

Bra022702 : -----*-----20-----*-----40-----*-----60-----*-----80-----*-----100-----*-----
BoCNGC15 : -----MATEQEFTR-----ASRVSGA-----SSSVG-----YYSDEDEYKDEEE-----EEEEEEEEEMEETEKD-----
AtCNGC4 : -----MATEQEFTR-----ASRVSGA-----SSSVG-----CYSDDEDYKDEEE-----EEEEEEEEEMEETEKD-----
Bra003001 : -----MATEQEFTR-----ASRVSRD-----SSSVG-----YSEEDNTEEED-----EEEEEMEEIEEEEE-----
BoCNGC16 : -----MATEQEFTR-----ASRVSRA-----SSSIG-----YSDDYTTDEE-----ENEEEMEELE-EAE-----
Bra008699 : -----MATEQEFTR-----ASRVSRA-----SSSIG-----YYSDEDEYTTTEE-----EDEEEEMEEQE-EEE-----
BoCNGC17 : -----MPSHTNLFWRWIGLFSQKLRRETTEISEN-----NGGESSSSS-----DDTPVLSSGECYACTQVGFPAFHSTSCDQANAPEWR-----
AtCNGC2 : -----MPSHTNLFWRWIGLFSQKLRRETTEISEN-----NVGESSSSS-----DDTPVLSSGECYACTQVGFPAFHSTSCDQANAPEWR-----
Bra004537 : -----MEMMNLKRNTEFVKFTEN-----EDSWN-----RPSVTSVIKKTVRRSFEKGSSEKIRTFKQQ-----
BoCNGC2 : -----MEMMNLKRNTEFVKFTEN-----EDSWN-----RPSVTSVIKKTVRRSFEKGSSEKIRTFKQQ-----
AtCNGC3 : -----MMNPQRNKFVRFNGN-----DDEFSTKTRPSVSSVMK-----TVRRSFEKGSSEKIRTFKQR-----
Bra000937 : -----MGFGRDSRVR-FKEPSS-T-----EFGYGR-RARPSLNAVLD-NVRRGFEKGSSEKIRTFKQR-----
BoCNGC1 : -----MGFGRDNRRVRFKPESS-T-----EYGYGR-RARPSLNAVLD-NVRRGFEKGSSEKIRTFKQR-----
AtCNGC13 : -----MAFGRNRRVRFWDWISSEGT-----EYGYGRNRRVRFWDWISSEGT-----LKK-----
AtCNGC10 : -----MILFRFKDEG-KPLSS-----EYGYGR-KARPSLDRVFK-NVRRG-----LKK-----
Bra034281 : -----MERASTIQSV-----HENIK-----SVRGQLKVVYK-----TLKTLNWRK-----
BoCNGC3 : -----MERASTMQSV-----HENIK-----SVRGQLKVVYK-----TLNLTENWRK-----
AtCNGC11 : -----MNLQRRKFVRLDSTG-V-----DGKLL-----SVRGRLKVVYK-----KMKTLNWRK-----
AtCNGC12 : -----MNHRRSKFARIDSMG-V-----DGKLL-----SVRGRLKVVYK-----KMKTLNWRK-----
Bra003323 : -----MTIFSVQSTLFRASVALLS-----SNGLKRFSFASFSAAAL-----YSPPLPKTKKR-----
Bra031515 : -----MTIFSVQSTLFRASVALLS-----SNGLKRFSFASFSAAAL-----YSPPLPKTKKR-----
Bra022632 : -----MNFRQEKVRFQDWKSDKTS-DVEYSGRNEPNGIFRRTIISISD-KFHR-----SSARIKTFRRTYK-----
AtCNGC1 : -----MNFRQEKVRFQDWKSDKTS-DVEYSGRNEPNGIFRRTIISISD-KFHR-----SSARIKTFRRTYK-----
Bra003081 : MKFRLTSLTLSSCGSRVLHSSHKEGYTTISCASNPTMFRPDKSVRFHDWKSDDKAS-DVEYS-----EVPDGLYRRAISSISD-KFHR-----SSLRIKMLR-----T-----
Bra020402 : -----MTFASLPHYHFCRASDRGLSRSSVIELAIMAGKPKQTFVSVDDLDLDFKLPSS-SSLTRQHNYSSSIS-GPLHPIQ-----GSHNTSGSFKKRFQ-----
BoCNGC7 : -----MAGKPKQTFVSVDDLDLDFKLPSS-SSLTRQHNYSSSIS-GPLHPIQ-----GSHNTSGSFKKRFQ-----
AtCNGC5 : -----MAGKRENFVRVDDLDLDFKLPSS-S-VAFQKQNYASNFS-GQLHPIH-----ASNETSRSFKKGIQ-----
Bra024067 : -----MDSRYSQ-----GAEAGLNKCTLNLIQ-GPSRANG-AGQGNNNNASSSGSFKKGFR-----
BoCNGC6 : -----MFDVCVKSQVVISGQREKFRVRLDSMDSRYSQ-GSEAGLSKCTLNLIQ-GQSRANGGTGQGNNNNASSSGSFKKGFR-----
AtCNGC9 : -----MLDCGKAVKSQVVISGRLEKFRVRLDSMDSRYSQ-TSDTGLNRCCTLNLIQ-GPTRGGG-AQGN--VSSGSFKKGFR-----
Bra039221 : -----MESKSQVVISGHRKFIKRLDSMDPR-----SPEAGLNCTINIQ-RPKRFTQ-----ANKTSSGSFKKGFR-----
BoCNGC4 : -----MESKSQVVISGHRKFIKRLDSMDPR-----SPEAGLNCTINIQ-RPKRFTQ-----ANKTSSGSFKKGFR-----
Bra032132 : -----MFD-CGTNGVKSQVVISGHRKFIKRLDSMDSRYSQ-SDNTGLNCTLNLIQ-APKRFAQ-----GSKTSSGSFKKGFR-----
BoCNGC5 : -----MFD-CGTNGVKSQVVISGHRKFIKRLDSMDSRYSQ-SDNTGLNCTLNLIQ-APKRFAQ-----GSKTSSGSFKNKFR-----
AtCNGC6 : -----MFDTCGPKGVKSQVVISGQRENFRVRLDSMDSRYSQ-SE-TGLNCTLNLIQGGPKRFAQ-----GSKASSGSFKKGFR-----
Bra026086 : -----MMTKRNCFG-FPVKNRGS-----EKRR-ASKSFREGVK-----
BoCNGC8 : -----MYKSQYISGQREKFRVRLDDLDSSASHA-T-GMMTKRNCFG-FPVKNRGS-----EKRR-ASKSFREGVK-----
AtCNGC7 : -----MMTKRNCFG-FNLKNRGG-----EKRR-ASKSFREGVK-----
AtCNGC8 : -----MYKSQYISGHRKFIKRLDSDSRVMS-SNATGMKRRSFCGLFNVTSRGG-----GKTKNTSKSFREGVK-----
Bra008733 : -----MNIKIRSLRFLPETITSA-----MNIKIRSLRFLPETITSA-----
BoCNGC13 : -----MNIKIRSLRFLPETITSA-----MNIKIRSLRFLPETITSA-----
