDYNGG.NNGVYPLSLYLSSLPQOOGIICNPYN.....
 BjtTCP1bMSSSNNDYING.NNGVYPLSLYLSPLAGHODIIRNPYN.....
 BjtTCP1cMSSFNNDYNGG.NNGVYPLSLYLSPLAGHODIIRNPYN.....
 BjtTCP1dMSSYNNYNGSNGVYPLSLYLSSLSGHODIIRNPYN.....
 AtTCP1MSSSTNDYNDGNNVYPLSLYLSSLSGHODIIRNPYN.....
 BjtTCP12aMFPSIDTNGYDLDFPFNLHEATMLPSFTTHILSPSS.....
 BjtTCP12bMFPSIDTNGYDLDFPFNLHEATMLPSFTTHIQCPSS.....
 AtTCP12MFPSLDTNGYDLDFPFIPHQTTMFPSTTHIQSPNS.....
 BjtTCP18aMNNRSFSTTTTISEDYMLFPYNDHYSSQPLLFPNCPSSINDLLIHSNSNISN.....
 BjtTCP18dMNDNKTFSTTTTINDDYMLFPYDDHYSSQPLLFPSPCSSINDLLIHSNSNTTNN.....
 BjtTCP18bMNNNKTFSTTTSTINEDYMSFPYNDNYCSQPLLFPSPSSINDLLIHSNSNTSNN.....
 BjtTCP18cMNNNKTFSTTTSTINEDYMSFPYNDNYCSQPLLFPSPSSINDLLIHSNSNTSNN.....
 AtTCP18MNNNIFSTTTTINDDYMLFPYNDHYSSQPLLFPSPSSINDLLIHSTNTSNN.....
 BjtTCP17a
 BjtTCP17bMRTN.....
 AtTCP17
 BjtTCP5cMRSREYDDEETQAKQERDHN.HNNQVNLNN.....
 BjtTCP5aM.....
 BjtTCP5bMRSKECDEEEIQAKQEGDHDNDHNHQNVLN.....
 AtTCP5MRSGECEDEEIQAKQERDQ.NQNQVNLN.....
 BjtTCP13aMDTGPWKDNDVSGQTRTR.HEEAV.....
 BjtTCP13cMDTVHWKDTNDVSGQTRTR.HEEAV.....
 BjtTCP13bMTVQTQELNITSIMNTGPWRDANDVSGGTRRRNGEVEEDSEEA.....
 AtTCP13MNIVSWKDANDEVAGGATRRREVEKEDQE.....
 BjtTCP24aMEVDD.....
 BjtTCP24bMEVDD.....
 BjtTCP24cMEDDDHTETQOOOQOOOQOOO.....
 BjtTCP24dEKHESSVSMEEDDDI.....
 AtTCP24MEVDEDI.....
 BjtTCP2a
 BjtTCP2d
 BjtTCP2b
 BjtTCP2c
 AtTCP2
 BjtTCP3
 AtTCP3MAPDN.....
 AtTCP4M.....
 AtTCP16
 AtTCP10

BjTCP19 EG.....KEAMAHLSDPDPETNRGMLLKQEDDDPNKQ.....
 AtTCP19 EGNA.....IQVIDQVTTMTHLSDPNPKTKPGMMLMKQEDG.....
 BjTCP9a EAER.....LRAVDLSIIDGVRVSVETSKPFQVANTVSLDPKAEPL.....
 BjTCP9c EAER.....LRAVDPSLINGVRSVETSKPSEVANTVSLDPKAEPS.....
 BjTCP9b EDER.....LRAVDLTSKP.....FEVNN.AVSLPEKTEPSLESS.....
 BjTCP9d EGER.....LRAVDLSVQT.....FEVNNNAVSLPEKTEPSLESS.....
 AtTCP9 EEVAGKQDQLRAVDLTIINGVRNVETSRPFQVNPTVSLPEKAEP.....
 AtTCP11MIFQNVCRNESNFNAIASERSQTO.....
 BjTCP21bMENSDDGA.....
 BjTCP21dMENNDGA.....
 BjTCP21aMTSNDGS.....
 BjTCP21eMTSNDGGG.....
 BjTCP21cMSNDDGT.....
 BjTCP21fMSNDDGT.....
 AtTCP21MADNDGA.....
 BjTCP7aMSNNDGVMISNGSLIEH.....
 BjTCP7eMSNNDGVMISNGSLMEH.....
 BjTCP7b
 BjTCP7d
 BjTCP7c
 AtTCP7MSINNNNNNNNN.....
 BjTCP22aMDQNSHDR.PTAAEAGLQLNSTENPSPGRSVHFAGG.....
 BjTCP22cMDQNSHDRPAAAEAGLQLNSTENPSPGRSVFPAS.....
 AtTCP22MNQNSSVAEATLQLNSGKPKSPGSIPIFISSG.....
 BjTCP22bMETRTAAEEASLQLNSTENPSPGG.....
 BjTCP22dMETRTAAEEASLQLNSTENQSPGG.....
 AtTCP23MESHNNNQSNNTTGSAAHLVPSMGPISGSVS.....
 BjTCP8aMDLSDD.....GAAARGSSRHLVDPVSLVPRSTP.....
 BjTCP8bMDLSDD.....GAAARGSSRHLVDPVSLVPRSTP.....
 AtTCP8MDLSDIRNNNDTAAVATGGGARQLVDASLSVPRSTP.....
 BjTCP15aMDPDPDHNPNNHHRPNFPLQLLDSSSSSSTSLAIVPSASSS.....
 BjTCP15dMDHNPNNHHRPNFPLQLLDSS.....TSFATIPVPSASSS.....
 BjTCP15cMDPDPDHNPNNHHRPNFPLQLLDSSSSSSTSLAIVPSASSS.....
 BjTCP15eMDPDPDHNPNNHHRPNFPLQLLDSSSSSSTSLAIVPSASSS.....
 BjTCP15bMDPDPDHNPNNHHRPNFPLQLLDSSSSSSTSLAIVPSASSS.....
 BjTCP15fMDPDPDHNPNNHHRPNFPLQLLDSSSSSSTSLAIVPSASSS.....
 AtTCP15MDPDPDHNPNNHHRPNFPLQLLDSSSSTSSSSTSLAIVSTTS.....
 BjTCP14a
 BjTCP14b GDDHNNHLLHHHHHRPTFFPQLLGKRDPPDNNQQQQPSPSSSSSLFSLHQHQ.....
 AtTCP14 GDDHNNHLLHHHHHRPTFFPQLLGKRDPPDNNQQQQPSPSSSSSLFSLHQHQQL.....
 BjTCP20aMDPKNPNRRHQVNFPLNPPPRNQSLGDASKDDK.....
 BjTCP20cMDPKNPNRRHQVNFPLNPPPRNQSLGDASKD.....
 AtTCP20MDPKNPNRRHQVNFPLNPPPRNQSLGDASKDDAASAVVSE.....
 BjTCP20bMDPKNPNRRHQVNFPLNPPPRNQSLGDASKDDAASAVVSE.....
 BjTCP6PNNLNPSE.....
 AtTCP6MVMEPKKNQNLPSFLNPSRQNDNDK.....
 BjTCP1aHQSTASPGQMVSAVPESELIDYMSFNNSAVNQK.....
 BjTCP1eHQSTASPGQMVSAVPESELIDYMSFNNSAVNQK.....
 BjTCP1bHQPTSPSGQMVSAVPESELINYMFSFNNSAVNQK.....
 BjTCP1cHQPTSPSGQMVSAVPESELINYMFSFNNSAVNQK.....
 BjTCP1dHQSTAYPGQMVSAVPESELINYMFSFNNSAVNQK.....
 AtTCP1HQKASPGHVMVSAVPESELIDYMAFKSNVNVNQ.....
 BjTCP12aHHHYPPFSS.....SDFLD.....ESVLISQFLLOOQ.....ADVDSF.....
 BjTCP12bHHHYPLPSFPFSSDFLD.....ESVLISQFLLOOQ.....DDDNPS.....
 AtTCP12HHHYSPPSFPFSSDFLESFDESFLINQFLLOOQDVAANVVESE.....
 BjTCP18aPLD.....HHYQFLQAPSSFSQFEFVDFALVASFLPONNGHNDNQITITNDHNNHHHH.....
 BjTCP18dLLDHHHHHHHHQFLQTPSCFSHFESVDFALLASFLPONNGHNDNQITIN.....NSHHH.....
 BjTCP18bHLD.....HHHQFLQAPSSFSQFEFVDFALLASFLPONIAHNDNQITIN.....DHH.....
 BjTCP18cHLD.....HHHQFLQAPSSFSQFEFVDFALLASFLPONIGHNDNQITIN.....DHH.....
 AtTCP18HLD.....HHHQFLQAPSSFSQFEFVDFALLASFLPONIGHNDNQITIN.....DHH.....
 BjTCP17aMGIKQEGDNQYQATSLSSLRQ.....
 BjTCP17bSMGIKQEGDNLYQTTSLSSLRQ.....
 AtTCP17MGIKKE.DQKSSLSLLTORWN.....
 BjTCP5cMLEQPQPSFVSSSRQWTSAPR.....
 BjTCP5aHVPAAESASPAPASRQWTSAPR.....
 BjTCP5bNMLQQQQQPVSSSSRQWTSAPR.....
 AtTCP5HMLQQQQPSSVSSSRQWTSAPR.....
 BjTCP13aEAVATTKRPATISSSSSWMKSK.....
 BjTCP13cVAVATTKRPASTSSSSSWMKSK.....
 AtTCP13VVVAVATSGKPKVKKKPTSISSSSSWMKSK.....
 BjTCP24aETEVRATSGKPKVKKKPTSISSSSSWMKSK.....
 BjTCP24bDIDAQQQTSRKLQRISDNDNRNEMRDWNNP.....
 BjTCP24cDIDAQQQTSRKLQRISDNDNRNEMRDWNNP.....
 BjTCP24dQOQQQQQTSRKLQRISDNDNRNEMRDWSDP.....
 AtTCP24ETOQQQQRSRKLQRISDNDNRNEMRDWSDP.....
 BjTCP2aELQKHQEQSRKLQRIFSE.DNTGLMRNWNPN.....
 BjTCP2d
 BjTCP2b
 BjTCP2c
 AtTCP2MIGDLMKNNNGDVVDNEVNNRSLRWHHN.....
 BjTCP3
 AtTCP3DHFLDSPSPPLLEMRHHQSATENGGGCGEIV.....
 AtTCP4SDDQFHPPPPSSMRHRSTSDAADGGGCGEIV.....
 AtTCP16
 AtTCP10MGLKGYSVGEGGGEIVEVQGG.....

