

408_G_translation

1 10 20 30 40

408_G_translationMSQKKSLIKGHDYSFKKNQSSKYNSYESDQD...TINPNEFKCMLTL
AF212302_GMPAENKKVRFENTTSDDKGIPIKSVIKSYGTMIDIKKI...NEGLLDSKILSAF
AF017149_GMMADSKLVSLNNNLGKIKDQKGVINKYYGTMIDIKKI...NDGLLDSKILGAF
KF278639_GMATNRDNITITSAEVQEDKVKKYGVETAKEV...ADISGNKVFIILM
JQ001776_G MLSQLQKNYLDNSNQGDKMNNPDKLSVFNPLELDKQKDLNKSYYVKNNYVNSNLLNESLHDIKFCIYC
HQ660129_G .MPQKTVEFINMNSPLERGVSTLSDKKTLLNQSKITKQGYFGLGSHSERNNWKKQK...NQNDHYMTVSTMI
MZ574409_G .MDKIMANKNNNNKNVN.TRETTVKKFYGVDTAEKV...ADSIISNKFIFIL
MZ574407_G .MSPKIDTNKTAPISS...RKYYGVDSVERE...ADGVTNNKIFILLA
consensus>50 .kk...nn...e..q...ikkyyg.d..ekv...nd...d.ki.il.

408_G_translation

50 60 70 80 90 100 110 120

408_G_translation TFLVLLLTIASVIVLGI CNVVKLDHESKQISTNTMSINKAIGKINEYSLINNELKIRMMVMdTAVNVDFAD
AF212302_G NTVIALLGSIIVIMNMI IQNYTRSTDNQAVIKDALQGIQQQIKGLADKIGTEIGPKVSLIDTSSITIFAN
AF017149_G NTVIALLGSIIVIMNMI IQNYTRSTDNQALIKESLQSVQQQIKALTDKIGTEIGPKVSLIDTSSITIFAN
KF278639_G NTLILITGAIITITLNI NTLTAASKQONMLKIIQDDVNAKLEMFVNLDQLVKGEEKPKVSLINTAVSVSIPGQ
JQ001776_G IFSLLIITITINIIITISIVITRLKVHEENGMESPNLQSIQDLSLSTNNMINTETIPRIGILVTATSVTLSSA
HQ660129_G LEILVVLGIMFNLIVLTMVYYQNDNINQMAELTNSITVLNLLNQLTNKIQREIIPRITLIDTATTITIPSA
MZ574409_G NTLIIITSSVITITLNI TNLEGIKNQNAIKTLQMEIMNKVETISKLEQIVKGLKPKVTLINSAVSVSIPGQ
MZ574407_G NMLLIIMSSIVMISLNI TNLENINNQKTSLKILNEDVTNKLQIDTDLQIVKGEIKPKLTLVNSAVSVTIFSQ
consensus>50 ntllililgsii.ivlni.iiqn...qndn..i..ddiq..geqi..L.q.!..#ikpkv.lidtavsltip.q

408_G_translation

130 140 150 160 170 180 190

408_G_translation TSA LSKMITSAITSTEELIQSQTSSVPSNRPSMNSQSGSSGSSQLSNSRPIPDQGNPNYCNKDKNRPSMSF
AF212302_G IGLGSKISTASINENVEKCE...KFTLPPLKIHECNISCNPPLPFR...EYRPQTEGV
AF017149_G IGLGSKISTSSINENVNDKC...KFTLPPLKIHECNISCNPPLPFR...EYRPISQGV
KF278639_G KFNLTQTKFLQKYVYLEEITKQCTC...NPLSGIFPTSGPTYPPTD..KPDDDT...TDDDKVDTTI
JQ001776_G ITNYVGTKTNQLVNEKLDYITKSC...GFKVPELKLHECNISCADPKISK...SAMYSTNAY
HQ660129_G ITYILATITTRISELLPSINQKCE...EFKFTPLVLNDCRINCTPPLNPS...DGVKMSLA
MZ574409_G ISNLQTKMSQKLFIEDSVIDQCTC...NPLSGIFPSKEPPKEPHPGTEDDDT...SDDDKVDDSI
MZ574407_G ISNLATKLNQIKTLEVAVNKQCSG...NILGLLTPKPPTGSGTTSPPDDGNPD...DNDVDDLEGDM
consensus>50 Is.l.tkl.q.i..iee.!ndqc...n...f..p.l...ec.i.cdpd.n...d.d...e.v