AtCNGC18 : -----MNIKIRSLRFLPETITSA-----MNIKIRSLRFLPETITSA-----
Bra018089 : -----MSNLHLHTSARFRNFPTAFSRR-----MSNLHLHTSARFRNFPTAFSRR-----
BoCNGC14 : -----MSNLHLHTSARFRNFPTAFSRR-----MSNLHLHTSARFRNFPTAFSRR-----
AtCNGC16 : -----MSNLHLHTSARFRNFPTAFSRR-----MSNLHLHTSARFRNFPTAFSRR-----
Bra011186 : -----MELRKDKILMLYSDKK-EPKEAIWAVNDPMSKSYKLSLPSALKPPDNNL-----
BoCNGC10 : -----MELSKDKILMLYSDKK-EPKEAIWAVNDPMSKSYKLSLPSALKPPDNL-----
AtCNGC17 : -----MELRKDKILMLFYSEGK-ESKEAKWAVNDPMSKSYKLSLPSALRP-DNL-----
Bra007839 : -----MEFKRDNTVRFYGEKQTELEATEKRQPLPMLKPTSTQFLKPELVI PKKTNK-----
BoCNGC12 : -----MEFKRDNTVRFYGEKQTELEATEKRQPLPMLKPTSTQFLKPELVI PKKTNK-----
Bra032081 : -----MEFKRDNTVRFYGEKQTELEATEKRQPLPMLKPTSTQFLKPELVI PKKTNK-----
BoCNGC11 : -----MEFKRDNTVRFYGEKQTELEATEKRQPLPMLKPTSTQFLKPELVI PKKTNK-----
AtCNGC14 : -----MEFKRDNTVRFYGEKQTELEATEKRQPLPMLKPTSTQFLKPELVI PKKTNK-----
Bra011963 : -----MGYGNRSRVRFEEDSEVTKPQAVHEETAELKFKINGAQISPRKNVKKMT-----
BoCNGC9 : -----MGYGNRSRVRFEEDSEVTKPQAVHEETAELKFKINGAQISPRKNVKKMT-----
AtCNGC15 : -----MGYGNRSRVRFEEDSEVTKPQAVHEETAELKFKINGAQISPRKNVKKMT-----
Bra021266 : -----MASPKE-NDDVPMLPISDTS-RTRPFTSRSRVSLNCTSTIDGF-DSSTVVLYGTGFLRAQRRPP-LVQMSGPLSS-TRTPEPLFLLPPP-----DSVGIS-----
BoCNGC21 : -----MASPKE-NDDVPMLPISDTS-RTRPFTSRSRVSLNCTSTIDGF-DSSTVVLYGTGFLRAQRRPP-LVQMSGPLSS-TRNPEPLFLLPPP-----DSVGIS-----
BoCNGC20 : -----ME-KDDVPMLPVSDDSSLS-RTRPFTSRSRVSLANTSSIDGF-DSSTVVLYGTGFLRTRRRPP-LVQMSGPLSS-TRSEPEPLFLLPPP-----STRDVS-----
AtCNGC20 : -----MASHNE-NDDIPMLPISDPSSRT-RARAFTSRSRVSLNCTSTIEGF-DTSTVVLYGTGFLRTRRRPP-LVQMSGPLSS-TRKHEPLFLLPPP-----DSVGIS-----
BoCNGC22 : -----MAPPNE-KDDVPMLPISDSSSSS-RTRPFTSRSRVSLANTSSAIDGF-DSSTVVLYGTGFLQTYGRPA-FVQMSALPS-TLPEPLFLLHPTPTGSSSHSIVS-----
Bra029958 : -----MLPISDASSSSSQRVFTSRTRVSLNCTSTIEGF-NSKAATLGYAGSLPSQ-RPP-LFPMTGPLSSSTR-----
BoCNGC23 : -----MVSPNK-NDKIHILPISDASSSSSQRVFTSRTRVSLNCTSTIEGF-NSNAVTLGYAGSLPSQ-RPP-LVPMTGPLSSSTRRPEPLFPPAPP-----
Bra021265 : -----NDQVSIPEATSRATRAFNKRSVSLNCTSTIEGF-DNSKVALGYTVPIRTQRRPP-----GLYS-TRP-ESHFPPS-----I-----
BoCNGC24 : -----MISPNE-NDQVSIPEATSRATRAFNKRSVSLNCTSTIEGF-DNSKVALGYTVPIRTQRRPP-----GLYS-TRP-ESHFPPS-----I-----
AtCNGC19 : -----MAHTRTFTSRNRVSLNCTSTIEGF-DNSTVTLGYTGFLRTRRRPP-LVQMSGPLSS-TRTPEPLFLLPPP-----DSVGIS-----
Bra022232 : -----MASPNE-KDEFPILLPVPEARSANTRAFNRNRVSLNCTSTIEGF-DNSTVTLGYTGFLRTRRRPP-LVQMSGPLSS-TRTPEPLFLLPPP-----DSVGIS-----
BoCNGC25 : -----MASPNE-KDEFPILLPVSEARPRANTRAFNRNRVSLNCTSTIEGF-DNSTVTLGYTGFLRTRRRPP-LVQMSGPLSS-TRTPEPLFLLPPP-----DSVGIS-----
Bra022233 : -----MASPNE-NDEFPMLRQVPEARS-RALHSRNRVSLNCTSTIEGF-DNSTVTLGYTGFLRTRRRPP-LVQMSGPLSS-TRTPEPLFLLPPP-----DSVGIS-----
BoCNGC26 : -----MAYPNE-SDEFPMLRQVPEARSRAQSRALHSRNRVSLNCTSTIEGF-DNSTVTLGYTGFLRTRRRPP-LVQMSGPLSS-TRTPEPLFLLPPP-----DSVGIS-----
Bra001676 : -----MASPME-NDDVPMLPASDTS-RTMPFTSRSRVSLNCTSTIEGF-DNSTVTLGYTGFLRTRRRPP-LVQMSGPLSS-TRTPEPLFLLPPP-----DSVGIS-----
BoCNGC18 : -----MASPME-NDDVPMLPASDTS-RTMPFTSRSRVSLNCTSTIEGF-DNSTVTLGYTGFLRTRRRPP-LVQMSGPLSS-TRTPEPLFLLPPP-----DSVGIS-----
Bra001678 : -----MASSNG-YDDVPMLPASDTS-RTMPFTSRSRVSLNCTSTIEGF-DNSTVTLGYTGFLRTRRRPP-LVQMSGPLSS-TRTPEPLFLLPPP-----DSVGIS-----
Bra022702 : -----120-----*-----140-----*-----160-----*-----180-----*-----200-----*-----220-----*-----
BoCNGC15 : -----EEEEPRVVRTCGGRR-NGSPGSYNKWMMLGRITDDE-----
AtCNGC4 : -----EEEEPRVVRTCGGRR-NGSPGSYNKWMMLGRITDDE-----
Bra003001 : -----EEEEPRVVRTCGGRR-NGSPGSYNKWMMLGRITDDE-----
BoCNGC16 : -----EEEEPRVVRTCGGRR-NGSPGSYNKWMMLGRITDDE-----
Bra008699 : -----ASAGSSLVPIQEGSAPDPVRRARIRRLKGFPGFVLDDE-----
BoCNGC17 : -----ASAGSSLVPIQEGSAPDPVRRARIRRLKGFPGFVLDDE-----