BjTCP19QEVGFLOQVPTAPKR.....PFSKDRH
AtTCP19YLQPVKTKPAPKR.....PTSKDRH
BjTCP9aLEVPSISMALAPPSSSIGPPLKR.ASTKDRH
BjTCP9cLEVPSISMALAPPSSSIGPPLKR.ASTKDRH
BjTCP9bLQVPSTSMALAPPSSSIGPPLKR.ASTKDRH
BjTCP9dPSLSVSMALAPPSSSSTMRPPLKR.ASTKDRH
AtTCP9VMPFSMALAPPSSSTG.PPLKR.ASTKDRH
AtTCP11FGVSKSSSSGGGICIS.....ARTKDRH
BjTCP21bMTNGVIVEHTSATNNKGPLNAVKKPPTKDRH
BjTCP21dMTNGVIVEHTSATNNKGPLNAVKKPPTKDRH
BjTCP21aVPNGVIVEHLS.AVNKGTLNAVKKPPTKDRH
BjTCP21eVPNGVIVEHTSATNNKGPLNAVKKPPTKDRH
BjTCP21cVTN.GAIVEHTSAANKGTLNAVKKPPTKDRH
BjTCP21fVTTNGAIVEHLS.....KGTNAVKKPPTKDRH
AtTCP21VSNGIIVEHTSATNNKGPLNAVKKPPTKDRH
BjTCP7aQRQQQQQQQNLKQSSD.GALVVKKPPAKDRH
BjTCP7eQRQQQQQQQNLKQSSD.GALVVKKPPAKDRH
BjTCP7bMSNNNDGALVVKKPPAKDRH
BjTCP7dMSNSNDGALAVKKPPAKDRH
BjTCP7cMSNSNDGALAVKKPPAKDRH
AtTCP7NNDGLMISSNGALIEQQPSVVVKKPPAKDRH
BjTCP22aAT.....SSSTSTSSGTALAVVKKPAVKK.PSKDRH
BjTCP22cSSSTSTSSGTALAVVKKPAVKK.PSKDRH
AtTCP22QHGN.....ISTATSSTSSGTALAVVKKPAVKK.PSKDRH
BjTCP22bGSPV.....STALAVVKKPAVKK.PSKDRH
BjTCP22dGSPV.....STALAVVKKPAVKK.PSKDRH
AtTCP23LTTTAPNSTTTTVAAKTPAKRPSKDRH
BjTCP8aPEDPTTSSP.ATAAATTS.GVVTKRSTKDRH
BjTCP8bPEDPTTSSP.ATAAATTS.GVVTKRSTKDRH
AtTCP8PEDSTLATTSTATATTT.....KRSTKDRH
BjTCP15aEPNSEPNALS.KTPPPKRSTKDRH
BjTCP15dEPNSDPNALS.KKPPPKRSTKDRH
BjTCP15cEPNSDPNALS.KKPPPKRSTKDRH
BjTCP15eEPNSDPNALS.KKPPPKRSTKDRH
BjTCP15bEPNSDPNALS.KKPPPKRSTKDRH
BjTCP15fEPNSDPNALS.KKPPPKRSTKDRH
AtTCP15EPNSEP.....KKPPPKRSTKDRH
BjTCP14aQLS..OTQTOPQOKPQPKDLOVTOEETAVAVAKKPPPKRSTKDRH
BjTCP14bSOSQOSQOSQOSQOTQKELLOTOEESAVVAKKPPPKRSTKDRH
AtTCP14HHSKPAEVKDFQIVVAS.....DKEPNKKP.QONQLGPKRSSNKRDRH
BjTCP20aHHSKPAEVKDFQIVVAS.....DSSSKQQONQNLGPKRSSNKRDRH
AtTCP20cNRKPTTEIKDFQIVVAS.....DKEPNKKSQNQLGPKRSSNKRDRH
BjTCP20bLHNKPAEVKDFQIVVAS.....DSSSKQQONQNLGPKRSSNKRDRH
BjTCP6TETEVEKVLNNTVEGKRRKGGRE.....IQTKSRKDRH
AtTCP6KRKQTEVKGFDIVVGEKRRKGGRE.....IQTKSRKDRH
BjTCP1aGFEIPEVPREIKKAVKKDRHSKIH
BjTCP1eGFEIPEVPREIKKAVKKDRHSKIH
BjTCP1bGFKIHEVREIKKAVKKDRHSKIH
BjTCP1cGFEIPEASREIKKAVKKDRHSKIH
BjTCP1dGFQIPEVREIKKAVKKDRHSKIH
AtTCP1GFEIPEVREIKKAVKKDRHSKIH
BjTCP12aRKLRELEQEKKNEEWDGTTSEKVSRRRTGKKRDRHSKIC
BjTCP12bRKLCKELEKKEKKEEWDGTTSEKVSRRRTGKKRDRHSKIC
AtTCP12WKFKKLELKKKNEKVDGTTSEKVSRRRTGKKRDRHSKIC
BjTCP18aLVEPLETIATHIEDSORISTSDPKMKNVKKPSRTDRHSKIK
BjTCP18dLVEPLETIATHIEDSORISTSDPKMKNVKKPSRTDRHSKIK
BjTCP18bLVEPLETIATHIEDSORISTSDPKMKNVKKPSRTDRHSKIK
BjTCP18cLVEPLETIATHIEDSORISTSDPKMKNVKKPSRTDRHSKIK
AtTCP18LVEPLETIATHIEDSORISTSDPKMKNVKKPSRTDRHSKIK
BjTCP17aNPRIVRASRIFFGGKDRHSKVC
BjTCP17bNPRIVRASRIFFGGKDRHSKVC
AtTCP17NPRIVRASRIFFGGKDRHSKVC
BjTCP5cNPRIVRSRAFGGKDRHSKVC
BjTCP5aNPRIVRSRAFGGKDRHSKVC
BjTCP5bNPRIVRSRAFGGKDRHSKVC
AtTCP5NPRIVRSRAFGGKDRHSKVC
BjTCP13aDPRIVRSRAFGGKDRHSKVC
BjTCP13cDPRIVRSRAFGGKDRHSKVC
BjTCP13bDPRIVRSRAFGGKDRHSKVC
AtTCP13DPRIVRSRAFGGKDRHSKVC
BjTCP24aSSRIIRVSRASGGKDRHSKVL
BjTCP24bSSRIIRVSRASGGKDRHSKVL
BjTCP24cSSRIIRVSRASGGKDRHSKVL
BjTCP24dSSRIIRVSRATGGKDRHSKVL
AtTCP24SSRIIRVSRASGGKDRHSKVL
BjTCP2aSSRIIRVSRASGGKDRHSKVL
BjTCP2dSSRIIRVSRASGGKDRHSKVL
BjTCP2bSSRIIRVSRASGGKDRHSKVL
BjTCP2cSSRIIRVSRASGGKDRHSKVL
AtTCP2SSRIIRVSRASGGKDRHSKVL
BjTCP3EVQGGHIVRSTGRKDRHSKVC
AtTCP4EVQGGHIVRSTGRKDRHSKVC
AtTCP16MDSKNGINNSQKARRTPKDRH
AtTCP10HIIRATGRKDRHSKVF

	6Q	7Q	8Q	9Q	10Q
BjTCP19	KVEGR	RRIRMPAGCAARI	FQITRE	LGHKSDGTE	TRWLL
AtTCP19	KVEGR	RRIRMPAGCAARI	FQITRE	LGHKSDGTE	TRWLL
BjTCP9a	KVEGR	RRIRMPATCAARI	FQITRE	LGHKSDGTE	TRWLL
BjTCP9c	KVEGR	RRIRMPATCAARI	FQITRE	LGHKSDGTE	TRWLL
BjTCP9b	KVEGR	RRIRMPATCAARI	FQITRE	LGHKSDGTE	TRWLL
BjTCP9d	KVEGR	RRIRMPATCAARI	FQITRE	LGHKSDGTE	TRWLL
AtTCP9	KVEGR	RRIRMPATCAARI	FQITRE	LGHKSDGTE	TRWLL
AtTCP11	KVNGR	SSRVTMPALAAARI	FQITRE	LGHKTEGETE	TEWLLS
BjTCP21b	SKVDGR	RRIRMPITCAARV	FQITRE	LGHKSDGQ	TEWLLR
BjTCP21d	SKVDGR	RRIRMPITCAARV	FQITRE	LGHKSDGQ	TEWLLR
BjTCP21a	SKVDGR	RRIRMPITCAARV	FQITRE	LGHKSDGQ	TEWLLR
BjTCP21e	SKVDGR	RRIRMPITCAARV	FQITRE	LGHKSDGQ	TEWLLR
BjTCP21c	SKVDGR	RRIRMPITCAARV	FQITRE	LGHKSDGQ	TEWLLR
BjTCP21f	SKVDGR	RRIRMPITCAARV	FQITRE	LGHKSDGQ	TEWLLR
AtTCP21	SKVDGR	RRIRMPITCAARV	FQITRE	LGHKSDGQ	TEWLLR
BjTCP7a	SKVDGR	RRIRMPITCAARV	FQITRE	LGHKSDGQ	TEWLLR
BjTCP7e	SKVDGR	RRIRMPITCAARV	FQITRE	LGHKSDGQ	TEWLLR
BjTCP7b	SKVDGR	RRIRMPITCAARV	FQITRE	LGHKSDGQ	TEWLLR
BjTCP7d	SKVDGR	RRIRMPITCAARV	FQITRE	LGHKSDGQ	TEWLLR
BjTCP7c	.....	...MPIICAAARV	FQITRE	LGHKSDGQ	TEWLLR
AtTCP7	SKVDGR	RRIRMPITCAARV	FQITRE	LGHKSDGQ	TEWLLR
BjTCP22a	KVDGR	RRIRMPALCAARV	LQITRE	LGHKSDGTE	TEWLLQ
BjTCP22c	KVDGR	RRIRMPALCAARV	FQITRE	LGHKSDGTE	TEWLLQ
AtTCP22	KVDGR	RRIRMPAMCAARV	FQITRE	LGHKSDGTE	TEWLLQ
BjTCP22b	KVDGR	RRIRMPAVCAARV	FQITRE	LGHKSDGTE	TEWLLQ
BjTCP22d	KVDGR	RRIRMPAVCAARV	FQITRE	LGHKSDGTE	TEWLLQ
AtTCP23	KVDGR	RRIRMPAICAAARV	FQITRE	LGHKSDGTE	TEWLLQ
BjTCP8a	KVDGR	RRIRMPALCAARV	FQITRE	LGHKSDGTE	TEWLLQ
BjTCP8b	KVDGR	RRIRMPALCAARV	FQITRE	LGHKSDGTE	TEWLLQ
AtTCP8	KVDGR	RRIRMPALCAARV	FQITRE	LGHKSDGTE	TEWLLQ
BjTCP15a	KVEGR	RRIRMPAMCAARV	FQITRE	LGHKSDGTE	TEWLLQ
BjTCP15d	KVDGR	RRIRMPAMCAARV	FQITRE	LGHKSDGTE	TEWLLQ
BjTCP15c	KVEGR	RRIRMPAMCAARV	FQITRE	LGHKSDGTE	TEWLLQ
BjTCP15e	KVEGR	RRIRMPAMCAARV	FQITRE	LGHKSDGTE	TEWLLQ
BjTCP15b	KVEGR	RRIRMPAMCAARV	FQITRE	LGHKSDGTE	TEWLLQ
BjTCP15f	KVEGR	RRIRMPAMCAARV	FQITRE	LGHKSDGTE	TEWLLQ
AtTCP15	KVEGR	RRIRMPAMCAARV	FQITRE	LGHKSDGTE	TEWLLQ
BjTCP14a	.....	...MPALCAARV	FQITRE	LGHKSDGTE	TEWLLQ
BjTCP14b	KVDGR	RRIRMPALCAARV	FQITRE	LGHKSDGTE	TEWLLQ
