

AtCPL1 1 M---YSNNRVEV-----FHDGRLGELIYPSRELNQOQDDVVKQRKKK
AtCPL2 1 M---NRIGHKSVV-----YHGDRLGELDVNH---VSSSHEFRF----P
OsCPL1 1 M---VMIMIKSVV-----YGSTSHGHVFWP---KGGTDLAV---AAW
OsCPL2 1 MATPRAPPQAVPGGGAGATAGVTRMRHFHGDVFLGAEVFP---MKOGAEGS---PFP

AtCPL1 42 QREVMELAKMGRISHFSQSGERCPLAILTTISSCGCFKLEASP---SP-AQESLSLF
AtCPL2 35 NDEI-----RIHHLSPAGERCPLAILOTIASFVRCLESSA---PVKSOELMHL
OsCPL1 36 AREI-----RVDHLSPPSERCPLAIVHAAVANGRCCLVMSRPTATADEPPPLVAM
OsCPL2 55 SNEI-----RISHLSPISERCPLAILQTIAPFSSVRCKLOAKL---MP-PHPSLHRL

AtCPL1 98 YSSCLRENKTAVMILGCEELHLVAMYSENIKNDRPCFWAFSVVAPGIYDSCLVMLNLRCLG
AtCPL2 83 HAVCFHKLKTAVMVLGDEEHLVAMPKSKKK--FPCFWCFVSPSGLYDSCLRMLNTRCLG
OsCPL1 88 HAACLREKGTAVFPLGAEELHLVAMISKRNLPNACFWGKVPVSGLYNSCLSLMLNLRCLG
OsCPL2 103 YLTCFNEYKSAVVVVGDEEHLVAMPKSKVEK--VPCFWCQSVRSGIYASVGMNLNLRCLA

AtCPL1 158 IVFDLDELIVANTMRSFEDRIKIDGSRORINEMDPRORLAVIVAENKRYODDKNLLKQYIE
AtCPL2 141 IVFDLDELIVANTMRSFEDRIEALKSWISREMDPVRINGMSAEIKRYMDRMLLKQYID
OsCPL1 148 IVFDLDELIVANTMRSFEDRIDALORKISNEIDPHIISGMSAEIKRYODKRSLLKQYIE
OsCPL2 161 IVFDLDELIVANTMRSFEDRIEMLSRRMDIEDDPVRIAGMSAEIKRYIDRELLKEIID

AtCPL1 218 SDOVVENGELVKVQSEIVPALSDNHQPLVRLIRLQEKNIILTRINPMIRDTSVLVRLRP
AtCPL2 201 NDYAFDNGVLLKACPSEVPTSDGQEKVCRPVIRLPEKNIVLTRIKPEIRDTSVLVRLRP
OsCPL1 208 NDOVILGGVYKVOEVIPLIPDNHQPTRPIRLQEKNIILTRINPLIRDTSVLVRLRP
OsCPL2 221 TDVTVDNGRIVGTQKEEVLPSGGQERVLRPVIRLPERNALILTRINPEIRDTSVVFVRLRP

AtCPL1 278 SWEELRSYLTAKGRKRFEVYVCTMAERDYALEMWRLLDPECNLINDILARIVCVKSGF
AtCPL2 261 AWEELRSYLTAKTRKRFEVYVCTMAERDYALEMWRLLDPEAHLISLRELRDRIVCVKPD
OsCPL1 268 AWEDLRSYLTAKGRKRFEVYVCTMAERDYALEMWRLLDPSRLINSVOLDRIVCVKSGS
OsCPL2 281 AWEDLRSYLTAKGRKRFEVYVCTMAERDYALEMWRLLDPEANLISSENLAEIRIVCVKSGS

AtCPL1 338 KKSLELVNVLDCGCHPKMALVIDDRLLKVVWDEKQDPRVHVVPAPYYSPOAEAA-ATPVLC
AtCPL2 321 KKSLELVNVLDCGCHPKMALVIDDRLLKVVWDEKQDPRVHVVPAPYYSPOAEAA-ATPVLC
OsCPL1 328 KKSLELVNVLDCGCHPKMALVIDDRLLKVVWDEKQDPRVHVVPAPYYSPOAEAA-ATPVLC
OsCPL2 341 KKSLELVNVLDCGCHPKMALVIDDRLLKVVWDEKQDPRVHVVPAPYYSPOAEAA-ATPVLC

AtCPL1 397 VARNVACGVRGGFFRFDFDLSLLPRIAIEISYENDAEIDPSPPDVSHYLVSEDDTSG-LNGN
AtCPL2 381 VARNVACNVRGYFFKFEDESLMSSISLVYYEDDENLPPSPDVSNYVIEDPGFA-SNGN
OsCPL1 388 FARNVACNVRGGFFRFDFDLSLLPRIAIEISYENDAEIDPSPPDVSHYLVSEDDTSG-LNGN
OsCPL2 401 VARNVACNVRGGFFRFDFDLSLLPRIAIEISYENDAEIDPSPPDVSHYLVSEDDTSG-LNGN