AtCNGC2 : -----ASAGSSLVPIQEGSAPDPVRRARIRRLKGFPGFVLDDE-----
Bra004537 : -----ASAGSSLVPIQEGSAPDPVRRARIRRLKGFPGFVLDDE-----
BoCNGC2 : -----PLTFHSQKKNEN-KKKIIR-VMNEN-----
AtCNGC3 : -----PLTFHSQKKNEN-KKKIIR-VMNEN-----
Bra000937 : -----PLSVHSHKNEEKRNATGTQKKNINBQ-----
BoCNGC1 : -----PLSVHSHKNEEKRNATGTQKKNINBQ-----
AtCNGC13 : -----PLSVHSHKNEEKRNATGTQKKNINBQ-----
AtCNGC10 : -----PLSVHSHKNEEKRNATGTQKKNINBQ-----
Bra034281 : -----AILLVCVVALG-----
BoCNGC3 : -----AILLVCVVALG-----
AtCNGC11 : -----TVLLACVVALA-----
AtCNGC12 : -----TVLLACVVALA-----
Bra003323 : -----RFPIVSAVDIGGVTVARNDDDPTNIVP-----
Bra031515 : -----IVLLVCLVALA-----
Bra022632 : -----SYSFKEAVSKGIDSSHKILD-----EQ-----
AtCNGC1 : -----SYSFKEAVSKGIDSSHKILD-----EQ-----
Bra003081 : -----SYSFKEAVSKGIDSSHKILD-----EQ-----
Bra020402 : -----KGSKGLKSIGRSLGFGYRAVFPEDLVSEKKIDDE-----
BoCNGC7 : -----KGSKGLKSIGRSLGFGYRAVFPEDLVSEKKIDDE-----
BoCNGC4 : -----KGSEGLWSIGRSLGFGYRAVFPEDLVSEKKIDDE-----
Bra032132 : -----KGSEGLWSIGRSLGFGYRAVFPEDLVSEKKIDDE-----
BoCNGC5 : -----KGSEGLWSIGRSLGFGYRAVFPEDLVSEKKIDDE-----
AtCNGC6 : -----KGSEGLWSIGRSLGFGYRAVFPEDLVSEKKIDDE-----
Bra026086 : -----IGSEGLFSIGKS-VTRAVFPEDLRSEKKIDDE-----
BoCNGC8 : -----IGSEGLFSIGKS-VTRAVFPEDLRSEKKIDDE-----
AtCNGC7 : -----IRSEGLITIGKS-VTRAVFPEDLRSEKKIDDE-----
AtCNGC8 : -----IGSEGLTIGKSFTSGVTRAVFPEDLRSEKKIDDE-----
Bra008733 : -----ASNRGSVAVRYGSQVLPWRHQIDDE-----
BoCNGC13 : -----ASNRGSVAVRYGSQVLPWRHQIDDE-----
AtCNGC18 : -----AASNRGSDGSQFS-VLWRHQIDDE-----
Bra018089 : -----HHNNNDLQNRGRSVFSELGDTTIDDE-----
BoCNGC14 : -----HHNNNDLQNRGRSVFSELGDTTIDDE-----
AtCNGC16 : -----HHNNNDLQNRGRSVFSELGDTTIDDE-----
Bra011186 : -----LSGNRISRYTDNNKSKSKSPSWYKTIDDE-----
BoCNGC10 : -----LAGNRISRYTDNNKSKSKSPSWYKTIDDE-----
AtCNGC17 : -----LPGNRL-RYTDASKSKSKSPSWYKTIDDE-----
Bra007839 : -----TRLFKLPREFGGLKVPENFEIERDKIDDE-----
BoCNGC12 : -----TRLFKLPREFGGLKVPENFEIERDKIDDE-----
Bra032081 : -----IFKIPREFGGLKVPENFEIERDKIDDE-----
BoCNGC11 : -----IFKIPREFGGLKVPENFEIERDKIDDE-----
AtCNGC14 : -----TRLFKLPREFGGLKVPENFEIERDKIDDE-----
Bra011963 : -----RGKSFKDKVLSRVFTEDLGRVKNKIDDE-----
BoCNGC9 : -----RGKSFKDKVLSRVFTEDLGRVKNKIDDE-----
AtCNGC15 : -----KGKFLKAVLSRVFTEDLGRVKNKIDDE-----
Bra021266 : SSQPERYPSFATLEHKKS-DEEFLKHAHL-----LRSGQLGMCNDPYCTTCPSYNRKAAQIPSSRVSAFFDS-----KFHNALYDDAGWARRFATTANRYLPGIMNEH-----
BoCNGC21 : SSQPERYPSFATLEHKKS-DEEFLKHAHL-----LRSGQLGMCNDPYCTTCPSYNRKAAQIPSSRVSAFFDS-----KFHNALYDDAGWARRFATTANRYLPGIMNEH-----
BoCNGC20 : SSQPERYPSFATLEHKKS-DEEFLKHAHL-----LRSGQLGMCNDPYCTTCPSYNRKAAQIPSSRVSAFFDS-----TFH-----DARGWARRFATINRHLPGIMNEH-----
AtCNGC20 : S-QPERYPSFAALEHKNSSEDEFLKHAHL-----LRSGQLGMCNDPYCTTCPSYNRKAAQIPSSRVSAFFDS-----TFH-----DARGWARRFATINRHLPGIMNEH-----
BoCNGC22 : SSQPESCP-FAALEHKNS-DEEFLGLG-----SGLEVCNDPYCTTCPSYNRKAAQIPSSRVSAFFDS-----KLHAMCDDARGWARRFATINRHLPGIMNEH-----
Bra029958 : -----SSGYFDLEEVNSSDNDLKHAAH-----LRSGQLGMCNDPYCTTCPSYNRKAAQIPSSRVSAFFDS-----TFH-----DARGWARRFATINRHLPGIMNEH-----
BoCNGC23 : -----PTRSSGYFDLEEVNSSDNDLKHAAH-----LRSGQLGMCNDPYCTTCPSYNRKAAQIPSSRVSAFFDS-----TFH-----DARGWARRFATINRHLPGIMNEH-----
Bra021265 : EPPDS-SS-TVDVRSSEDE-SVLENANI-----LRSGQLGMCNDPYCTTCPSYNRKAAQIPSSRVSAFFDS-----FHTVLYDDARGWARRFATINRHLPGIMNEH-----

120 * 140 * 160 * 180 * 200 * 220 *
BoCNGC24 : EPPDS---SS-TVDVRSDE--SVVKNANI-----LTSGQLGMCNEPYCTTCSYYSHQANFHTS-KVSDSR-----FHTALYDDARGWAKRFASSVRRCPVGMNPH
AtcNGC19 : ESPDS---SS-TVDVPPEDD--FVFKNANL-----LRSGQLGMCNDPYCTTCSYYSNRQAAQLHTS-RVSASR-----FRTLVLGDARGWAKRFASSVRRCLPGIMNPH
Bra022232 : QPPDS---SS-TVDVPSDED--EVVLKNANL-----LKSQQLGMCNDPYCTTCSYYSNRQAAQFHTYRVSVDSSR-----FRTALYDDARGWAKRFASSVRRKMVPGIMNPH