AtTCP14	KVDGR	RRIRMPALCAARV	FQITRE	LGHKSDGTE	TEWLLQ
BjTCP20a	KVEGR	RRIRMPALCAARI	FQITRE	LGHKSDGTE	TEWLLQ
BjTCP20c	KVEGR	RRIRMPALCAARI	FQITRE	LGHKSDGTE	TEWLLQ
AtTCP20	KVEGR	RRIRMPALCAARI	FQITRE	LGHKSDGTE	TEWLLQ
BjTCP20b	.....	...DKEFNNDGTE	TEWLLQ		
BjTCP6	KVEGR	RRVRLPPLCAARI	FQITRE	LGHKTDGTE	TEWLLR
AtTCP6	KVEGR	RRVRLPPLCAARI	FQITRE	LGHKTDGTE	TEWLLR
BjTCP1e	TAQGLR	RRVRLSIGVAROF	FDIQDMLG	FDKASE	LDWLLK
BjTCP1b	TGQGLR	RRVRLSIGVAROF	FDIQDMLG	FDKASE	LDWLLK
BjTCP1c	TGQGLR	RRVRLSIGVAROF	FDIQDMLG	FDKASE	LDWLLK
BjTCP1d	TAQGLR	RRVRLSIGVAROF	FDIQDMLG	FDKASE	LDWLLK
AtTCP1	TAQGLR	RRVRLSIGVAROF	FDIQDMLG	FDKASE	LDWLLK
BjTCP12a	TAQGLR	RRMRLSLQIAROF	FDIQDMLG	FDKASE	TEWLLS
BjTCP12b	TAQGLR	RRMRLSLQIAROF	FDIQDMLG	FDKASE	TEWLLS
AtTCP12	TAQGLR	RRMRLSLQIAROF	FDIQDMLG	FDKASE	TEWLLS
BjTCP18a	AKGTR	RRMRLSLDVAKEL	FGIQDMLG	FDKASE	TEWLLT
BjTCP18d	AKGTR	RRMRLSLDVAKEL	FGIQDMLG	FDKASE	TEWLLT
BjTCP18b	AKGTR	RRMRLSLDVAKEL	FGIQDMLG	FDKASE	TEWLLT
BjTCP18c	AKGTR	RRMRLSLDVAKEL	FGIQDMLG	FDKASE	TEWLLT
AtTCP18	AKGTR	RRMRLSLDVAKEL	FGIQDMLG	FDKASE	TEWLLT
BjTCP17a	VRGLR	RRIRLSATTAIQLYDI	QERLGLSQPSKVIDWLL		
BjTCP17b	VRGLR	RRIRLSATTAIQLYDI	QERLGLSQPSKVIDWLL		
AtTCP17	VRGLR	RRIRLSVMTAIQVYDI	QERLGLSQPSKVIDWLL		
BjTCP5c	VRGLR	RRIRLSVPTAIQLYDI	QERLGLSQPSKVIDWLL		
BjTCP5a	VRGLR	RRIRLSVPTAIQVYDI	QERLGLSQPSKVIDWLL		
BjTCP5b	VRGLR	RRIRLSVPTAIQLYDI	QERLGLSQPSKVIDWLL		
AtTCP5	VRGLR	RRIRLSVPTAIQLYDI	QERLGLSQPSKVIDWLL		
BjTCP13a	LRGLR	RRVRLSVPTAIQLYDI	QERLGLDQPSKAVDWLL		
BjTCP13c	LRGLR	RRVRLSVPTAIQLYDI	QERLGLDQPSKAVDWLL		
BjTCP13b	LRGLR	RRVRLSVPTAIQLYDI	QERLGLDQPSKAVDWLL		
AtTCP13	LRGLR	RRVRLSVPTAIQLYDI	QERLGLDQPSKAVDWLL		
BjTCP24a	SKGLR	RRIRLSVATAIQFYDI	QDRLGFQDQPSKAVEWLL		
BjTCP24b	SKGLR	RRIRLSVATAIQFYDI	QDRLGFQDQPSKAVEWLL		
BjTCP24c	SKGLR	RRIRLSVATAIQFYDI	QDRLGFQDQPSKAVEWLL		
BjTCP24d	SKGLR	RRIRLSVATAIQFYDI	QDRLGFQDQPSKAVEWLL		
AtTCP24	SKGLR	RRIRLSVATAIQFYDI	QDRLGFQDQPSKAVEWLL		
BjTCP2a	.....	.....	.....	.....	.....
BjTCP2d	.....	.....	.....	.....	.....
BjTCP2b	.....	.....	.....	.....	.....
BjTCP2c	.....	.....	.....	.....	.....
AtTCP2	SKGPR	RRVRLSVSTALQFYDI	QDRLGYDQPSKAVEWLL	KAAEDSISELPSLNTHFPT	
BjTCP3	.....	.....	DRLGFDRPSKAVDWLL	KAKS	
AtTCP3	AKGPR	RRVRLSAPTAIQFYDYVQDR	LGFDRPSKAVDWLL	KAKS	
AtTCP4	AKGPR	RRVRLSAHTAIQFYDYVQDR	LGFDRPSKAVDWLL	KAKT	
AtTCP16	LKIGGR	RRIRIPPSVAPQLFR	LTKELGFKTDGTE	TVSWLLQ	
AtTCP10	SKGPR	RRVRLSAHTAIQFYDYVQDR	LGFDRPSKAVDWLL	K	

	110	120	130	140					
BjTCP19	EPA	TEATGTG	TIPAI	AVSVNG	ALKIPT	DSTPQ	FESDGG	SSG	.....
AtTCP19	EPA	TEATGTG	TIPAI	AVSVNG	TLKIPT	SSPVL	NDGGR	DGD	.....
BjTCP9a	EPA	IAATGTG	TIPAI	AMSVNG	TLKIPT	TNNAD	ADVAEN	PAK	.....
BjTCP9c	EPA	IAATGTG	TIPAI	AMSVNG	TLKIPT	TNNAD	ADLSEN	PAK	.....
BjTCP9b	EPA	IAATGTG	TIPAI	AMSVNG	TLKIPT	TNNAD	SDVDNS	SAK	.....
BjTCP9d	EPA	IAATGTG	TIPAI	AMSVNG	TLKIPT	TNNAD	SDAGDN	PAK	.....
AtTCP9	EPA	IAATGTG	TIPAI	AMSVNG	TLKIPT	TNNAD	SDMGEN	LMK	.....
AtTCP11	EPA	IAATGYG	TK	.....	.....	.....	.....	.....	.....
BjTCP21b	EPA	IAATGTG	TTPASF	STASLS	ASSS	PPFALG	.....	KRVL	RGEE
BjTCP21d	EPA	IAATGTG	TTPASF	STASLS	SSSS	PFILG	.....	KRVV	RAEE
BjTCP21a	EPA	IAATGTG	TTPASF	STASLS	TSSS	SFILG	.....	KRGV	RAGE
BjTCP21e	EPA	VAATGTG	TTPASF	STASLS	TSSS	SFILG	.....	KRVV	RAGE
BjTCP21c	EPA	IAATGTG	TTPASF	STASLS	TSSS	PFILG	.....	KRVV	RAEE
BjTCP21f	EPA	IAATGTG	TTPASF	STASLS	SSSS	PPFALG	.....	KRVV	RAEE
AtTCP21	EPA	IAATGTG	TTPASF	STASLS	TSSS	PFILG	.....	KRVV	RAEE
BjTCP7a	EPA	IAATGTG	TTPASF	STASV	VRGSS	TTTIST	STNCTL	SSSL	.....
BjTCP7e	EPA	IAATGTG	TTPASF	STASV	VRGNS	TTTIST	SANCTL	SSSL	.....
BjTCP7b	EPA	IAATGTG	TTPASF	STASV	LRGNS	TTT	.....	TNC	SLSS
BjTCP7d	EPA	IAATGTG	TTPASF	STASV	LRGNS	TTT	.....	TNC	ALSP
BjTCP7c	EPA	IAATGTG	TTPASF	STST	TCTIS	.....	SSSL	.....	.....
AtTCP7	EPA	IAATGTG	TTPASF	STASV	IRGATN	STSS	.....	LDHK	.....
BjTCP22a	EPA	IASTGTG	TIPANF	STLNAT	LRG	GGG	STIFA	QSSK	SSP
BjTCP22c	EPA	IASTGTG	TIPANF	STLNAT	LRG	GGGG	STIFA	QSSK	SSP
AtTCP22	EPA	IASTGTG	TIPANF	STLNAT	LRG	GGG	STLFS	QASSK	SSSPLS
BjTCP22b	EPA	IATTTGT	TIPANF	STLNAT	LRG	GGGGGG	STVFA	QSSK	SSSPLMS
BjTCP22d	EPA	IATTTGT	TIPANF	STLNAT	LRG	GGGGGG	TVFA	QSSK	SS
AtTCP23	EPA	IAATGTG	TIPANIS	TLNIS	LRSS	SGSTL	SAPLS	KSFH	MGR
BjTCP8a	EPA	VAATGTG	TIPANF	SSLV	SLRSG	STLS	APPS	KSV	PLYG
BjTCP8b	EPA	VAATGTG	TIPANF	SSLV	SLRSG	STLS	APPS	KSV	PLYG
AtTCP8	EPA	VAATGTG	TIPANF	SSLV	SLRSG	STLS	APPS	KSV	PLYG
BjTCP15a	EPA	IAATGTG	TIPANF	ASLNIS	LRSS	SRSSLS	AAHLRT	.....	.....
BjTCP15d	EPA	IAATGTG	TIPANF	ASLNIS	LRSS	SRSSLS	AAHLRS	.....	.....
BjTCP15c	EPA	IAATGTG	TIPANF	ASLNIS	LRSS	SRSSLS	AAHLRT	.....	.....
BjTCP15e	EPA	IAATGTG	TIPANF	ASLNIS	LRSS	SRSSLS	AAHLRT	.....	.....
BjTCP15b	EPA	IAATGTG	TIPANF	ASLNIS	LRSS	SRSSLS	AAHLRT	.....	.....
BjTCP15f	EPA	IAATGTG	TIPANF	ASLNIS	LRSS	SRSSLS	AAHLRT	.....	.....
AtTCP15	EPA	IAATGTG	TIPANF	ASLNIS	LRSS	SRSSLS	AAHLRT	.....	.....
BjTCP14a	EPA	IAATGTG	TIPANF	ASLNIS	LRSS	SGSSML	PSHYR	NAAST	FSPNNIF
BjTCP14b	EPA	IAATGTG	TIPANF	ASLNIS	LRSS	SGSSML	PSHYR	NAAST	FSPNNIF
AtTCP14	EPA	IAATGTG	TIPANF	ASLNIS	LRSS	SGSSML	PSHYR	NAAST	FSPNNIF
BjTCP20a	EPA	IAATGS	GTPAS	ALASAAA	AVSSH	HLLQGG	SLTAGL	MISH	ELDGG
BjTCP20c	EPA	IAATGS	GTPAS	ALASAAA	AVSNH	HLLQGG	SLTAGL	MISH	ELDGGGG
AtTCP20	EPA	IAATGS	GTPAS	ALASAAA	AVSNH	HLLQGG	SLTAGL	MISH	ELDGGSS
BjTCP20b	EPA	IAATGS	GTPAS	ALASAAA	AVSNH	HLLQGG	SLTAGL	MISH	ELDGG
BjTCP6	EPA	ISATDS	.....	VSQ	PPH	AVD	.....	.....	.....