408_G_translation

200 210 220 230 240 250 260

408_G_translation TSLNIITPTESAYTEGCHTETVLTSEQFQLVPLNQLLAGDYGEDYCSRYPSLSLRGRFTEYTEERYRGSCSTR
AF212302_G SNLVGLPNNICL...QKTSNQILKPKLISYTLPLVVGQSGTCITDPLLAMDEGYFAYSHLEIRIGSCSRG
AF017149_G SDLVGLPNQICL...QKTSNQILKPKLISYTLPLINTRREGVCTIDPLLAVNGGFAYSHLEKIGSCSRG
KF278639_G KPIEYYPKPDGNCNRTGDHF...TMEPGANFYTVP...NLGPASSNSDECYNPFSFISGSIYMFSGQIRKTDCTAG
JQ001776_G AELAGPPIKFC...SVSKDPDFRLKQIDYVIVPQQDRSICMNNPLLDISDGFITYIHYEGINSCKKS
HQ660129_G TNLVAHGSPSCR...NFSVPTIYYRIPGLYNRTALDERCILNPLRTISSSTFAFYVHSEYDKNCKTRG
MZ574409_G QSFDPSPFTVCNNSDETT..SIIPGNLYAVP...NLSIKEDDEDECVTNPSFSGTSIYMSYSEIRKTDCKSG
MZ574407_G RPLNLALENDCSRYPTPNPTFAISPDIHPMP...ELTEPIQLKNHCAVFTVALGESIYVYSHQIRKTPCKSE
consensus>50 .nl...n.c...pn...pi.nl.p.d.qed.CitnP.l.i.e..%.%sheer..sc..g

408_G_translation

270 280 290 300 310 320 330

408_G_translation TKEAQITVYGYITDFGYRHPITLMIIDTFNPNYDMYIRCTSVTKLSTGLVICLYTNMTEFELYESPKNTDIT
AF212302_G VSKQRIIGVGEVLDRGDEVPSLFMTNVWTPPNPNTVYHCSAVYNNEFYVVLCAVSTVGDPIILNSTYWSGSLMM
AF017149_G IAKQRIIGVGEVLDRGDKVPSMFMTNVWTPPNPNTIHCSSSTYHEDFYVTLCAVSHVGDPIILNSTWSTESLSL
KF278639_G EILSIQIVLGRIVDKGQGGPQASPLWAVPNPKIINCSAVAAGDEMGWVLCSTVLTAAAGSEPPIHMFDFGFWL
JQ001776_G DSFKVLLSHGEIVDRGDYRPSLYLLSSHYHPYSMQVINCVPTCNQSSFFVCHISNNTKTLDNSDYSSDEYYI
HQ660129_G FKYYELMTFGEILEGPEKEPRMFSRFSYPTNAVNYHSCPTIVTVNEGYFLCLECTSSDPLYKANLSNSTFHL
MZ574409_G PLTGIIKILGRIVDKGQFGPQVSPILLVWDVPKPETINSCAVVAEDEVGALCSTSIANSGEPIPYLLSGFKL
MZ574407_G DTHQRVSLGRIVDRGFSGRASPIITLWLOETEFLSSCSVAASGEIGWVLCVTTDKFTRDTVYAGPYTGRL
consensus>50i..Ge!v#rgd..P.l.f.l.vw.ppnpe.i.sc...v..ne.gyvLC.vt...d...d...i..l

