

>CsCML1

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FELFKSLSSSIIDDGLIHKEELRLALFNTTPQGENLFLDRVFDLDFDEKRNQVIEFEFVHALSIF
HPYAPIEDKINFAFRL
YDLRQTGYIEREEVKQMLIAILTESEMNLSDDLLDVIIDKTFADADTDGDGKICKKEEWKEF
ALRYPSLLKNMTLPYLADI
TTAFPSFVFHTSVEDAT

>CsCML2

MGCFHSTVKKPVPGHENPTLLASQTAFSVSEVEALFELFKSISSSVIDDGLINKEEFQLALF
KNRKKENLFANRIFDLFD
VKQKGVIDFGDFVRALNVFHPNAPQEDKISFCFKLYDMDGTGFIERQEVKQMLIALLCES
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>CsCML3

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VKQKGVIDFGDFVRALNVFHPNAPQEDKISFCFKLYDMDGTGFIERQEVKQMLIALLCES
ELKLADDTIETILDKTFSEA
DVDQDGKIDKSEWHNFVTHNPSSLKIMTLPYLRDITTTFPSFVFNSEVEEIIAT

>CsCML4

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DVDGDGMVSFDEFKEMMRSGGFAAMAQN

>CsCML5

MFDKNGDGRITKQELNDSLENMNIYICDNDLVHMEKIDVNNDGCVDIDFEGELYKSIMD
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AQN

>CsCaM1

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DSEELKEAFRVFDKQNGFISAAELRHVMTNLGEKLTDEEVDEMIREADVDDGDGQINYE
EFVKVMMAK

>CsCML6

MCPTGTLIPLATKQAE LRSAFNVMDVDHDGKISHDDLKRFYADYAVNDNEIIIGTMMKET
DLNKDGYVEYEEFEKMLFLR
RSSNVMEEVFNEIDKVGDANDDENDGVTFEGFLKILAI

>CsCML7

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QFDVDSNGTIDREELRKCLHKFQFDCTEDEINDLFESCNLGRNQGMKFNEFIVVLCIIYLL
TCTSSSNHTATTMGSPCLK
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GFREFLFLSLINWVGIDSNNEV

HVEVIREQKP

>CsCaM2

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EFVKIMMAK

>CsCML8

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>CsCML9

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MTRNMKLA

>CsCML10

MADADHQAANLERIFKKFDTNGDGKISSSELGEALKTLGSVSPEEVQRMMREIDTDGDGFI

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KIV

>CsCML11

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>CsCML12

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VQTVMGNLGIFCNSKGES

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DDCKKMIRVFDENDDGRIDFD

EFVKFMEGTFC

>CsCML13

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>CsCML14

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>CsCML15

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>CsCML16

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>CsCML17

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MV

>CsCML18

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MEDLVKVVEGANEEEEKINDLK
MAFKMYEETEGSGCITAESLRRTL SKLGESKTVDDCKIMIAKFDVNGDGVNLFDEFREM
MA

>CsCML19

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RQMMTKIDTDNDGCITL
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SVDADGDGFVNFEFEKKMM
SNGKTEP

>CsCML20

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GQKPTETELNMIKEVDADGDGFIDLHEFIALNTKDIDSNELLENLKEAFCVFDIDKNGSIS
AEELQKVLGRLEESCTIE
ECRKMISGVDVDGDGMISFDEFKVMMSGNGFVSKKNNNREMKEE

>CsCML21

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LFPRIDVDPADGFVSEHELTQW
NLEQSQREVLHRSQREMELHDKNRDGLVSFHEYSPPSWVRD TDNNSFGYDMGWWKEEH
FNASDIDGDGFLNLTEFNDFQH
PADTKNPRLLQWLCKEEVRERD TDKD GKVNFKEFFHGLFDLVRNYDEESHHSN
DSLESPAKRFFSELDKDADGF
LSDVELLPIIGKLHPSEYYAKQQADYIISQADTDKDGR LSLTEMIDSPYVFYSAIFNEDDE
EDYEHDEFR

>CsCML22

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RLALFSNSTMQNLFAD
RLFESFDIKKNGVIEFDEFVRSLSIFHPNAPESDKIEFMFRLYDLRHTGFIEREELKEMVVAL
LSEMDVSVSDEDIEAIL
DKTLLDADLNGDGKIDLEEWKIFISKNPSILKNMTLPLLREITQAFPNFVLNTQVQNLEVE
V