AtTCP6	EPA	LSATV	NGIK	PTES	VVS	QPP	LTAD	.....	.....
BjTCP1a	SRRG	NELVQ	EKKL	NNK	DGDY	GNNR	GGVED	DEED	.....
BjTCP1e	SRRR	KELVQ	EKKL	NNK	DDDF	GNNR	GGVED	DEED	.....
BjTCP1b	SRRR	KELVQ	EKKL	NNN	TDED	FGNK	GGVEE	EEEGD	.....
BjTCP1c	SRRR	KELVQ	EKKL	NNN	TDKD	SGNI	GGVEE	EEEEEE	.....
BjTCP1d	SRRR	KELVQ	EKKL	SN	NDEDF	GNN	GGNVE	KEDEDD	.....
AtTCP1	SRKA	KEVVO	AKN	LNN	DDDF	FGNI	GGVEE	EEEEKEED	.....
BjTCP12a	SKAS	KOVKE	SAAA	ASG	.....	NHEH	LQVSD	NVND	.....
BjTCP12b	SKAS	KOVKE	SAA	ASG	GGGGGG	NHEH	LQVSEN	AND	.....
AtTCP12	SKTS	KQLK	ERVA	ASEGG	.....	GKDE	HQVDE	KEKD	.....
BjTCP18a	AKPE	I	KIANS	LSNQ	FNHG	PFSS	CEESOP	.....	.....
BjTCP18d	AKPE	I	KIANS	LSNQ	FNHG	PFSS	CEESOP	.....	.....
BjTCP18b	AKPE	I	KIANS	LSNQ	FNHG	PFSS	CEESOP	.....	.....
BjTCP18c	AKPE	I	KIANS	LSNQ	FNHG	PFSS	CEESOP	.....	.....
AtTCP18	AKPE	I	KIAT	TLS	.....	HGCF	SSGDES	HIRP	VLGSM
BjTCP17a	AQND	V	AML	PLP	LQ	PPG	.....	FHP	NLTAAA
BjTCP17b	AQND	V	AML	PLP	LQ	PPG	.....	FHL	NLPTAT
AtTCP17	AKND	V	DL	PLP	LQ	PPG	.....	FHL	NPNLTGL
BjTCP5c	AKDD	V	KL	PLP	LQ	PHG	.....	FNQ	MPNLI
BjTCP5a	AKDD	V	DL	PLP	LQ	PHG	.....	FNQ	MPNLI
BjTCP5b	AKDD	V	KL	PLP	LQ	PHG	.....	FNQ	MPNLI
AtTCP5	AKDD	V	KL	PLP	LQ	PHG	.....	FNQ	MPNLI
BjTCP13a	AKEE	I	DEL	PLP	LPV	SPET	FTL	FNH	HQSP
BjTCP13c	AKEE	I	DEL	PLP	LPV	SPET	FTL	FNH	HQSP
BjTCP13b	AKEE	I	DEL	PLP	LPV	SPET	FTL	FNH	HQSP
AtTCP13	AKEE	I	DEL	PLP	LPV	SPEN	FI	FNH	HQSP
BjTCP24a	AADS	I	SEL	PP	INT	SFD	QALS	.....	LSKS
BjTCP24b	AADS	I	SEL	PP	INT	SFD	QALS	.....	LSKS
BjTCP24c	AADS	I	SDL	NP	IDT	NFD	.....	QTL	SLSKS
BjTCP24d	AADS	I	SEL	NP	IDT	NFD	.....	QTL	SLSKS
AtTCP24	AADS	I	SDL	NP	IDT	NFD	.....	QTL	SLSKS
BjTCP2a	NDDEN	Q	I	Q	T	V	GASP	.....	AAAA
BjTCP2d	TD	EN	Q	I	Q	T	V	GVS	.....
BjTCP2b	MND	DE	Q	I	Q	T	V	GVS	.....
BjTCP2c	NDD	EN	Q	I	P	T	L	GAS	PTAAA
AtTCP2	DD	EN	Q	I	Q	T	L	T	V
BjTCP3	AID	GL	LA	EL	PP	WNP	ADAI	RQ	AAAAN
AtTCP3	AID	DL	LA	EL	PP	WNP	ADAI	RQ	HAAAAAN
AtTCP4	SIDE	L	LA	EL	PP	WNP	ADAI	RQ	LAAAAN
AtTCP16	EPA	FAAT	G	H	G	V	T	T	S
AtTCP10	AKTA	D	K	L	E	L	G	E	T

BjTCP19KRRRRNCTSEFVDINR.QDSSVTS.....
AtTCP19LIKRRRRNCTSDFVDVNDSCSSSVTS.....
BjTCP9aKRRKRPSNSEYIDINEPVSVSVSS.....
BjTCP9cKRRKRPSNSEYIDINEAASVSS.....
BjTCP9bKRRKRPSNSEYIDINEAVTVSVSSGLAPISSGL
BjTCP9dKRRKRPSNSEYIDINEAVSVSVSSGLAPISSGL
AtTCP9KRRKRPSNSEYIDISDAVSASSGLAPIAATTTTI
AtTCP11LISNVWVDAADSSSSSS.....
BjTCP21bGESVGPGGGELTVGHAMS.....
BjTCP21dGESGGGGGGHTV GASLMS.....
BjTCP21aGEAGAGGGG.LTVGPTMG...AS.....
BjTCP21eGVAGAGGGGGLTVGHMTG...AS.....
BjTCP21cGESGAGGG.ELSVGHTMG.....
BjTCP21fEESGGGGGGELSVGHTMGSSVM.....
AtTCP21GESGGGGGGGLTVGHMTGSLMG.....
BjTCP7aDHK.....PFI LGRRLREDSGGGKDD.....
BjTCP7eDHKPLLGSPPILGRRLRADEVSGKDESH.....
BjTCP7bDQKPLLGSPPILGRVRADED.....
BjTCP7dDHKPLLGSPPILGRVRADED.....
BjTCP7cDHKPLLGSPPILGRVRREGFGG.....
AtTCP7PTSLGGTSPFILGRVRADEDSSNNSHNS.....
BjTCP22a FHSSTGMSLYEDSNGTNGSSSSAAKLLN.AATAAQNAAVFGFHHQGYQPIMSAERNP..PT
BjTCP22b FHSSTGMSLYEDSNGANGSSSSAVVDP SRKLLNAQNAAVFGFHHQVYPPIT.....PT
AtTCP22 FHSSTGMSLYEDNNGTNGSS...VDP SRKLLNSAANAAVFGFHHQMYPPIMSTERNP..NT
BjTCP22c FHGSGMSLYDDSNANGSSSSVVVDH SRKLLNGG...VFGFHHPPIMSAE.....
BjTCP22d FHSSGMSLYDDSNANGSSSSAVVVDH SRKLLNGG...VFGFHHPPIMSAE.....
AtTCP23AAQNAAVFGFQQQLYHPHHITDSSSSSL
BjTCP8aALGLTHHQYEQ...GGAFGAHTPPLLGFHHHLQHQHQHQHQQA.PA
BjTCP8bALGLSHHHHQYEEQGGGAFGPHTPPLLGFHHHLQHQ...QLHQQA.PA
AtTCP8ALGLTHHQYDEQG.GGGVFAAHTSPLLGFHHHLQHQHQHQNDP.VE
BjTCP15aAPSSYFHSPTM.....AHPHOV
BjTCP15dNPSSYFHP.....HOV
BjTCP15cTPSSYFHSPTM.....AHHOV
BjTCP15eTPSSYFHSPTM.....AHHOV
BjTCP15bTPSNYYFHSPAMAQHHL...QQQLHOV
BjTCP15fTPSSYFHSPTMSQHHLHQHQHQHQHHV
AtTCP15TPSSYFHSPHQSMTHH...LQHGOV
BjTCP14a Q.RSGGGGFLPHPHHLQGRATTSLLFP GIDNFTPTTSFLNFHNPKQEGDQDSSEELSPDK
BjTCP14b QQRSGGGGFLPHPHHLQGRATTSLLFP GIDNFTPTTSFLNFHNPKQEGDQDSSEELSSDK
AtTCP14 Q.QQRGGGVGFHHPHLQGRAPTSSLLFP GIDNFTPTTSFLNFHNPKQEGDQDSSEELNSEK
BjTCP20aSSSRPNWVGVGDDGGS.....
BjTCP20cSSSRPNWVGVGDDGGS.....
AtTCP20SSGRPLNWGIGGEGVS.....
BjTCP20bGGRPSWVGVGGEASR.....
BjTCP6LNLDDGSSRSQ.....
AtTCP6LMICHSVVEASR.....
BjTCP1aGDKSFVYGWSPD.SCEEVVEVKKTEKS.....NV
BjTCP1eGDKSFVYGLSPD.SCEEVVEVKKTAVKS.....NI
BjTCP1bDGDKSFLYGSPPDSWEEVACEVKKAKQRNKKIDLSNI
BjTCP1cEDGDESFVYGSPPDSCKEEVVEVCKKAEKRKKNIELSNI
BjTCP1dDVGDKSFLYGSPPDSCKEEVVEVCKKAEKRKKNIELSNI
AtTCP1DNMGKSFVYGLSPGYGEEVVEVCEATKAGIRKXKSELRNI
BjTCP12aETQKVS...GRTKRVDSCKKKQREKAR.....
BjTCP12bETLKVSM...RRAKRVEDSCKKESREKAR.....
AtTCP12ETLKLVRVKRRRTKMTESFCKTESREKAR.....
BjTCP18aGTVEDRGSNTNSTETRGNKVDGRSMRGKRRKMLQARTPILKK
BjTCP18dQTRGNKVDGRSMRGKRRMSQRPRTPILKK
BjTCP18bWTVEDRGSN...TSMTENKVDGRTMRGKRRMSQR.TPILKE
BjTCP18cWTVEDRSSN...TSMTENKVDGRTMRGKRRMSQR.TPILKE
AtTCP18WTVEDRGSNTNSTETRGNKVDGRSMRGKRRKREPRTPILKK
BjTCP17aESFPGIFESFELGSCSSRTDT.....TQKEG
BjTCP17bESFPGIFENFDLGSCSSRAET.....TQRES
AtTCP17ESFPGVFDLGRTOREALDLEK.....RKWVN
BjTCP5cESSSTSAPPGTNYINLGLQSWDLGGSSSRTRSRIIDTTTTL.RES
BjTCP5aESSSTSAAAFPGTINLGFLESWNLGGSSSRTRSRIADTTP...RES
BjTCP5bESSSTS...AFPGSNLGFLESYDLGGSSSRTRSRIQDTTTTTPRET
AtTCP5ESPSSTTSTFPGTINLGFLENWDLGGSS.RTRARLDTTTTTQ.RES
BjTCP13aPGQDPTQLGFKINGCVEESTTTTSSREENNKEKEDVVF
BjTCP13cPGQDPIQLGING...STTTTTSSREENNKEKEDVVF
AtTCP13PGQDPTQLGFKINGCVEESNTTTTSSREE.....