408_G_translation

340 350 360 370 380 390 400

408_G_translation FEA FDSGQHK...GTILNSSKFIY LNDIDMFIIPGTGGGYL NKT IYLP GIVFTTNPPDGNAGCPNSAC...
AF212302_G TRLA VKPKSNGGGY NQH LALRSIEKGRYDKVM PYGPGS GIKQ GDTLYFP AVGF LVRTEF...KYND SNCPITKC
AF017149_G IRLA VRPKSDSGDY NQY IAITKVERGKYDKVM PYGPGS GIKQ GDTLYFP AVGF LVRTEF...QYND SNCPIIHC
KF278639_G YKLEPDTFVV...SYRITGYAYLLDKQYDSVFI GKG GNDLYF QMYGLSRNRQSFKA LCEHSG CLGTG
JQ001776_G TFLNGIDRPK...TKKIPINMTADNRYIHFTFSGGGVCLEGEFIIPTVTVINTDVFTHDYCEHNSCSVQT
HQ660129_G VILRH NKDEK...IVSMPSFNLS TDQEVYQIIPAE GGTAE SGNLYFP CIGRL LHKRVTHP LCKKSN...C
MZ574409_G FKFE PDSEVV...QYVLGSKSFR LDRVYHTLVYVG GGAARYDGLYFEGF GVI TNIGKDQPLCNHGK...SG
MZ574407_G YKLSIRGKE...EYSITANNITDAV IIA LTLTRGSGVPKNNKLIFLGLAAVRD VDTTGVLCP TWKC...EN
consensus>50 f.l...q...n...d..yd.v.p..ggGi..gd.lyfp.ig...n.e...lcd...c...

408_G_translation

410 420 430 440 450 460 470

408_G_translation TNKDPKILRKGLKYIFNNSYIMVNGFALISQKGRKEYEIVITMTIETDVYHF GSR SRVQYFN SRRAKYQAPNGW
AF212302_G QYSKPENRLSMGIRPNSHYILRSGLLKYNLSDGENPKVVFIEISDQRLSISGSPSKIYNSLGGQPVFYQASFSW
AF017149_G KYSKAENCR LSMGVNSKSHYILRSGLLKYNLSDGDIILQFIEIADNR LTI GSPSKIYNSLGGQPVFYQASFSW
KF278639_G GGGYQVLC DRAVMSFGSESLITNAY LKVN DLAS GKPV IIGQT FPPSDS YKGSN GRMYTIGDKYGLY LAPSSW
JQ001776_G GKSLKETCSESLRSPTNSSRYMISQNNMTDFKIQNLNGITYNKLSFGSPGR LSKTLGQVLYYQSSMSW
HQ660129_G SRTDDESLKLSYYNQSGSPQH QVYVNC LIRIRNAQRDNPTWDVITVDLTNTYPSGRSRIFGFSFKPMLYQSSVSW
MZ574409_G SGSYIPICLSAMSMGDTDFHLVSNIIKVV DANIKKPVITVQTFKIQDTYKSGHGR IYQMDNNYGIYLA SSW
MZ574407_G INNNVGS CVHSYRLTADMN NYFMMVVAVDVTE GKM TAVSVSL LPMSES YIGSGE GGVIDKPGGYGLMISNKGW
consensus>50 ...s..e..c...sm...n.ey...ng.lkinq.n.gnp.i.v..i..qd.y.GS.griyd.gg..yyqas.sW