>CsCML23

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DTNSNGLVEFSEFVALVA
PELLPAKSPYTDDQLKQLFKMFDRDNGYITAAESFLAPLLQLLLIILFRDFGYSFAYLFVF
R

>CsCML24

MGCCYSAMGVPVVARSDRTLASQTTFSVSEVEALFELFKSISSSVIDDGLISKEEFLLALF
KNKRKKNLFANRIFSLFD
VKRKGVIDFGDFVRSLSGVFHPRAPLEDKINFSFKLYDLEGTGFIERREVKQMLIALHSEL
KLADAEIEMILDNTFSEA
DGDRDGKIDRSEWHAFVTKNPSLLKTMPLVLRDITSAPPSFVFNTQVDEISSPQVEEVEIS
SSQVEEIEISSSQVEEIP
K

>CsCML25

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MS

>CsCML26

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LAFKMYEEMEGCGCITPKSLKRMLSKLGESERTVDDCELMIKKFDLDGNGVLDQEFQDM
MS

>CsCML27

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FGSIGEYMSHQEAQGVIDDLDTDGDGFIDFQDFMRLMKVSNEKDDVKA AFEMFEYEKGC
GQISPKSLQKTL SRLGDSKTY
DECLQMIKMFDTHGKGAVDFNEFQQMMTA

>CsCML28

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EFVAFHNGNGEEEEESKELR
EAFDLYDEDKNGKISANELHSVMKRLGEKCSLKDCKKMIQSVDVDGDGCVNFEEFKKM
MNK

>CsCML29

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NILILLAILSLLSRWGYLEK
QNKAQPNIKSCFMEWRLKQVEAPLTDDQIKGLVSKFDTNGDGKISRREL RVGLKSLGLHF
AGLRAMGAVRHADANGDGI
SDEEINELAKYISKWGISVT

>CsCML30

MRQSWCLRQVEAAPLTEDQIKGLLRKFDANGDGKISRREL RAGLKSLGLRFACFRARRAL
RYADANGDGVISDEEINELA
RYVSKWDISLT

>CsCML31

MTRKSWCLKQVEMPMTDDQIKGLVNKFDTNNGDGKITRRELRVGLRKLGLRFATFRAMG
AVRYADANGDGVISDEEINELA
KYISKWGISVN

>CsCML32

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KKKALGVNPKTMMERLGT
FWDPDHREALDMDVMNLFVEDEPSLDEVKQAFGVFDKNNDGYVDAKELQNVLSNM
GFLHICESDCRRMIVSYDADKDG
KLSFREFLKVVEDGFR

>CsCML33

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ILVNQQQLMEIFRSFDRDGSFITPAELAKSMTKMGQPLTYRELSEMVRDADTDGDGVISF
KEFQGIMARSAADSLGFSL

>CsCML34

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FTVNEVEALRELFNKLSS
SIIDDGLIHKEELQLALLNSAGGENLFLNRVFDLFDEKQNGVIEFEEFIHVLSIFHPYAPIEEK
IDFAFRLYDLRKTGYI
EREEVKEMIVATLKETGMRLSEEILEEIIDNTFADADADMDGRINKEEWRDFVIQRPQLLK
NMTLPSLRDVTTAFPSFIF
NTGVDD

>CsCML35

MDPAELRRVFQMFDRNGDGKITKQELAKSLENLGIYIPDDDLAQMIKIDVNKDGFVDME
EFGELYQTILGERDEEEDMR
EAFNVFDQNRDGFITVEELRSVLSSLGLRQGRSIEECRLMIKKVDEDGDGMVNYKEFKQ
MMKAGGFAGLET

>CsCML36

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APAQPYGAPSAPYGQNPKNP
PKENKPQSGGGYGAAPPPGGAYGQGGAPYGSPFAALLPSTFPPGTDPNVVACFQVADQDG
SGVIDDKELQRALSSYNQSF
SLRTVHLLMYLFTNTNTRKIGPKEFIQVFYSLQNWRANFEKFDRDRSGKIDINELREALMS
LGFAVSPVVDLLVSKFDK
SGGKNKAIEYDNFIECCLTVKGLTEKFKEKDTSSYSGNATFTYEAFMLTVLPFLIA