BjTCP24aSES...SLLSLSRTE SRGKARERARERTAKD...DKDL
BjTCP24bSES...SLLSLSRTE SRGKARERARERTAKEK...DKDL
BjTCP24cSES...SLLSLSRTE SRGKRTSKEK.....D
BjTCP24dSES...SLLSLSRTE SRGKARERTAK.....D
AtTCP24SES...SLLSLSRTEIRGKARERARERTAKDR...DKDL
BjTCP2aDTSKNSSGLSLSRSELRDKARERARERTAKETKERDHN..
BjTCP2dDTSKNSSGLSLSRSELRDKARERARERTAKETKERDHN..
BjTCP2bDTSKNSSGLSLSRSELRDKARERARERTAKETKERDGTN..
BjTCP2cDTSKNSSGLSLSRSELRDKARERARERTAKETKERDGN..
AtTCP2DTSKNSSGLSLSRSELRDKARERARERTAKETKERDHN..
BjTCP3TGHHSN.....FLPASVS.....TPH
AtTCP3HRIGEEEDNESSFLPASMDSIADTIKSFPPVAST.....TQS
AtTCP4NNGGAEHPSNNNESSFLPPSMDSIADTIKSFPPVIGSSTEAPSNHNLNMH
AtTCP16LDPEDAMKTFPPATTTTNGGGGTNINFNQNYPHQDDNNMV

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BjTCP19 .....GLAPITASSYGVN.....L
AtTCP19 .....GLAPITASNRYGVN.....I
BjTCP9a .....GLAPASTVAQQTLPQGMIPMMAFPPSNAV.....V
BjTCP9c .....GLAPTSTVAQQTLPQGMIPMMAFPPSNAV.....V
BjTCP9b APISSGLAPVTTVAQQTLPQGMIPMMAFPPSNAV.....I
BjTCP9d APISSGLASVSTVQQTLPQGMIPMMAFPPSNAV.....I
AtTCP9  QP..PQALASSTVAQQLLPQGMYPMMAFPPSNAM.....I
AtTCP11 .....
BjTCP21b .....G
BjTCP21d .....S
BjTCP21a .....L
BjTCP21e .....L
BjTCP21c .....A
BjTCP21f .....S
AtTCP21 .....G
BjTCP7a .....MGSF
BjTCP7e .....ETMGSF
BjTCP7b .....
BjTCP7d .....
BjTCP7c .....
AtTCP7  .....SVGKDEFTT
BjTCP22a LGKPYREDYFKESE..PSGSSSQKPGQFOEQEMGPPGGMGRG..TANVVVPPMMAVAPGTT
BjTCP22b LGKPYREDYFKESE..PSGSSSQKPGQFOEQEMGPPGTVGVRG..TANVVVPPMMAVAPGST
AtTCP22 LVKPYREDYFKEPS..SAAEPSESSQKASQFOEQELAQGRG..TANVVVPPMMAVAPGTT
BjTCP22c .RNPYREDYFNKESSEVPSGSSSQKPGQFOEQELGPPGGMGRGPTASVVVPPMMAVAPGST
BjTCP22d .RNPYREDYFKESSEVPSGSSSQKPGQFOEQELGPPGGMGMG...MGRGVPPMMAVAPGST
AtTCP23 PKTFREEDLFKDPNFLDQEPGSRSPKPGSEAPDQDPGSTRSRTQNMIPPMWALAPTAST
BjTCP8a ETIPGPDGESFSRKRYSRSDSSKEDGEGKQNESKSLKESSEPPAAAATGAPMMAVAPTNR
BjTCP8b ETD...GEGFSRKRYSRSE..KEDDEGKQOSESKSLKESSEPPAAAATGAPMMAVAPTNR
AtTCP8  TIP...EGENFSRKRYSRSDLSKENDDRKQENKSLKESSE..TSGPTAAPMMAVAPPSRS
BjTCP15a RPKHESHSSSSSS..QLLDHNQMGNYLVOSTAGS.....LPTS
BjTCP15d RPKNETHSSSSSS..QLLDHNQMGSYLVOSTAGS.....LPTS
BjTCP15c RPKNESHSSSSSS..QLLDHSQMGNYLVOSTAGS.....LPTS
BjTCP15e RPKNESHSSSSSS..QLLDHSPMGNYLVOSTAGS.....LPTS
BjTCP15b RPKNESDSCSSSS..QLVDHNQMGNYLVOSTAGS.....LPTS
BjTCP15f RPKNESHSSSSSS..QLVDHNQMGNYLVOSTAGS.....LPSS
AtTCP15 RPKNESHSSSSSSQLLDHNQMGNYLVOSTAGS.....LPTS
BjTCP14a KRRLOTTSDLH...HQHDQIGGYTLQSSNSG.....STATTA
BjTCP14b KR...RLQDLH...HQHDQIGAYTLQSSNSG.....STATTA
AtTCP14 KRRLOTTSDLHQQQQHHDQIGGYTLQSSNSG...STATTA
BjTCP20a .....ATAAAQ
BjTCP20c .....RS
AtTCP20 .....RS
BjTCP20b .....RS
BjTCP6 .....
AtTCP6 .....TQ
BjTCP1a SSKGLMDKARGKSKQITREMV.YDHPEAVSEITQ.....
BjTCP1e SSKGLREKARGKSKQITREMT.YDHPETISEITQ.....
BjTCP1b SSKGSRARAKARGKAKELT...YDHPETISEITQ.....
BjTCP1c SSKGSRARAKARGKAKEMT...YDHPETISEITQ.....
BjTCP1d SSKRSRAKALGKAKEIAREMI.SDHPETASEITQ.....
AtTCP1  SSKGLGAKARGKAKERTKEMMAYDNPETASDITQ.....
BjTCP12a .....ERARERTMTKMKMRLSGLIDTSTKTFADPNQ.....
BjTCP12b .....ERARERTMTKMKMRLTGLMDTSTKTFADPNQ.....
AtTCP12 .....KRARERTMAKMKMRLF...ETSETISDHPQ.....
BjTCP18a LSKDERAKARERAKDRTEKMKMRR...SQVTVL.....
BjTCP18d LSKDARAKARERAKDRTEKMKMRR...AQVNVV.....
BjTCP18b MSKDARAKARERAKDRTEKMKMRR...PQVNAVE.....
BjTCP18c MSKDARAKARERAKDRTEKMKMRR...PQVNAVE.....
AtTCP18 LSKEERAKARERAKDRTEKMKMRR...PQVNAVE.....
BjTCP17a LNLES...HGFDIDHHFYSNSNHRDKLYFPSSR.....
BjTCP17b LNLERNSLSHGFDIDHHFYSNSNSQSNKLYPPTL.....
AtTCP17 LDHVPD...HIDHHNHFSNSIQSNKLYPPTI.....
BjTCP5c FDLDKKGKWKHDENSNNHHQEHGFDMNHNHFLTN.....
BjTCP5a FDLDKKGKWKQDENSNNHDDLGFNTHQHFLTN.....
BjTCP5b FDLDKKGKWKHDENNTNHHQDHGFDTNHQHFLSN.....
AtTCP5  FDLDKKGKWKNDENSNNQDHQGFNTNHQOQFPPTN.....
BjTCP13a ANNNHIGSYGTYN.MEHHHQOHS..SFQADYHQH.....
BjTCP13c ANNNHIGSYGTYN.MEHHHQOHS..SFQADYHQH.....
BjTCP13b TNNNHIGSYGTYQYMEQHQQHTRFQADYPHQH.....
AtTCP13 TNNHHVGSYGTYNLEHHHHHHQHLSLQADYHSH.....
BjTCP24a QNAQSS.FTQLLTGGFDEPNRNRWIGG..SSSDCF.....
BjTCP24b QNADQSSFTQLLTGGFDEPNRNRWIGGSSSSSDCF.....
BjTCP24c KDLQSS.FTQLLTGGLDEPNRNRWTGAG..SSDCF.....
BjTCP24d KDLQSS.FTQLLTRGLDEPNRNRWTGAG..STDCF.....
AtTCP24 QNAHSS.FTQLLTGGFDOQPSNRNRWTG..GSDCF.....
BjTCP2a ...TTTSFTDLLNSGSDPVNINRQWMAFSSSSSQ.....
BjTCP2d ...TGSFTDLLNSGSDPVNINRQWMAFSSSPAQ.....
BjTCP2b NHHTTSFTDLLNSGSDPVNINRQWMAFSSSPAQ.....
BjTCP2c NHHTTS.FTDLLNSGSDPVNANRQWMAFSSSPA.....
AtTCP2  ...HTSFTDLLNSGSDPVNSNRQWMAFSSSPA.....
BjTCP3  YHQPPP...SRADAQSO.DLRLSLHSFONGPP.....
AtTCP3  YHQPPP...SRGNTQNDLLRLSLQSFONGPP.....
AtTCP4  YHQHPPDLLSRTNSQNO.DLRLSLQSFDPGPPSLLHHQHH.....HHT
AtTCP16 .....
AtTCP10 SRTTTPPPNLSQDLGLSLHPPFQGNNTVVVPEPN.....N

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180          190          200
BjTCP19  MNVNAQSFVFFWQT...GFVTGGPN
AtTCP19  LNVNTQGFVFFWPMGMGTAFVTTGGPD
BjTCP9a  PTVGAFFLVQNPNSN...QPRILAYPA
BjTCP9c  PTVGAFFLVPHVAVPLSQPOMLAFPA
BjTCP9b  PTVGAFFLVPHVAGPTNQPOMLAFPA
BjTCP9d  PTVGAFFLVPHVAGPTNQPOMLAFPA
AtTCP9   PTVGAFFLIPQIAGPSNQPOLLAFPA
AtTCP11  .....MTSPQ
BjTCP21b GGGGFFWAVPARQDFG
BjTCP21d GSGGFFWAVPARQDFG
BjTCP21a MSGGFFWAVPARPDFG
BjTCP21e MSGGFFWAVPARPDFG
BjTCP21c SGGGFFWAVPARPDFG
BjTCP21f GSGGFFWAVPARPDFG
AtTCP21  GSGGFFWAVPARPDFG
BjTCP7a  ATPAGFFWAVPARPDFG
BjTCP7e  AAPAGFFWAVPARPDFG
BjTCP7b  .TPSGFFWAVPARPDFG
BjTCP7d  .TPSGFFWAVPARPDFG
BjTCP7c  AIPAGFFWAVPARPDFG
AtTCP7   TTPAGFFWAVPARPDFG
BjTCP22a NGGSFFWMLPMSGGGREOMQQO
BjTCP22c NGGSFFWMLPMSGGGREOMQQO
AtTCP22  NGGSFFWMLPMSGGGREOMQQO
BjTCP22b NGGSFFWMLPMSGGGREOMQQO
BjTCP22d NGGSFFWMLPMSGGGREOMQQO
AtTCP23  NGGSFFWMLPVGGGGG..PANVQD
BjTCP8a  AGGNTFFWMLPVPTTAAGNOPAAMESSSNAS.RAHMWP..FGGGG..AGAGGGGATHFMAG
BjTCP8b  AGGNTFFWMLPVPTTAAGNOPAAMESSSNANNRAHMWP..FGAGAGAGGGGGGATHFMAG
AtTCP8   GAGNTFFWMLPVPTTAAGNQMESSNNNTAAGHRAPPMWPFVNSAGGGAGGGGGAATHFMAG
BjTCP15a QTPPTAPFFWSSGDS
BjTCP15d QTPPTAPFFWSSGDS
BjTCP15c QTPATAPFFWSSGDN
BjTCP15e QTPATAPFFWSSGDN
BjTCP15b QTPATAPFFWSSGDN
BjTCP15f QTPATAPFFWSSGDN
AtTCP15  QSPATAPFFWSSGDN
BjTCP14a QIPGNFMMVAAAAAGG...NNNQTGGGSSVGSAGG
BjTCP14b QIPGNFMMVAAAAAGG...NNNQTGGGSSVGSAGG
AtTCP14  QIPGNFMMVAAAAAGGGGNNNQTGGGLMTASIGTGG
BjTCP20a SLPTGLWPNVAGFGAG
BjTCP20c SLPTGLWPNVAGFGAAG
AtTCP20  SLPTGLWPNVAGFGSG
BjTCP20b .....LWPNVAG
BjTCP6   .LANGFWRNETGFGIV
AtTCP6   MEANGLWRNETG
BjTCP1a  .....T
BjTCP1e  .....T
BjTCP1b  .....T
BjTCP1c  .....T
BjTCP1d  .....T
AtTCP1   .....S
BjTCP12a .....V
BjTCP12b .....E
AtTCP12  .....E
BjTCP18a .....D
BjTCP18d .....V
BjTCP18b .....E
BjTCP18c .....E
AtTCP18  .....V
BjTCP17a SCH.....