408_G_translation β20 → TT β21 → TT β22 → TT β23 → T

480 490 500 510 520 530 540 550

408_G_translation FSYPIYGNIFYFEKNQKITTFDEANYTVYERYTEGSCPINSSCPAFCHSSGYNDIWANDIDSNITFGIYNSSDSHS
 AF212302_G DTMIKFGDVLTVNPLVVNW..RNNVISRPGQSQCPRFNTCPAFCWEGVYNDAFLLIDRLNWSAGVFLDSNQST
 AF017149_G DTMIKLGDVDTVDP LRVQW..RNNVISRPGQSQCPRFNTCPAFCWEGVYNDAFLLIDRLNWSAGVFLDSNQST
 KF278639_G NRYLRFGITPDISVRSTTWLKSQDPI MKILSTCTNTDRDMCPAFCNTRGYQDIFPLSEDSYYTYIGITPNNNG
 JQ001776_G DTYLKAGFVEKWKPFPTPNW..MNNVISRPNQGNCPRYHKKCPAFCYGGTYNDIAPLDLGKDMVYSVILDSQQL
 HQ660129_G HTLLQVAEITDLDKYQLDW..LDTPIYISRPGGSECPFGNYCPTVCWEGTYNDVYSLTPNNDLFVTVYLKSEQV
 MZ574409_G NRYLKFGTTNTLIPTVEVWSKLKDPIMDIQNNCHNTNQDMCPAVCSSYGYEDIFPLNIENGNAMTYMSMRNGE
 MZ574407_G FARIRYGTDRASPORVEWTDYMSFETPYLYLYCSGGR..LCPVSCKTWNFTVPTILNPSGSIIGVKKAKSKTG
 consensus>50 dtylkfgdvd...p..vnw...nn.visrp.q.qcpr.n.CPeiC..g.%ndif.ld.d.ni..gvyl.snq.

408_G_translation T β24 → TT β25 → β26 → TT β27 → TT β28 → Q

560 570 580 590 600 610 620

408_G_translation YGRPVF FMANQSGIMYEFVTPGSIIAAGQSTTSCFLFYQEVWC MNVIEITRKTLNSSQEIIYGFWTKTPLVCP TK
 AF212302_G AENPVFTVFKDNEILYRAQLASEDTNAQKTITNCFLLKNKIWCISLVEIYDTGDNVIRPKLFAVKIPEQCT..
 AF017149_G AENPVFAVFKDNEILYQVPLAEDDTNAQKTITD CFFLENNIWCISLVEIYDTGDSVIRPKLFAVKIPAQCSES
 KF278639_G GTKNFVAVRDS DGHIASIDILQNYYSITSATISSCFMYKDEIWCIAITEGKKQKQDNPRQRIYAHASYKIRQM CYNM
 JQ001776_G AENPEITVFNSTTILYKERVSKDELNTRS TTTSCFFLFLEDFWCISVLETNRFNGKSI RPEIYSYKIPKY...
 HQ660129_G AENPYFAIFSRDQILKEFPLDAWISSARTTTISCFMFNNEIWCIAALEITRLNDDIIRPIYYSFWLP TD CRTP
 MZ574409_G GTSNFIIVARSQDNVYNTMKALGEYFKIITATTS CFTFKDEAWCIVVNBGQHKKGDQKRIFAHSYKLKKS CIKR
 MZ574407_G NSASM TINTPDEVIDQYEVFN DYQSIGSTITKCF SYKRQPWCLVLLRGVLKSTGV TETTSIQTFKIFRS CVKH
 consensus>50 aenp.i.vf.qdeilye..i..d...a..ttsCflfkneiWCi.v.Ei....dnvirp..fsykip..C...

408_G_translation α5
 0000000
 630 640 650 660 670 680

408_G_translation DQYDIAHAFPLPTSPAPAPSQSVFVTEASTITLIQSVEPQGTPTDIPSTTNRDDIQITITNATSG
 AF212302_G
 AF017149_G
 KF278639_G KSATVTVGNAKNITIRRY.....
 JQ001776_G
 HQ660129_G YPHTGKMIRVPLRSTYNY.....
 MZ574409_G SKITDLATTSITFNRSIR.....
 MZ574407_G RTYLDLSLGRFYTYTSDNGNKTQTYIPGSDT.....
 consensus>50