BoCNGC25 : QPPDSSLSSS-TVDVPSDED--EVVLKNANL-----LKSQQLGMCNDPYCTTCSYYSNRQAAQFHTYRVSVDSSR-----FRTALYDDARGWAKRFASSVRRKLPIMNPH
Bra022233 : QPPASSLSSS-TVDIPSEEVVEALLKNANL-----LKSQQLGMCNDPYCTTCSYYSNRQAAQFHTYGVVSDSRTQVNVTHNRQALHDYDRGWAKLFASVYRRCVPGIINPH
BoCNGC26 : QPPASSLSSSTVDIPSEEVVEALLKNANL-----LKSQQLGMCNDPYCTTCSYYSNRQAAQFHTYGVVSDSRTQVNVTHNRQALHDYDRGWAKLFASVYRRCVPGIINPH
Bra001676 : STGASYSVSGASSQPNERNHAYS-----RTPRVFATSDF-----TLHNALDDDAKAWA-----KYFSGIIYPE
BoCNGC18 : STGASDSVSGASSQPNERNHAYS-----RTPRVFATSDF-----TLHNALDDDAKAWA-----KYFSGIIYPE
Bra001678 : -----
BoCNGC19 : GTTCCPSDYNREAAQIPTPR-----VSDS-----MVHNARDDDAKAWARFATSVDKYLPKIMEBN
Bra031529 : STGGSSDPVGVSSSQPERYPSFAALEHDNSDDNSVLNPHLLRSEKFGVCNDPYCTTCSYYSNRKADQVPTSRVPAIFYS-----MFHSALYEDAKARARFATSVDNHLPGIMNPH

240 * 260 * 280 * 300 * 320 * 340
Bra022702 : SKLVQEWNRVFLVLCATGFLVDPLFLYTLISNDAC---MCLIVDGMALTVTALRSMTDLHLHWNLIQFKIARRWYPGGDSDGDKNGDCTRVRT--RVAAPPYVKKNG-FFFDI
AtcNGC15 : SKLVQEWNRVFLVLCATGFLVDPLFLYTLISNDAC---MCLIVDGMALTVTALRSMTDLHLHWNLIQFKIARRWYPGGDSDGDKNGDCTRVRT--RVAAPPYVKKNG-FFFDI
BoCNGC4 : SKLVQEWNRVFLVLCATGFLVDPLFLYTLISNDTC---MCLIVDGMALTVTALRSMTDLHLHWNLIQFKIARRWYPGGDSDGDKNGDCTRVRT--RVAAPPYVKKNG-FFFDI
Bra003001 : SKLVQEWNRVFLVLCATGFLVDPLFLYTLISNDAC---MCLIVDGMALTVTALRSMTDLHLHWNLIQFKIARRWYPGGDSDGDKNGDCTRVRT--RVAAPPYVKKNG-FFFDI
BoCNGC16 : SKLVQEWNRVFLVLCATGFLVDPLFLYTLISNDAC---MCLIVDGMALTVTALRSMTDLHLHWNLIQFKIARRWYPGGDSDGDKNGDCTRVRT--RVAAPPYVKKNG-FFFDI
Bra008699 : SKRVRQWNRALLLARGMALAVDPLFFYALSIGRTTG-PACLYMDGAFAAVTVVRICLDAHLHWHVWLQFRLA---YVSRES---LVVCCCKLVWDDPRATASHYARSLTGFWFDV
BoCNGC17 : SKRVRQWNRALLLARGMALAVDPLFFYALSIGRTTG-PACLYMDGAFAAVTVVRICLDAHLHWHVWLQFRLA---YVSRES---LVVCCCKLVWDDPRATASHYARSLTGFWFDV
AtcNGC2 : SKRVRQWNRALLLARGMALAVDPLFFYALSIGRTTG-PACLYMDGAFAAVTVVRICLDAHLHWHVWLQFRLA---YVSRES---LVVCCCKLVWDDPRATASHYARSLTGFWFDV
Bra004537 : DSYLQWNRKIFLLLCVVALADPLFFYIPVDPG---RRCIKLDRKLEAVACVFRFIDAFYVHIFHFQFRTG---FIAPSS---RGFGRGELVQSSKLAIRYLL--KSYFIIDV
BoCNGC2 : DSYLQWNRKIFLLLCVVALADPLFFYIPVDPG---RRCIKLDRKLEAVACVFRFIDAFYVHIFHFQFRTG---FIAPSS---RGFGRGELVQSSKLAIRYLL--KSYFIIDV
AtcNGC3 : DSYLQWNRKIFLLLCVVALADPLFFYIPVDPG---RRCIKLDRKLEAVACVFRFIDAFYVHIFHFQFRTG---FIAPSS---RGFGRGELVQSSKLAIRYLL--KSYFIIDV
Bra000937 : GSFQWNRKIFLLFASVIALADPLFFYIPVDPG---RRCIKLDRKLEAVACVFRFIDAFYVHIFHFQFRTG---FIAPSS---RGFGRGELVQSSKLAIRYLL--KSYFIIDV
BoCNGC1 : GSFQWNRKIFLLFASVIALADPLFFYIPVDPG---RRCIKLDRKLEAVACVFRFIDAFYVHIFHFQFRTG---FIAPSS---RGFGRGELVQSSKLAIRYLL--KSYFIIDV
AtcNGC13 : GSFQWNRKIFLLFASVIALADPLFFYIPVDPG---RRCIKLDRKLEAVACVFRFIDAFYVHIFHFQFRTG---FIAPSS---RGFGRGELVQSSKLAIRYLL--KSYFIIDV
BoCNGC10 : DSYLQWNRKIFLLFACVVALADPLFFYIPVDPG---RRCIKLDRKLEAVACVFRFIDAFYVHIFHFQFRTG---FIAPSS---RGFGRGELVQSSKLAIRYLL--KSYFIIDV
Bra034281 : VDFLFLFIPVDSF---NCFDFTDKKAAVVAARFIDTFYVHIFHFQFRTG---FIAPSS---QVSLRGLVHSHKATKRLKLF--FFHFIVDI
BoCNGC3 : VDFLFLFIPVDSF---NCFDFTDKKAAVVAARFIDTFYVHIFHFQFRTG---FIAPSS---QVSLRGLVHSHKATKRLKLF--FFHFIVDI
AtcNGC11 : VDFLFLFIPVDSF---NCFDFTDKKAAVVAARFIDTFYVHIFHFQFRTG---FIAPSS---QVSLRGLVHSHKATKRLKLF--FFHFIVDI
BoCNGC12 : VDFLFLFIPVDSF---NCFDFTDKKAAVVAARFIDTFYVHIFHFQFRTG---FIAPSS---QVSLRGLVHSHKATKRLKLF--FFHFIVDI
Bra003323 : DSIFESN---YANCYHQATVDFLFFYIPVDSH---RRCIKLDRKLEAVACVFRFIDAFYVHIFHFQFRTG---FIAPSS---QVSLRGLVHSHKATKRLKLF--FFHFIVDI
Bra031515 : VDFLFLFIPVDSH---RRCIKLDRKLEAVACVFRFIDAFYVHIFHFQFRTG---FIAPSS---QVSLRGLVHSHKATKRLKLF--FFHFIVDI
Bra022632 : GPELQWNRKIFVLACIIAVSDPLFFYIPVDDA---KRCIGIDRKAIVATTTTRVIDDFYLFHMLALFRFTA---YVAPSS---RVFGRGELVIDPAKIAKRYLL--QYFIVDF
AtcNGC1 : GPELQWNRKIFVLACIIAVSDPLFFYIPVDDA---KRCIGIDRKAIVATTTTRVIDDFYLFHMLALFRFTA---YVAPSS---RVFGRGELVIDPAKIAKRYLL--QYFIVDF