>CsCML37

MKLSGRINPKNIFRSKSHKKDSVSRSESSSFSSSITTSSGSPERSKGATTPTTVLPTQPLTRSD
LEALLRRITNDEAEVK
LMLDEVEGDGEVEGTMTEFGEEEMRGAFEFFDSDGDGMITADELFQVFKVINGDDGCTL
EESTIHQSLSSSNLLQISI
FRCIRVIRHVKGTLKRERE

>CsCML38

MKEAFELFDTDGNGTIDAKELSNAMRALGFEMTKEQLDQMIADVDRDGS GAIDFDEFVY

MMSDKIGERSNKQELTKAFNI
IDHDKNGKISILDIKNIAKELSVRFTDAEIHAMVEEADRDDDGEVSKEEFMRMMQTTSYG
Y

>CsCML39

MRALGFEMTEEQINQMIADVDDKDGSGAIDFDEFAYMMTAKIGERDSKQELTKAFEIIDQD
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FTDDEIHEMVEEADRDHDGEVSAEEFMRMMKRTSYGY

>CsCML40

MIYNYYNKSILEDLSGSFLLFSTRSDIFEPPVNDDRPSQTRSTRTFYRGKGEAVIFIKNSLQK
MGVRRESSRSDQPRGRH
HGLNPQKKQEINEAFDLFDTDGSGTIDAKELNVAMRALGFEMTEEQINQMIADVDDKDG
GAIDRDEFYMMTAKIGERDS
KQELKKAFFIIDQDKNGKISFADIKKIAKELGEHFTDAEIHAMVEEADCDDDRGEVSSEEF
MKMMKRTSYGY

>CsCML41

MSKMSFLDIQYNISKRKFLRKPSRMFSSSERQPSGLPMFQPNVNEMRRVFDKFDKDKDGK
ISRGEYKAILRALKQGGTER
DIQKIFEVADLDGDGFIDFKEFMEVQKKGGAVKAVDVQSAFKTFDLGDGKISVEEVYEL
MKRLGERCSLQDCRKMVRGV
DSNQDGVIDIDEFMTMMTQNMKI

>CsCML42

MSNSSERKAELKSVMFATFDKNKDGFITKQELSDSLKNIGISTSEKDVVEMVQRVVDVNGDG
LIDDEFCELFESMMSKEDM
QGSKVGDDDDHEDGDLRDAFNVDGDKNGLISVEELGLVLDLGLFKEGKKLEDCKKMIS
KVIDIDGGMINFNEFKSMMKS
GVSLISVS

>CsCML43

MSSPPSYNDLYRLFKKLDQNGDGLVSPHELQWLLDTMKVSSSVDDLRYLTGKTNINFTEF
LEFYGTITKEEKVTCDESE
SDLFKAFEMFDKNRDGFICNEELMEALTRLGLWDDKSNMDVKSMIKAYDANCDGFIDFH
EFKKMMA

>CsCML44

MSQCLEGIKHLCTSLSCCDLELTQSQGLDDPAILASQTVFSVSEIEALYELFKKISSAVND
DGLINKEKFQLALFKTN
KKESLFADRVFDLFDTKHNGILGFEEFARALSVFHPNAPIDDKINFSFQLYDLKQQGFIERQ
EVKQMVVATLAESGMNLS
DDVIESIIDKTFFEEADTKHDGKIDQEEWRNLVLRHPSLLKNMTLQYLDITTTFPSVFHRSR
VEDM

>CsCML45

MAASKTQLEFHDHLPLIEEKLGGDGLIGELCKGFELIMDPNKGVITFDSLKNNASFLGLQD
LSDDDLMSMLKEGDYDGDG
ALNQMEFCVLMFRLSPDLMDQSEFLLEEALQEVKNSYQ

>CsCML46

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FRLYDLRQTGFIEREELNE
MVIALLDESDLVLSERVEDVIEMIVDKTFSDADIKGDGKIDEEEWKQFVAHNPSLIKNMTPYL
KIDITLAFPSFVVTSEVEDS
EV