BjTCP17b STYNSSSSCHYNLG.....QL
AtTCP17  TSS...SSSYHYNLG.....HL
BjTCP5c  PYNNNTSSSYYNLG.....HL
BjTCP5a  LYNNNTSSSYYNLG.....HL
BjTCP5b  PYNNNTSSSYYNLG.....HL
AtTCP5   PYNN..TSAYYNLG.....HL
BjTCP13a QLHSLVPPFSQFLV.....CP
BjTCP13c QLHSLVPPFSQFLV.....CP
BjTCP13b QLHSLVPIQSQFLV.....CP
AtTCP13  QLHSLVPPFSQILV.....CP
BjTCP24a NPVQLIPNSSSSS.....LHHYN.....TNNHRO
BjTCP24b NPVQLIPTTSSSSS.....LHHFN.....SNQTSL
BjTCP24c NPVQLIP.....ADSLN
BjTCP24d NPVQLMPNS.....LNHR.....QEPSLN
AtTCP24  NPVQLQIP.....NSSS
BjTCP2a  MEYLSGGLILGSGO..THFPVQNAHP.....FSD
BjTCP2d  MEYLSGGLILGSGO..THFPVQNAHP.....FSD
BjTCP2b  MEYFSGGLILGSGO..THFPVQNSHPPFLAI.....SDQHHH
BjTCP2c  MEYFSGGLILGSGO..THFPVQNSHPPFLAI.....SDQHHH
AtTCP2   MEYFSGGLILGSGO..THFPVQNSHPPFLAI.....SDQHHH
BjTCP3   FSDQTEHALFSGQSN..PLVFDSSASSWQSO.....QN
AtTCP3   FPNQTEPALFSGQSN..PLVFDSSASSWQSO.....QSPEFG
AtTCP4   SASASEPTLFYQGSN..PLGFDTSSWEQSSSE.....FG
AtTCP16  .....
AtTCP10  FTTHFDTFGRISGWN.....

```

210 220 230
BjTCP19 .. QMGHMWAIPTVAAPSFLNNGGTRPVPSYVSN.....
AtTCP19 .. QMGQMWAIP TVATAPFLNVG . ARPVSSYVSN.....
BjTCP9a .. ATAALPATYVAAVQQASSMARPPPPQVVP.....
BjTCP9c .. SAAASPSTYDAAVQQAPSMSRPPSPRVVPSNGV.....
BjTCP9b .. APP . . SSVYAAVQQASLMARPPFVSVSTPS.....
BjTCP9d .. APPQ . . SSVYAAVQQASSMARPPFPRVDPVT.....
AtTCP9 .. AAAS . PSSYVAAVQQASTMARPPPLQVVPSSGFVS.....
AtTCP11 .. TQTQTPQSPSCRDLDCQPIGIQYVNGYSHMP.....
BjTCP21b .. QVWSFAAGATPEMLFTQ000..... AATLF
BjTCP21d .. QVWSFAAGATPEMLFTQ000..... AATLF
BjTCP21a .. QVWSFAAGAPPEMLFTQ000..... AATLF
BjTCP21e .. QVWSFSGASPEMLFAQ0000..... PATLF
BjTCP21c .. QVWSFAAGAPPEMLFTQ0000..... PATLF
BjTCP21f .. QVWSFAAGAPPEMLFTQ0000..... PATLF
AtTCP21 .. QVWSFATGAPPEMVFAQ000..... PATLF
BjTCP7a .. QVWSFAS . . HQEMFLQ000000..... PAAAAALF
BjTCP7e .. QVWSFAS . . HQEMFLQ000000..... QPAAAAALF
BjTCP7b .. QVWSFAAGATQELFLQ000000..... AAGLVFV
BjTCP7d .. QVWSFAAGATQELFLQ000000..... AALFVH
BjTCP7c .. QVLSFAAGAPHHEMFLQ000000..... AALF
AtTCP7 .. QVWSFAGAPQEMFLQ000000..... LF
BjTCP22a .. PGHQMWAFNPGSYPPVGTGRVVTAP..... MGSMM
BjTCP22c .. PGHQMWAFNPGSYPPVGTGRVVTAP..... MGSMM
AtTCP22 .. PGHQMWAFNPGNYPPVGTGRVVTAP..... MGSMM
BjTCP22b .. PGHQMWAFNPGSYPPVGTGRVVTAP..... MGSMM
BjTCP22d .. PGHQMWAFNPGSYPPVGTGRVMTAP..... MGSMM
AtTCP23 .. PSQHMMWAFNPGHYPPGRIG . . . SVQ..... LGSML
BjTCP8a .. TGFSPMDQYRGSPLQLGSLAQ000..... PNQNI GLS
BjTCP8b .. TGFSPMEQYRGSPLQLGSLAQ0000..... QPNQNI GLS
AtTCP8 .. TGFSPMDQYRGSPLQLGSLAQ00P..... TONLGLS
BjTCP15a TONLWAFNINPHHSGEVYNTSGGGGGGGGGGAGGGG..... VHLMNFAPIALF
BjTCP15d TONLWAFNINPHHSGDAYNTSGGGGGGGGGG..... VHLMNFAPIALF
BjTCP15c TONLWAFNINPHHSDVYNTNGGGGGGGGGG..... AG..... VHLMNFAPIALF
BjTCP15e TONLWAFNINPHHSDVYNTNGGGGGGGGGGAGG..... VHLMNFAPIALF
BjTCP15b TONLWAFHHSGDVYNTSSGGGGGGGGGAGGG..... GG..... VHLMNFAPIALF
BjTCP15f TONLWAFNAN . . . PHHSGDVYNTSGGVGG..... GG..... VHLMNFAPIALF
AtTCP15 TONLWAFNINPHHSGVYAGDVYNTNPSGGSGGG..... SG..... VHLMNFAPIALF
BjTCP14a GGGEVWTFPSINTAAALYRSVSVS . . . GGAVS . . . SG..... LHFMNFAAPMAFL
BjTCP14b GEPVWTFPSINTAAALYRSVSVSGVSGGAVS . . . SG..... LHFMNFAAPMAFL
AtTCP14 GGGEVWTFPSINTAAALYRSVSVSGVSGAVS . . . SG..... LHFMNFAAPMAFL
BjTCP20a VQTMDSGGGGYRIGPFGFDYPPGGAMSFAFILGGG..... SNQMPGLE
BjTCP20c VQTTGLMSEGAGYRIGPFGFDYPPGGAMSFAFILGGN..... NNQMPGLE
AtTCP20 VPTTGLMSEGAGYRIGPFGFDYPPGGAMSFAFILGG..... NNQMPGLE
BjTCP20b GVMSEGAGYRIGPFGFDYPPGGAMSFAIFGAGGG..... GNGNHMLGLE
BjTCP6 GANPTGGGFDLNCGIGLGFDFNG . . . SSDMGFE . . . NNQMP . . .