Bra003081 : GPELQWNRKIFVLACIIAVSDPLFFYIPVDDA---KRCIGIDRKAIVATTTTRVIDDFYLFHMLALFRFTA---YVAPSS---RVFGRGELVIDPAKIAKRYLL--QYFIVDF
Bra020402 : DKTLLFCNKLFVASCIIAVSDPLFFYIPVDDA---KRCIGIDRKAIVATTTTRVIDDFYLFHMLALFRFTA---YVAPSS---RVFGRGELVIDPAKIAKRYLL--QYFIVDF
BoCNGC7 : DKTLLFCNKLFVASCIIAVSDPLFFYIPVDDA---KRCIGIDRKAIVATTTTRVIDDFYLFHMLALFRFTA---YVAPSS---RVFGRGELVIDPAKIAKRYLL--QYFIVDF
AtcNGC5 : DKTLLFCNKLFVASCIIAVSDPLFFYIPVDDA---KRCIGIDRKAIVATTTTRVIDDFYLFHMLALFRFTA---YVAPSS---RVFGRGELVIDPAKIAKRYLL--QYFIVDF
Bra024067 : DKTLLFCNKLFVASCIIAVSDPLFFYIPVDDA---KRCIGIDRKAIVATTTTRVIDDFYLFHMLALFRFTA---YVAPSS---RVFGRGELVIDPAKIAKRYLL--QYFIVDF
BoCNGC6 : DKTLLFCNKLFVASCIIAVSDPLFFYIPVDDA---KRCIGIDRKAIVATTTTRVIDDFYLFHMLALFRFTA---YVAPSS---RVFGRGELVIDPAKIAKRYLL--QYFIVDF
AtcNGC9 : DKTLLFCNKLFVASCIIAVSDPLFFYIPVDDA---KRCIGIDRKAIVATTTTRVIDDFYLFHMLALFRFTA---YVAPSS---RVFGRGELVIDPAKIAKRYLL--QYFIVDF
Bra039221 : DKTLLFCNKLFVASCIIAVSDPLFFYIPVDDA---KRCIGIDRKAIVATTTTRVIDDFYLFHMLALFRFTA---YVAPSS---RVFGRGELVIDPAKIAKRYLL--QYFIVDF
BoCNGC4 : DKTLLFCNKLFVASCIIAVSDPLFFYIPVDDA---KRCIGIDRKAIVATTTTRVIDDFYLFHMLALFRFTA---YVAPSS---RVFGRGELVIDPAKIAKRYLL--QYFIVDF
Bra032132 : DKTLLFCNKLFVASCIIAVSDPLFFYIPVDDA---KRCIGIDRKAIVATTTTRVIDDFYLFHMLALFRFTA---YVAPSS---RVFGRGELVIDPAKIAKRYLL--QYFIVDF
BoCNGC5 : DKTLLFCNKLFVASCIIAVSDPLFFYIPVDDA---KRCIGIDRKAIVATTTTRVIDDFYLFHMLALFRFTA---YVAPSS---RVFGRGELVIDPAKIAKRYLL--QYFIVDF
AtcNGC6 : DKTLLFCNKLFVASCIIAVSDPLFFYIPVDDA---KRCIGIDRKAIVATTTTRVIDDFYLFHMLALFRFTA---YVAPSS---RVFGRGELVIDPAKIAKRYLL--QYFIVDF
Bra026086 : DKTLLFCNKLFVASCIIAVSDPLFFYIPVDDA---KRCIGIDRKAIVATTTTRVIDDFYLFHMLALFRFTA---YVAPSS---RVFGRGELVIDPAKIAKRYLL--QYFIVDF
BoCNGC8 : DKTLLFCNKLFVASCIIAVSDPLFFYIPVDDA---KRCIGIDRKAIVATTTTRVIDDFYLFHMLALFRFTA---YVAPSS---RVFGRGELVIDPAKIAKRYLL--QYFIVDF
AtcNGC7 : DKTLLFCNKLFVASCIIAVSDPLFFYIPVDDA---KRCIGIDRKAIVATTTTRVIDDFYLFHMLALFRFTA---YVAPSS---RVFGRGELVIDPAKIAKRYLL--QYFIVDF
Bra008733 : SNIVTYWNRHVFVLTSLALFDFEYFYAPYVGG---G-PACLSVDVCAATVTFRRVADLHLLHIFMKFRTA---FVARS---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
BoCNGC13 : SNIVTYWNRHVFVLTSLALFDFEYFYAPYVGG---G-PACLSVDVCAATVTFRRVADLHLLHIFMKFRTA---FVARS---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
AtcNGC18 : SNIVTYWNRHVFVLTSLALFDFEYFYAPYVGG---G-PACLSVDVCAATVTFRRVADLHLLHIFMKFRTA---FVARS---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
Bra018089 : GDLTRWNHIFLITCLLALFDPLFFYIPVQA---G-TACMSIDIGFGLVTFRRVADLHLLHIFMKFRTA---FVARS---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
BoCNGC14 : GDLTRWNHIFLITCLLALFDPLFFYIPVQA---G-TACMSIDIGFGLVTFRRVADLHLLHIFMKFRTA---FVARS---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
AtcNGC16 : GDLTRWNHIFLITCLLALFDPLFFYIPVQA---G-TACMSIDIGFGLVTFRRVADLHLLHIFMKFRTA---FVARS---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
Bra011186 : SEIVLKNWVFIISCMALFDPLFFYIPVPA---GGKND-YEAKTDTNRILVTFRRVADLHLLHIFMKFRTA---FVARS---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
BoCNGC10 : SEIVLKNWVFIISCMALFDPLFFYIPVPA---GGKND-YEAKTDTNRILVTFRRVADLHLLHIFMKFRTA---FVARS---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
AtcNGC17 : SEIVLKNWVFIISCMALFDPLFFYIPVPA---GGKND-YEAKTDTNRILVTFRRVADLHLLHIFMKFRTA---FVARS---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
Bra007839 : GDVVLQWNRVFLFWCLVALYVDFLFFYIPVQA---G-TACMSIDIGFGLVTFRRVADLHLLHIFMKFRTA---FVARS---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
BoCNGC12 : GDVVLQWNRVFLFWCLVALYVDFLFFYIPVQA---G-TACMSIDIGFGLVTFRRVADLHLLHIFMKFRTA---FVARS---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
AtcNGC14 : GDVVLQWNRVFLFWCLVALYVDFLFFYIPVQA---G-TACMSIDIGFGLVTFRRVADLHLLHIFMKFRTA---FVARS---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