>CsCML47

MGCMCSSGIKHTPGYEDPAILANETPFTVSEVESLYELFNKLSSSIIDDGLIHKEEFQLALFR
NRNKRNLFADRIFDLFD
VKHNGVIERGEFVRSLSGVFHPDAPTEKDIEFAFRLYDLRQTGFIEREELNEMVIALLESDL
VLSEDVIEMIVDKTFSDA
DIKGDGKIDEEEWKQFVAHNPSLIKNMTPYLKDISLAFPSFVLTSECEVEDSEV

>CsCML48

MELTSVATAATTGGILSMEVKYFIILYMFVEWVKLLHDCYFLLARPMWRFISTTENTTCRP
TPSTVAQAHDITQVFHAYN
SRKKSLSGVLEIVLKRLLGMFCDHDDKGQIIGSDEILGLFDEDEPSLDEVKEAFSAFDRNKD
GFIDAKELQHALSEMGCIQ
ISESNCRMLIGGYDVDQDDKISFREFLKLMEDCF

>CsCML49

MGCISSTPKEFKKLPAYDPVALAAETPFTVNEVEALYELFEKLSSSVVDDGLIGKDEFNLA
LFRNHSKRNLFADRIFDLF
DVNRSGHIDFNEFVRSLSVFHPKAPQADKVLAFRLYDLRRTGFIEREELKDMVKALLSES
DLVLSDEIIESMVDKTFAE
ADYKGDGKIDQEEWREYVDKNPSLLKNMTLPHLMDITLRFPSFVMNSQVEETQSTD

>CsCML50

MSYNPSGYNYGAPPPSQPYYSTPYAAPSPYGGPQQPAFTSPYGYGTSTFPPGTDPNVIACF
QVADIDRSGVVDDKELQIA
LSSYNQSFSIRTVRLLMHHFTNTNTRKIGPKFTQVFYSLQNWRAIFEKFDRLSGHIDTW
ELREALMSLGFTVSPVVLD
LLVSKFDKTGGYKKAIEYDNFIECCLIVKGLTEKFKEKDTMYSGNATFTYEAFMLTVLPFL
IV

>CsCML51

MGNTSSMLTQYDIEEVQEHENNTFSQQEIVSLYQRFQCLDRNSGGFISADEFLSVPEFAVN
PLSQRLFRMIDGLNFKEFV
AFLSAFSSRATLQHKVEFIFKVYDSGNGKVAFSDLLDVLRDLTGQFISEQQRELVLTVL
EEAGYKKDSLVLVLSDFMKI
LGNTGLKMEVEVPTNPSKYVGIISILNDVIGTLKIHKPYSSLSQTPLFNYYLTTQLTDRKWL
DLV

>CsCML52

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GLISKEEFQLALFKTNK
KESLFADRVFDLFDTKHNGILGFEEFARALSVFHPNAPVDEKIEFSFQLYDLKKQGFIERQE
VKQMVAATLAESKMKLTD
DVNIENIINTTFQEADTKHDGKIDMEEWRSLALRHPSLLKNMTLHYLKDITTTTFPSFVFHSR
VEDS

>CsCML53

MGGKLTKADESPKTSVPTTKLEAKILETIRRRESKGTSMKSFNTIILKFPKIDASLRKCKAIF
EQFDEDKSGTIDPKELN
HCFRKLEIDFTDEEISDLFKECDINHDMGINFKEFIVLLCLVYLLKNDPVSPHSSSRMGMP
LQAFETLVDSFVFLDKNK
DGYVSRSEMVDAINETTTGERSSGRIAMRRFEEMDWDKNGMVNFKEFIFAFEKWIGIEDG
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>CsCML54

MASTNNMQSEFQDYLPMLADKLGGDGLIQELCNGFQLLMDQDKGVITFDSLKKNSSVLG
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GALNQMEFCVLMFRLSPNLMDQSEYLLLEEALQELNNFQY