AtTCP6 QTIGGFDLNCGIG . . . FDFNG . . . VPEIGFG . . . DNQTPGLE
BjTCP1a EIMDPFKRSII FNEGDDMTHSFYKEAIEEFDNQE CILTKTNVNL
BjTCP1e KIMDPFKRSII SNEGDDMTHSFYKEAIEEFDNQE CILTKTKVNL
BjTCP1b ETIDPLKRSII SNEGDDMTHSLYKEATQEFDSQE CILSKTKVNL
BjTCP1c DIIDPLKRSII FNEGELMKHSLYKEATQEFDSQES CILSKMKVNL
BjTCP1d EIVDPFKRSII FNEGEHMTDSFYKESIQUESGNQE CTTKMKVNL
AtTCP1 EIMDPFKRSIVFNEGEDMTHLFYKEPIEFDNQE SILTNMNL
BjTCP12a SRKTKIIGGAQER . . . ENLEQER SIEIKFL
BjTCP12b SRKTKITGGAQVEGONLEQERSTTN LNR DSVSIEIKFL
AtTCP12 TREIKITNGVQLLEKENKEQEWSTNTNDVHMVEYQM DSVSIEIKFL
BjTCP18a AEAHNQHDEIVKNNKSHVNCCKSFEATPCQEEETEELCKN DGFVAVCNEFV
BjTCP18b EEEVHNHHDEIVLVKNNK . . . SNVKATPCEDKIQELCKN DHPVSNNEFV
BjTCP18c VEAHNQHDEQQ
BjTCP18d VEAHNQLDEVVKNNTGVNWNNTTFEVTPCGENMEEELCKN NRFADYNDFV
AtTCP18 EEDAHDHGEI I KNNNRSQVNRSSFEMTHCEDKIEELCKN DRFVAVCNEFI
BjTCP17a
BjTCP17b QQSLLDQSGNVTVALSN . . . NNNLNPP TVET MSSLF
AtTCP17 QQSLLDQSGNVTVAFSNNYNNNNLNPPAAET MSSLF
BjTCP5c QHSLDQSGNVTVAISNVPNNNNNLNLP AMSSLF
BjTCP5a QHSLDQSGNVTVAISNVPNNNNNLNLP TMSLF
BjTCP5b QHSLDQSGNVTVAIPNVPNNNNNNLNMP PSSAGDGS QLFPGPPPAMSSLF
AtTCP5 QQSLLDQSGNVTVAISNVANNNNNLNLP PSSAGDGS QLFPGPTPPAMSSLF
BjTCP13a MTTLS TTTTQSLFPSSSSAGSWMETTDPR RMVSHF
BjTCP13c VITLS ATTQSLFPSSSSAGSWMETTDPR RMVSHF
BjTCP13b VITSS TTTTQSLFPSSSSAGSRTMETTDPR QMVSHF
AtTCP13 MTTSP TTTTQSLFPSSSSAGSGTMETLDR QM
BjTCP24a ETSLHNHHSFVPPDYNFVGISSSSDSPA AAVNG GCYTSRGTLO
BjTCP24b NHHHNFHFSFVPPDYNFVGISSSSDSPA GAAAG CYISRGTLO
BjTCP24c HHHSONQYSFVPPDYNFVGISSSSDSPA GAAAG YSSRGTLO
BjTCP24d HNNSONQYSFVPPDYNFVGISSSSDSPA GEAGC YSSRGTLO
AtTCP24 QEPMNHFFSFVPPDYNFVGISSSSS AINGG YSSRGTLO
BjTCP2a HHHHQEFVPPDHLISPA SNGGAFNLDNFMSTTSGA GTAVASAGFSGFNRGTLO
BjTCP2d HHHHPQEFVPPDHLISPA SNGGAFNLDNFMSTT SAAGTAGFSGFNRGTLO
BjTCP2b PHHPHQEFVPPDHLISPA GAGGAFNLDNFMSTT VASTGFSGFNRGTLO
BjTCP2c HHQHQEFVPPDHLISPA SNGGAFNLDNFMSTT VASTGFSGFNRGTLO
AtTCP2 PHHQHQEFVPPDHLISPA SNGG AFNLDNFMSTPSGAGAAVSAASGGGFSGFNRGTLO
BjTCP3 HRLVTWNNNGGAADSAA S GGGGFVFPASPTTTTSFQP OSQVFSORGPLQ
AtTCP3 KIORLVSWNNVGA AESAGS TGG FVFPASPSLHPVYS OSQVFSORGPLQ
AtTCP4 RIORLVSWNNVGA AESAGS TGG FVFPASPSLHPVYS OSQVFSORGPLQ
AtTCP16 DNISNNVFPCTV VNTGHRQMVFPVS
AtTCP10 HHDLTMTSSSSSEHQ QQQEQEERSN GGFVMVNHHPHHHHHP SMMLLNSQQQVFLGGQQ

240 250 260 270
BjTCP19TSDAEPQMGTSGGGGDEGTTQTLRDFSLITYDKKELQFLGGSSG
AtTCP19ASDAEEMETSGG...GTTQPLRDFSLIYDKKRELQFLGGSSG
BjTCP9aNFTGVSVMAPSSSSSS...IATKNMLRDFSLIYDKKELQFLGGSSG
BjTCP9cISVNVVNGSVMAPSSSSSSGIANVAPTMNMLRDFSLIYDKKELQFLGGSSG
BjTCP9bVMAPSSSSG...VTNGSSSSSTTNMLRDFSLIYDKKELQFLGGSSG
BjTCP9dGSAPSSSSGINTNGSSSSSTTNMLRDFSLIYDKKELQFLGGSSG
AtTCP9 VSDVSGSNLSRATSVMAPSSSSSGVTGSSSSIATTTHTLRDFSLIYDKKELQFLGGSSG
AtTCP11FTAMLLPEPMTTAAESEVEIAEIEEERR
BjTCP21b VRQ00000...ASAAVAAMGEASAARVGNYPGHHNLNLLASLSGGSPGSRREEDDSR.
BjTCP21d VRQ0000000000ASAAVAAMGEASAARVGNYPGHHNLNLLASLSGGNTGSRREEDDSR.
BjTCP21a VRQ00...QQQASAAAAMGEASAARVGNYPGHHNLNLLASLSGGNTGSRREEDNPR.
BjTCP21e VRHQ00...QQQQ.AAAAAMGEASAARVGNYPGHHNLNLLASLSGGNTGSRREEDDSR.
BjTCP21f VRHQ0000...QQQASAAAAMGEASAARVGNYPGHHNLNLLASLSGGNTGSRREEDNPR.
AtTCP21 VRHQ0000...QASAAAAAMGEASAARVGNYPGHHNLNLLASLSGGANGSRREEDNPR.
BjTCP7a VHQQ0000...QAAMGEASAARVGNYPG.HLNLLASLSGGAPGSRREDDQR..
BjTCP7e VHQQ0000...QAAMGEASAARVGNYPG.HLNLLASLSGGAPGSRREDDQR..
BjTCP7b HQ000000...QAAMGEASAARVGNYPG.HLNLLASLSGGAPGSRREDDQR..
BjTCP7d QQQ00000...QAAMGEASAARVGNYPG.HLNLLASLSGGAPGSRREDDQR..
BjTCP7c VHQQ0000...QGAIGEASAARVGNYPG.HLSLLASLSGGVPAASGRREDDTR..
AtTCP7 VHQQ0000...QAAMGEASAARVGNYPG.HLNLLASLSGGSPGSRREDDPR..
BjTCP22a LGGQQLG...LGVAEENMMAAMRSGRGGG.DGLAMTLDQHQQHQQHQPENOS
BjTCP22c LGGQQLG...LGVAENMMAAMRSGRGGG.DGLAMTLDQHQQHQQHQP.TTQS
AtTCP22 LGGQQLG...LGVAEENMMAAMRSGRGGG...LAMTLDQHQQHQQHQPENOS
BjTCP22b LGGQQLG...LGVAEENMMAAMRSGRGGG...GLMTLEQHQQHQQHQPENNQ
AtTCP22 LGGQQLG...LGVAENMMAAMRSGRGGG...GLMTLEQHQQHQQHQPENNQ
BjTCP23 VRHQ0000...LGVAENMMLGLFSGGGGGRVGLMSLEKQPQHVSDHATROQN
BjTCP8a MPDSNLG...VLAALNAAYPRGGNANAEOVNN...AVEHQEKQPPQSDQDDD
BjTCP8b MPDSNLG...VLAALNAAYSRGGNANAEOVNNNAVEHQEKQPPQSDQDDD
AtTCP8 MPDSNLG...MLAALNSAYSRRGGNANAEOVNN...NAVEHQEKQPPQSDQDDD
BjTCP15a SG.QPLASG...YGGGGGHHNYGVLAALNAAYRQVET...ASQQNREGDHH
BjTCP15d SG.QPLASG...YGGGGGHHNYGVLAALNAAYRQVET...ANQQSREGDHH
BjTCP15c SG.QPLASGYGGGGGGGGGGHHNYGVLAALNAAYRQVET...ANQQNRDGDHH
BjTCP15e SG.QPYG...GGGGGGHHNYGVLAGALNAAYRQVET...ANQQNREGDHH
BjTCP15b SG.QPLASG...YGGGGGHHNYGVLAGALNAAYRQVET...ANQQNRDGDHH
BjTCP15f SG.QPLASG...YGGGGGHHNYGVLAGALNAAYRQVET...ANQQNRDGDHH
AtTCP15 SG.QPLASG...YGGGGGHHNYGVLAGALNAAYRQVET...ANQQNRDGDHH
BjTCP14a TG.QLATSSNHEINEDNNNNEGGRSDGG.DHHNTQRHHHQQQQQQHNNLHSLGQ
BjTCP14b TG.QLATSSNHEINEDNNNNEGGRSDGG.DHHDTQRHHHHHQQQQQ.HHHNLHSLGQ
AtTCP14 TGQQQLATTSSNHEINEDNNNNEGGRSDGGDHHNTQRHHHQQQ...QHNNLHSLGQ
BjTCP20a LGLAQEGNVGVLNPFQSFALIQOQMSQAQAQGRVLLHHTLQHNH.THEHQESESKEKDDSO
BjTCP20c LGLAQEGNVGVLNPFQSFALIQOQMSQAQAQGRVLLHHTLHNNPSSHEEHQESKEDDSO
AtTCP20 LGLSQEGNVGVLNPFQSFALIQOQMSQAQAQGRVLLHHTLHNNPSSHEEHQESKEDDSO
BjTCP20b LGLSQEGNVGVLN...QOIQOQMSQAQAQGRVLLHHTLHNNP.GHEDHQESKEDDSO
BjTCP6QVGV...NPRIYQMGQEAQVQLQHHYHPHEAQENADKQSS
AtTCP6 IRLS0VGV...NPQVQMGQEAQVQLQHHYHPHEAQENADKQSS
BjTCP1a PTDMDSYNYHYGTFFMLKDKGSSSNYNTILPQNLDYGDQNPFFMDQLCAVTNRNFRGK
BjTCP1e PTDMDSYNYHYGTFFMLKDKGSSSNYNTILPQNLDYGDQNPFFMDQLCAVTNRNFRGK
BjTCP1b PTNMDQIYNQYGTFFMLKDKGSSSNYNTILPQNLDFYDQNSFIDQPFCAVTKTSFPRGN
BjTCP1c PTNMDQIYNQYGTFFMLKDKGSSSNYNTILPQNLDFYDQNSFIDQPFCAVTKTSFPRGN
BjTCP1d LINMDQIYNQYGTFFMLKDKGSSSNYNTILPQNLDFYDQNSFIDQPFCAVTKTSFPRGN
AtTCP1 PTNMDQIYNQYGTFFMLKDKGSSSNYNTILPQNLDFYDQNSFIDQPFCAVTKTSFPRGN
BjTCP12a PTKMGSYNYHYGTFFMLKDKGSSSNYNTILPQNLDFYDQNSFIDQPFCAVTKTSFPRGN
BjTCP12b GLTSESSSSSIFGDSEESYSLSGSIRETVSTAGVVIPREHN...TSTASVDEERNPTST
AtTCP12 GLTSDSSSSSIFGDSEESYSLSGSIRETVSTAGVVIPREHN...TSTASVDEERNPTST
BjTCP18a VN.....KFNSSFPMPNHHRSQGTVSSIE...QORQFMDLHHFLERPR
BjTCP18b MDKKDHISD.....EFNSSFPMLDHHHSQWAASSIE...QORQFMDLHHFLERPR
BjTCP18c VNKKDHISDESYNMI.SKLNSSFPVLTTHRSQGVATSIEQQQQQQQQVQVDRDVHFLERPR
AtTCP18 MNKKDHISNESYDLVNYKPNSSFPVINHHRSQGAANSIE...QHQTDLHYSGAKPR
BjTCP17aQHQTDLHYSGAKPR
BjTCP17b PRYPLFLEGG.....DQLQLFSSSHSSSSKQTDHVE.....
AtTCP17 PTRYPSFLGG.....GQLQLFSSSTSSQPDHIE.....
BjTCP5c PTYPSFLGASQQHHVVVDGAGNLQLFSSNANRNNR.....
BjTCP5a PTYPSFLGAS...HHVVVDGAGNLQLFSSNANRNNR.....
BjTCP5b PTYPSFLGAS.HHHVVVDGAGNLQLFSSNANRNNR.....
AtTCP5 PTYPSFLGAS.HHHVVVDGAGNLQLFSSNANRNNR.....
BjTCP13a QMPLMGSSSSSASQNIISTLYSLHGGSS...SNRMSSVQLNRTNRGSDNMM.....
BjTCP13c QMPLMGSSSSSASQNIISTLYSLHGGSS...SNRMSSVQLNRTNRGSDNMM.....