Bra011963 : GQTRKWNKFLIACLVSLFDPLFFYIPVQR---K-EACITIGIRVAVVLTVIRSLADAFYIACVIRFRTA---YIAPSS---RVFGRGELVIDSRKIAKRYLL--NKSFWIHL
BoCNGC9 : GQTRKWNKFLIACLVSLFDPLFFYIPVQR---K-EACITIGIRVAVVLTVIRSLADAFYIACVIRFRTA---YIAPSS---RVFGRGELVIDSRKIAKRYLL--NKSFWIHL
AtcNGC15 : GQTRKWNKFLIACLVSLFDPLFFYIPVQR---K-EACITIGIRVAVVLTVIRSLADAFYIACVIRFRTA---YIAPSS---RVFGRGELVIDSRKIAKRYLL--NKSFWIHL
Bra021266 : SKFVQSWTKFFALSCLLAFIDPLFFYIPVQRNDK---CIVIDWPKAKAFVAVRSVTDVLEFSVNLQ---FRLAYVAPES---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
BoCNGC21 : SKFVQSWTKFFALSCLLAFIDPLFFYIPVQRNDK---CIVIDWPKAKAFVAVRSVTDVLEFSVNLQ---FRLAYVAPES---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
BoCNGC20 : SKFVQSWTKFFALSCLLAFIDPLFFYIPVQRNDK---CIVIDWPKAKAFVAVRSVTDVLEFSVNLQ---FRLAYVAPES---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
AtcNGC20 : AKFVQSWTKFFALSCLLAFIDPLFFYIPVQRNDK---CIVIDWPKAKAFVAVRSVTDVLEFSVNLQ---FRLAYVAPES---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
BoCNGC22 : YKFWQSWTKFFALSCLLAFIDPLFFYIPVQRNDK---CIVIDWPKAKAFVAVRSVTDVLEFSVNLQ---FRLAYVAPES---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
Bra029958 : SKFVQSWTKFFALSCLLAFIDPLFFYIPVQRNDK---CIVIDWPKAKAFVAVRSVTDVLEFSVNLQ---FRLAYVAPES---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
BoCNGC23 : SKFVQSWTKFFALSCLLAFIDPLFFYIPVQRNDK---CIVIDWPKAKAFVAVRSVTDVLEFSVNLQ---FRLAYVAPES---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
AtcNGC12 : SKFVQSWTKFFALSCLLAFIDPLFFYIPVQRNDK---CIVIDWPKAKAFVAVRSVTDVLEFSVNLQ---FRLAYVAPES---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
BoCNGC24 : SKFVQSWTKFFALSCLLAFIDPLFFYIPVQRNDK---CIVIDWPKAKAFVAVRSVTDVLEFSVNLQ---FRLAYVAPES---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
AtcNGC19 : SKFVQSWTKFFALSCLLAFIDPLFFYIPVQRNDK---CIVIDWPKAKAFVAVRSVTDVLEFSVNLQ---FRLAYVAPES---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
Bra022232 : SKFVQSWTKFFALSCLLAFIDPLFFYIPVQRNDK---CIVIDWPKAKAFVAVRSVTDVLEFSVNLQ---FRLAYVAPES---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
BoCNGC25 : SKFVQSWTKFFALSCLLAFIDPLFFYIPVQRNDK---CIVIDWPKAKAFVAVRSVTDVLEFSVNLQ---FRLAYVAPES---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
Bra022233 : SKFVQSWTKFFALSCLLAFIDPLFFYIPVQRNDK---CIVIDWPKAKAFVAVRSVTDVLEFSVNLQ---FRLAYVAPES---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
BoCNGC26 : SKFVQSWTKFFALSCLLAFIDPLFFYIPVQRNDK---CIVIDWPKAKAFVAVRSVTDVLEFSVNLQ---FRLAYVAPES---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
Bra001676 : SNVQLWTTTFVLSCLLAFIDPLFFYIPVQRNDK---CIVIDWPKAKAFVAVRSVTDVLEFSVNLQ---FRLAYVAPES---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
BoCNGC18 : SNVQLWTTTFVLSCLLAFIDPLFFYIPVQRNDK---CIVIDWPKAKAFVAVRSVTDVLEFSVNLQ---FRLAYVAPES---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
Bra001678 : SKFVQSWTKFFALSCLLAFIDPLFFYIPVQRNDK---CIVIDWPKAKAFVAVRSVTDVLEFSVNLQ---FRLAYVAPES---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
BoCNGC19 : SKFVQSWTKFFALSCLLAFIDPLFFYIPVQRNDK---CIVIDWPKAKAFVAVRSVTDVLEFSVNLQ---FRLAYVAPES---RVFGRGELVDRPREIAMKYLL--KSDFIVDV
Bra031529 : SIFVQSWTKFFALSCLLAFIDPLFFYIPVQRNDK---CIVIDWPKAKAFVAVRSVTDVLEFSVNLQ---FRLAYVAPES---RVFGRGELVDRPREIAMKYLL--KSDFIVDV

360 * 380 * 400 * 420 * 440 * 460
Bra022702 : FVILPLP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
BoCNGC15 : FVILPLP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
AtcNGC4 : FVILPLP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
Bra003001 : FVILPLP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