AtCPL1 456 KD-PLSFDMADTEVERRLKEAISASSAVLPA-ANIDPITAAPVQFPMASASSVSVVPV
AtCPL2 440 INAPPLINEGMCGEVERRLNQAADHSTLPATSNAEQKPEP-----
OsCPL1 448 KD-PLAFDMADAVERRLKEVSCVQAVNPIPTNADVMVAP-----N
OsCPL2 459 KDVPAPPEGMSGAEVCKRLN-----GLIKS-AN-DAYFYDD-----

AtCPL1 514 QVVQQAIOPSAMAFPSIPF---QPPCOPTSIKHLVPS-EPSSLQSSPAREEGEVPESELD
AtCPL2 483 -----KPOLAVIP-----NMASTATAALPSHKPSLGGAP-RRDG-----FTF
OsCPL1 491 QOITSSVPEAPSLGNIPLNNDGPPPPSNPVAQSAVPS-QSSPAREEGEVPESELD
OsCPL2 493 -----DCVALRGIP-----G

AtCPL1 570 PDTRRRLLILOHGQDTRDPAPEPSPFQPPVQAPPSHVQSRNGWFFVEEMDPAQVRRRA
AtCPL2 521 SDGGRFLM-MRFGVDLRNQNFPILAKIPQPPSSSHSPGGWL-VVDENRPSFPCRP
OsCPL1 550 PDTRRRLLILOHGQDTRDPA---PPCPAGSEVQTSVLPVQSHGNMSHVEDEMNSRNRT
OsCPL2 503 -----GTVN-----VQSNNG-----

AtCPL1 630 VSKEYPLDSEMIHMKHRPSPHSPFSKIDNSTQSDRMLLENRREPKESLRDREOLRSNNN
AtCPL2 579 -SGLYP-----SQFPHGTP-----GSAPVGFAPPSHLRSEEAMDDDLKRONPS
OsCPL1 607 -STGHELESDDINYDKKOPHNPPYFPEEDNLITSDRYNRRIHRVPSQLPSEDEHMLNRS
OsCPL2 512 -----

AtCPL1 690 LPDSLEPYGEDA--SNQSSSRNSDIDFLPERSVATETSADVHGILKCGAKVEYKPS
AtCPL2 623 ---ROHTEGGISQNL-VSNGREHETDG-GKSNNGGOSHLFVSAQOEIGRCGSKVEFRTV
OsCPL1 666 SIAYRSFPGEDMGNRRGSPNSRSSKIEP-GHOFVQNAETSAGVLEIIVCECGKVEYQST
OsCPL2 512 -----SLATPPLFVTVLQOEIGRLCESNV-----

AtCPL1 748 LVSSTDLRFVSEAWLSNOKIGEGIGKSRREALKAAEASQNLANGYVRANGDPGPHRD
AtCPL2 678 LSTNKLELQFSVEVLFCEKIGIGMAKTKKBAHQAAENARSLAEKYV-----AH
OsCPL1 725 LCSTAELOFSLEVRIIGEKVCEGIGKTRKAAKROAVNMSLRNLAEKFL-----TSDPD
OsCPL2 536 -----LFSNEKIGIGKTRDEAQLAAEKALONLESNYL-----SFMAP

AtCPL1 808 ATPFTNENISMGNANALNNOFFARDETALPVSSRPTL-----PRLEGSMRHIGSITALKE
AtCPL2 728 VAPLARET---EKGEENDNGFLWESSE-DVSNKGLEEAPKENISEL
OsCPL1 778 KMMILKENGFSNNSNFRYSGSRDITTS-PVASTSNESRYMGERMDTLRNPAGSVAALKE
OsCPL2 576 VAGVLLKQDV---NRPFGSNGFLEDITL-----SEDLIS-DEEPSGS---TLKE

AtCPL1 863 LCASEGLEMAFQSQRCQPSDMVHRDELHAQVEIDGRVVGEGVGSFWDEARMQAAERALS
AtCPL2
OsCPL1 837 LCTVEGYNVPEQEPSRPRGSSGK-FAYAQVEIGGQILGKVGATWEQAKLQAADEALGN
OsCPL2 617 -----QDHSKALDRLLSSVIS---LIR-EL---AELGGQILGRGIDLNKDFAKLQAAEBAKKT

AtCPL1 923 VRSMLGQPLHKRQGSFRSFGGMSN-KRLKPDFORSLQRPSSGRYS
AtCPL2
OsCPL1 896 LKSMGLIFAHKSSGFORS-SV-SNFRKPDFORSLOTTPSGWDSRNRNGRVL
OsCPL2 667 LKTTTDPQIKKHLRPMQQLNFPLYPTKALQIMDIFTRSPQEHHISITEMIEK