BjTCP13b QMPLMGSSSSSASQNIISTLYSLHGGSS...SNRMSSVQLNRTNRGSDNMM.....
AtTCP13SNRMSSVQLNRTNRGSDNMM.....
BjTCP24a SNSHSHFLNNNN.....VNQRPI SFMATPPPLDHHN.HQLPATFDGR
BjTCP24b SNSHSHFLNNNN.....VNQRPI SFMATPPPLDHHSHQOLPATFDGR
BjTCP24c SNSQPLFLNNNNN.INORSISSSSSSSPMDSQISFFMAPP.LHHHTHQPPEAVDGR
BjTCP24d SNSQPLFLNNNNN.INORSISSSSSSSPMDSQISFFMAPP.LHHHTHQPPEAVDGR
AtTCP24 SNSQPLFLNNNNN.ITORSISSSSSSSPMDSQISFFMATPPPLDHHHQLPETFDGR
BjTCP2a SNSSNHHHHHQO.QQOSLLANLQRLSSSEGGGGPOFLG.ALPAENHHNN.....HO
BjTCP2d SNSSNHHHHHQO.QQOSLLANLQRLSSSEGGGGPOFLG.ALPAENHHNN.....HO
BjTCP2b SNSSTNHHHHH...QSFANLQRFPSSEGGGGPOFLGNGALPAENHHPHNNNN.HO
AtTCP2c SNSSTNHHHHH...QSFANLQRFPSSEGGGGPOFLG.MPAENQHPHNNNNNHQ
BjTCP2 SNSSTNHHHHH...LANLQRFPSSEGGGGPOFLG.ALPAENHHNN.....Q
BjTCP3 SINTPMLRWFDPYHHH...QSIITNDHHHHHPYQS.....AIPGIAFASGGELSGL
AtTCP3 SINTPMLRWFDPYHHH...QSIITNDHHHHHPYQS.....AIPGIAFASGGELSGL
AtTCP4 SSSYPMIRAWFDPHHHH...QSIITNDHHHHHPYQS.....AIPGIAFASGGELSGL
BjTCP16TMDHAPSTNYSTISDNYNSTFNAGNATASDTSATTTATTTV
AtTCP10 QQQQRGTQSSFLPFSFRSWDHHQTTSDDHHHHQONQASSMFASSQYSGHMMMQGLSFP

BjTCP19 DNTSPS.....
AtTCP19 NSSPSSCHET.....
BjTCP9a AAPRSSNH.....
BjTCP9c TARSSANR.....
BjTCP9b TARSSSNH.....
BjTCP9d TARSSSNH.....
AtTCP9 TARSSNH.....
AtTCP11 RRHH.....
BjTCP21b
BjTCP21d
BjTCP21a
BjTCP21e
BjTCP21c
BjTCP21f
AtTCP21
BjTCP7a
BjTCP7e
BjTCP7b
BjTCP7d
BjTCP7c
AtTCP7
BjTCP22a QAS.ENGDDDKK.....
BjTCP22c QVS.ENGDDDKK.....
AtTCP22 QAS.ENGDDDKK.....
BjTCP22b AEASENGDDDKK.....
BjTCP22d AEASENGDDDTK.....
AtTCP23 PTIDGSP.....
BjTCP8a SRDENSNSDG.....
BjTCP8b SRDENSNSDG.....
AtTCP8 SREENSNSSE.....
BjTCP15a HSHQEDGSTSHHS.....
BjTCP15d HNHQEDGSTSHHS.....
BjTCP15c HSHQEDGSTSHHS.....
BjTCP15e HSHQEDGSTSHHS.....
BjTCP15b HNHQEDGSTSHHS.....
BjTCP15f HNHQEDGSTSHHS.....
AtTCP15 HNHQEDGSTSHHS.....
BjTCP14a YGRQVSGESQASDSLGGGEEDPOD.....
BjTCP14b YGRQVSGESQASDSLGGGEEDPOD.....
AtTCP14 YGRQVSGDSQASGSLGGGEEDQOD.....
BjTCP20a GSGR.....
BjTCP20c GSGR.....
AtTCP20 GSGR.....
BjTCP20b GSF.....
BjTCP6 INLWFSLLRYAYIVCEMSEIYAFGGISSLVLLGYAFCGKMCLFYSLVCLNSLSMALMYLI.....
AtTCP6
BjTCP1a VLVQDSSLA.....
BjTCP1e VWIQDYLL.....
BjTCP1b V.....
BjTCP1c
BjTCP1d
AtTCP1 VWIQDSFVN.....
BjTCP12a FSLYDYLCY.....
BjTCP12b FSLYDYLCY.....
AtTCP12 FSLYDYLCY.....
BjTCP18a DLMYNYHNM.....
BjTCP18d DLVYNYHSMC.....
BjTCP18b NM.....
BjTCP18c DFMYNYHNM.....
AtTCP18 DLMHNYQNM.....
BjTCP17a
BjTCP17b
AtTCP17
BjTCP5c
BjTCP5a
BjTCP5b RHSSDDNDSDS.....
AtTCP5 HHSSDNESDS.....
BjTCP13a
BjTCP13c
BjTCP13b
AtTCP13
BjTCP24a LYLYYEGGNRSDDKKGKDR.....
BjTCP24b LYLYYEGGNRSDDKAKDGS.....
BjTCP24c LYLYYEGGNRSDDKKGKERR.....
BjTCP24d LYLYYEGGKKGKDR.....
AtTCP24 LYLYYEGGNRSDDKAKERR.....
BjTCP2a FQLYYENGCRNS.DOKGKGN.....
BjTCP2d FQLYYENGCRNS.DOKGKGN.....
BjTCP2b FQLYYENGCRNS.DOKGKGN.....
BjTCP2c FQLYYENGCRNS.DOKGKGN.....
AtTCP2 FQLYYENGCRNSSEHKGKGN.....
BjTCP3 RVPVRYQS.EQDDHG.DNPPSASSDSRH.....
AtTCP3 RIPARFQG.EQEEHGGDNKPSSASSDSRH.....
AtTCP4 RIPARFQGEQHDGLTHKPPSASSISRH.....
AtTCP16
AtTCP10 NITRLLHGEEATQPNSSSSPPNSHL.....

BjTCP19
AtTCP19
BjTCP9a
BjTCP9c
BjTCP9b
BjTCP9d
AtTCP9
AtTCP11
BjTCP21b
BjTCP21d
BjTCP21a
BjTCP21e
BjTCP21c
BjTCP21f
AtTCP21
BjTCP7a
BjTCP7e
BjTCP7b
BjTCP7d
BjTCP7c
AtTCP7
BjTCP22a
BjTCP22c
AtTCP22
BjTCP22b
BjTCP22d
AtTCP23
BjTCP8a
BjTCP8b
AtTCP8
BjTCP15a
BjTCP15d
BjTCP15c
BjTCP15e
BjTCP15b
BjTCP15f
AtTCP15
BjTCP14a
BjTCP14b
AtTCP14
BjTCP20a
BjTCP20c
AtTCP20
BjTCP20b
BjTCP6
AtTCP6
BjTCP1a
BjTCP1e
BjTCP1b
BjTCP1c
BjTCP1d
AtTCP1
BjTCP12a
BjTCP12b
AtTCP12
BjTCP18a
BjTCP18d
BjTCP18b
BjTCP18c
AtTCP18
BjTCP17a
BjTCP17b
AtTCP17
BjTCP5c
BjTCP5a
BjTCP5b
AtTCP5
BjTCP13a
BjTCP13c
BjTCP13b
AtTCP13
BjTCP24a
BjTCP24b
BjTCP24c
BjTCP24d
AtTCP24
BjTCP2a
BjTCP2d
BjTCP2b
BjTCP2c
AtTCP2
BjTCP3
AtTCP3
AtTCP4
AtTCP16
AtTCP10

BjTCP19
 AtTCP19
 BjTCP9a
 BjTCP9c
 BjTCP9b
 BjTCP9d
 AtTCP9
 AtTCP11
 BjTCP21b
 BjTCP21d
 BjTCP21a
 BjTCP21e
 BjTCP21c
 BjTCP21f
 AtTCP21
 BjTCP7a
 BjTCP7e
 BjTCP7b
 BjTCP7d
 BjTCP7c
 AtTCP7
 BjTCP22a
 BjTCP22c
 AtTCP22
 BjTCP22b
 BjTCP22d
 AtTCP23
 BjTCP8a
 BjTCP8b
 AtTCP8
 BjTCP15a
 BjTCP15d
 BjTCP15c
 BjTCP15e
 BjTCP15b
 BjTCP15f
 AtTCP15
 BjTCP14a
 BjTCP14b
 AtTCP14
 BjTCP20a
 BjTCP20c
 AtTCP20
 BjTCP20b
 BjTCP6
 AtTCP6
 BjTCP1a
 BjTCP1e
 BjTCP1b
 BjTCP1c
 BjTCP1d
 AtTCP1
 BjTCP12a
 BjTCP12b
 AtTCP12
 BjTCP18a
 BjTCP18d
 BjTCP18b
 BjTCP18c
 AtTCP18
 BjTCP17a
 BjTCP17b
 AtTCP17
 BjTCP5c
 BjTCP5a
 BjTCP5b
 AtTCP5
 BjTCP13a
 BjTCP13c
 BjTCP13b
 AtTCP13
 BjTCP24a
 BjTCP24b
 BjTCP24c
 BjTCP24d
 AtTCP24
 BjTCP2a
 BjTCP2d
 BjTCP2b
 BjTCP2c
 AtTCP2
 BjTCP3
 AtTCP3
 AtTCP4
 AtTCP16
 AtTCP10

QTMKWPSNAIANYKCENIITLNSPLNIKSEFKIIYYPLALGVCFGDLITQLTESSTFTCI

BjTCP19
AtTCP19
BjTCP9a
BjTCP9c
BjTCP9b
BjTCP9d
AtTCP9
AtTCP11
BjTCP21b
BjTCP21d
BjTCP21a
BjTCP21e
BjTCP21c
BjTCP21f
AtTCP21
BjTCP7a
BjTCP7e
BjTCP7b
BjTCP7d
BjTCP7c
AtTCP7
BjTCP22a
BjTCP22c
AtTCP22
BjTCP22b
BjTCP22d
AtTCP23
BjTCP8a
BjTCP8b
AtTCP8
BjTCP15a
BjTCP15d
BjTCP15c
BjTCP15e
BjTCP15b
BjTCP15f
AtTCP15
BjTCP14a
BjTCP14b
AtTCP14
BjTCP20a
BjTCP20c
AtTCP20
BjTCP20b
BjTCP6 VCLSFDLSGYICGRISFAALWDKSAVNIFLASITRKLQLRKLNVNNEYVVGENSESLLGNSCT
AtTCP6
BjTCP1a
BjTCP1e
BjTCP1b
BjTCP1c
BjTCP1d
AtTCP1
BjTCP12a
BjTCP12b
AtTCP12
BjTCP18a
BjTCP18d
BjTCP18b
BjTCP18c
AtTCP18
BjTCP17a
BjTCP17b
AtTCP17
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BjTCP2a
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BjTCP19
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 BjTCP7a
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 BjTCP8a
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 BjTCP15a
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 BjTCP18a
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