BoCNGC16 : FVILPLP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
Bra008699 : IVILPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
BoCNGC17 : IVILPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
AtcNGC2 : IVILPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
Bra004537 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
BoCNGC2 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
AtcNGC3 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
Bra000937 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
BoCNGC1 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
AtcNGC13 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
BoCNGC10 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
Bra034281 : CSVIPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
BoCNGC3 : CSVIPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
AtcNGC11 : ISVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
BoCNGC12 : ISVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
Bra003323 : VSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
BoCNGC18 : VSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
Bra022632 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
AtcNGC1 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
Bra003081 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
BoCNGC2 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
Bra020402 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
BoCNGC7 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
AtcNGC5 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
Bra024067 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
BoCNGC6 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
AtcNGC9 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
Bra039221 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
BoCNGC4 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
Bra032132 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
BoCNGC5 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
AtcNGC6 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
Bra026086 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
BoCNGC8 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
AtcNGC7 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL
BoCNGC8 : LSVLPVP---QVVLWVWVPSLLKRGSVTLVSVI---LLTFLFQYLPKIIYHSIRHLRQATLSGYIFGIVWGFALNMVAIFVAABAAGACWYL

Bra008733 : AAMLPLP-----QLVIWLVIP--AATNGTANHANSTIALIVLVQYIPRSFIIIFLNQRIIKTTGFIAKLAWAGAAAYNLLYLASHVIGAMWYL
BoCNGC13 : AAMLPLP-----QLVIWLVIP--AATNGTANHANSTIALIVLVQYIPRSFIIIFLNQRIIKTTGFIAKLAWAGAAAYNLLYLASHVIGAMWYL
AtCNGC18 : AAMLPLP-----QLVIWLVIP--AATNGTANHANSTIALIVLVQYIPRSFIIIFLNQRIIKTTGFIAKLAWAGAAAYNLLYLASHVIGAMWYL
Bra018089 : AATLPLP-----QIMWVFIIPNAGEFRYAAHQNHTLSLVVLIQYVPRILVMIPLNRRRIKATGVAAKLAWAGAAAYNLLYLASHVIGAMWYL
BoCNGC14 : AATLPLP-----QIMWVFIIPNAGEFRYAAHQNHTLSLVVLIQYVPRILVMIPLNRRRIKATGVAAKLAWAGAAAYNLLYLASHVIGAMWYL
AtCNGC16 : AATLPLP-----QIMWVFIIPNAGEFRYAAHQNHTLSLVVLIQYVPRILVMIPLNRRRIKATGVAAKLAWAGAAAYNLLYLASHVIGAMWYL
Bra011186 : VATLPLP-----QIVWVFMVMP--ATRSYRFDHNSNDIALIVLVQYIPRFYLIIFLSSQIVKATGVVTKLAWAGAAAYNLLYLASHVIGAMWYL
BoCNGC10 : VATLPLP-----QIVWVFMVMP--ATRSYRFDHNSNDIALIVLVQYIPRFYLIIFLSSQIVKATGVVTKLAWAGAAAYNLLYLASHVIGAMWYL
AtCNGC17 : IATLPLP-----QIVWVFMVMP--ATRSYRFDHNSNDIALIVLVQYIPRFYLIIFLSSQIVKATGVVTKLAWAGAAAYNLLYLASHVIGAMWYL
Bra007839 : IACLPLP-----QIVSWFIFLP--SIRSSSDHTTNAIVLVVLIQYIPRLYLIIFLSAEIIRKATGVVTTLAWAGAAAYNLLYLASHVIGAMWYL
BoCNGC12 : IACLPLP-----QIVSWFIFLP--SIRSSSDHTTNAIVLVVLIQYIPRLYLIIFLSAEIIRKATGVVTTLAWAGAAAYNLLYLASHVIGAMWYL
Bra032081 : IACLPLP-----QIVSWFIFLP--SIRSSSDHTTNAIVLVVLIQYIPRLYLIIFLSAEIIRKATGVVTTLAWAGAAAYNLLYLASHVIGAMWYL