>CsCML55

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GLSDDEVMSMLKEGDFDGDGA
LNQMEFCVLMFRLSPNLMDQSEYLLAALEQEFNYL

>CsCML56

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DPETCTAAQIMLLSVIPFLFLLIPKLFGMTYAPHGYIFLIALPVSVTFLLVYFIYQVFPSIQK
RRLSYVKHEHLVLDIL
KHLQEQIPENILAEDGSVNLPAIKSLFKKIDQDGDIIISFSELKELLESIKFRQLKSDKQKTF
DQLIKEFDSGNAQVSL
DEFIHRFTEWLDEAKNELSEVVKPLVQTKRNEDDMTQVLVSEIIGNAKSSPLGKFYKEDG
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SVSLTELKKLTMHVNLGETSWNVDETTSRIMQNLDTNGDKEIDEQEFVDGFEEKLVNITN
DRSKTSGPKDVSRKACKKWK
GDNVDRSVWGWTKAIMLLVLGIAMLALMAEPLIHSVQNVSNSAAMPSFFISFILVPLATN
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>CsCML57

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IILRFPRFKEGLKEIQGVFE
LYDEDSNGTIDNEELKRCLQKLEFHCTEQEIRDLFESCDVDGSNGIQFNEFIVLLCLYLLD
GPSSSSHVTSTVGSPELK
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VSFREFLFLINWVGLESTDEV
PETVF

>CsCML58

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SFQAVDLDRSGFIDAKELQQALTQAYLKFSSRTIKLLMFQFRNPTDPTRTGPKFAELWSCL
GQWRAIFERFDRDRSGKI
DLAELRDALYSLGYAIPPSVLQLLISKYDDQSGRRVDLSFDSFVECGMIIKGLTEKFKEKDT
RYTG SATLSYETFMTMVI

PFLVAE

>CsCML59

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KLSEEETAGLKQMFKMIDTDKSGYITFEELKAGLKRFGSTLNESEIYDLMQSADIDNGTID
YEEFVASTLHMNKVDRDDH
LFAAFSYFDKDDSGYITLDELQQACKEFGLDDVHLEEIKEADQNNVRFSLP

>CsCML60

MAEQLTEEQIAEFKEAFSLFDKDGDCITTKELGTVMRSLGQNPTEAELQDMINEVDADQ
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DSEELKEAFKVFDKDQNGYISAAELRHVMTNLGEKLTDEEVDEMIREADMGDGQVN
YEEFVRMMLAK

>CsCaM3

MRSLGQNPTEAELQDMINEVDADGNGTIDFPEFLNLMARKMKDSTDSEELKEAFRVFDK
DQNGFISAAELRHVITNLGEK
LTDEEVDEMIREA

>CsCML61

MSKSNDYKRVFDHFDEDSNGMVSPSELHRRVGMICHEQVLIEDVQVIVESLHGSKVDGH
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AMML

>CsCML62

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QQRCSDDQDSNIDILSVFDD
EEPTLEEVKVAFDVFDENS DGFIDENELRDMLCKLGKQENAMLKECRSMIKGFDVNGDG
LIDFDEFVRLMETCSF

>CsCML63

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ELKKMIMEVDKDGDFIDLEEFIELNTKVDSSELLELIEKAFSMFDVDKNGLITVEELLRV
MRSLHEDYSIEECKKMIAG
VDQDGDGMINLNEFKVMMMSGVRSDVSES

>CsCML64

MNTGEPSTSSSPVKFFRPPTTISPPSSPLPTPCTDDIHQLFNYFDENGDKITATELQNRLK
TVAGDEVQLSDEEAEMA
VRSSDADGDGVLFDDFTKMMKEGAEELREAFRMYSAKSGTVITANSRRMLRRLGQS
TVTVEECKGMIGRFDVNGDAV
LDYDEFRAMMS

>CsCML65

METQTPTS KHAPLLKSCSNGSFRLRSPSLNSLRLRRIFDLFDSNHDSFITIEEITRALTLGLD
TNASDLDTMIKSYVHP
GNVGLTYEDFVTLHRSINDLFFGMDEVVEAVGSKEDQEEADLNEAFKVFDENG DGFISAA
ELQMVLGKLGFTAEIEMGRV
KMMISSVDLNHDGCVDFSEFKDMMRVLQ

>CsCML66

MCDDSGVPHRFVLDIQVLQEISLLDSVAETA VEMMNILKKIKKNVKTASKPISNKKIKHDPE
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>AtCML47|AT3G47480.1

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>AtCML48|AT2G27480.1
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GYGAPPPQASYGSPFASLVPSA
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