BoCNGC11 : IACLPLP-----QIVSWFIFLP--SIRSSSDHTTNAIVLVVLIQYIPRLYLIIFLSAEIIRKATGVVTTLAWAGAAAYNLLYLASHVIGAMWYL
AtCNGC14 : IACLPLP-----QIVSWFIFLP--SIRSSSDHTTNAIVLVVLIQYIPRLYLIIFLSAEIIRKATGVVTTLAWAGAAAYNLLYLASHVIGAMWYL
Bra011963 : VAALPLP-----QVLWIVVIP--NLRGSPMTNKTNRIFIIIFQYVPRMFLIFPLSRQIIRKATGVVTTLAWAGAAAYNLLYLASHVIGAMWYL
BoCNGC9 : VAALPLP-----QVLWIVVIP--NLRGSPMTNKTNRIFIIIFQYVPRMFLIFPLSRQIIRKATGVVTTLAWAGAAAYNLLYLASHVIGAMWYL
AtCNGC15 : VAALPLP-----QVLWIVVIP--NLRGSPMTNKTNRIFIIIFQYVPRMFLIFPLSRQIIRKATGVVTTLAWAGAAAYNLLYLASHVIGAMWYL
Bra021266 : FIVMPLP-----QILILWIIIPAHLGASGANYAKNLLRAAVLIFQYIPKLYRILPILLAG--QTPTGFIFESAWANFVINLLTFMLAGHVVGSCWYL
BoCNGC21 : FIVMPLP-----QILILWIIIPAHLGASGANYAKNLLRAAVLIFQYIPKLYRILPILLAG--QTPTGFIFESAWANFVINLLTFMLAGHVVGSCWYL
BoCNGC20 : FIVMPLP-----QILILWIIIPAHLGASGANYAKNLLRAAVLIFQYIPKLYRILPILLAG--QTPTGFIFESAWANFVINLLTFMLAGHVVGSCWYL
AtCNGC20 : FIVMPLP-----QILILWIIIPAHLGASGANYAKNLLRAAVLIFQYIPKLYRILPILLAG--QTPTGFIFESAWANFVINLLTFMLAGHVVGSCWYL
BoCNGC22 : FIVMPLP-----QILILWIIIPAHLGASGANYAKNLLRAAVLIFQYIPKLYRILPILLAG--QTPTGFIFESAWANFVINLLTFMLAGHVVGSCWYL
Bra029958 : FIVMPLP-----QILILWIIIPAHLGASGANYAKNLLRAAVLIFQYIPKLYRILPILLAG--QTPTGFIFESAWANFVINLLTFMLAGHVVGSCWYL
BoCNGC23 : FIVMPLP-----QILILWIIIPAHLGASGANYAKNLLRAAVLIFQYIPKLYRILPILLAG--QTPTGFIFESAWANFVINLLTFMLAGHVVGSCWYL
Bra021265 : FIVLPIIP-----QIMTSLIPAHLGTSTAGFERNIIRSTFIIFQYIPKLYRILPILLAG--QTPTGFIFESAWANFVINLLTFMLAGHVVGSCWYL
BoCNGC24 : FIVLPIIP-----QIMTSLIPAHLGTSTAGFERNIIRSTFIIFQYIPKLYRILPILLAG--QTPTGFIFESAWANFVINLLTFMLAGHVVGSCWYL
AtCNGC19 : FIVLPIIP-----QIMTSLIPAHLGTSTAGFERNIIRSTFIIFQYIPKLYRILPILLAG--QTPTGFIFESAWANFVINLLTFMLAGHVVGSCWYL
Bra022232 : LIVLPM-----QIMILSMLPAHLGTPRSELEKNIIRIVLIFQYIPKLYRILPILLAG--QTPTGFIFESAWANFVINLLTFMLAGHVVGSCWYL
BoCNGC25 : LIVLPM-----QIMILSMLPAHLGTPRSELEKNIIRIVLIFQYIPKLYRILPILLAG--QTPTGFIFESAWANFVINLLTFMLAGHVVGSCWYL
Bra022233 : VIVYVVP-----QIMILSMLPAHLGTPRSELEKNIIRIVLIFQYIPKLYRILPILLAG--QTPTGFIFESAWANFVINLLTFMLAGHVVGSCWYL
BoCNGC26 : VIVYVVP-----QIMILSMLPAHLGTPRSELEKNIIRIVLIFQYIPKLYRILPILLAG--QTPTGFIFESAWANFVINLLTFMLAGHVVGSCWYL
Bra001676 : FIVLPIIP-----QILILWIIIPAHLGTSTAGFERNIIRSTFIIFQYIPKLYRILPILLAG--QTPTGFIFESAWANFVINLLTFMLAGHVVGSCWYL
BoCNGC18 : FIVLPIIP-----QILILWIIIPAHLGTSTAGFERNIIRSTFIIFQYIPKLYRILPILLAG--QTPTGFIFESAWANFVINLLTFMLAGHVVGSCWYL
Bra001678 : VIVYVVP-----QIMILSMLPAHLGTPRSELEKNIIRIVLIFQYIPKLYRILPILLAG--QTPTGFIFESAWANFVINLLTFMLAGHVVGSCWYL
BoCNGC19 : FIVLPIIP-----QILILWIIIPAHLGTSTAGFERNIIRSTFIIFQYIPKLYRILPILLAG--QTPTGFIFESAWANFVINLLTFMLAGHVVGSCWYL
Bra031529 : FIVMPLP-----QILISWITPAWLGGSWENNAYSIIQAAVILQYITLIRYRILPILLAG--KTPICGIFILES--SKFAINFILTFMLAGHVVGSCWYL

p p q p p g w a h g wy

Bra022702 : LGVQRSACLKEQCENMGCDLRLMSCKEIVYGGTTEM----VLDRLARLAWARNHQ--ARSVCLDIDTDIYGAQWTLQLVSNESR---LEKILFPI-----FWG
BoCNGC15 : LGVQRSACLKEQCENMGCDLRLMSCKEIVYGGTTEM----VLDRLARLAWARNHQ--ARSVCLDSDTNMAYGAYQWTLQLVSNESR---LEKILFPI-----FWG
AtCNGC4 : LGVQRSACLKEQCENMGCDLRLMSCKEIVYGGTTEM----VLDRLARLAWARNHQ--ARSVCLDINTNMYGAYQWTLQLVSNESR---LEKILFPI-----FWG
Bra003001 : LGVQRSACLKEQCENMGCDLRLMSCKEIVYGGTTEM----VLDRLARLAWARNHQ--ARSVCLDINTNMYGAYQWTLQLVSNESR---LEKILFPI-----FWG
BoCNGC16 : LGVQRSACLKEQCENMGCDLRLMSCKEIVYGGTTEM----VLDRLARLAWARNHQ--ARSVCLDINTNMYGAYQWTLQLVSNESR---LEKILFPI-----FWG
Bra008699 : LAIQRVASCIRQQCMRTANCNL-SLSCQEEVCYQFVSP----SSTIGFPCVSGNLTSSVKKPCLDSDGPFERYGIYRWALPVISSNSL---AVKILYPI-----FWG
BoCNGC17 : LAIQRVASCIRQQCMRTANCNL-SLSCQEEVCYQFVSP----SSTIGFPCVSGNLTSSVKKPCLDSDGPFERYGIYRWALPVISSNSL---AVKILYPI-----FWG
AtCNGC2 : LAIQRVASCIRQQCMRTANCNL-SLSCQEEVCYQFVSP----SSTIGFPCVSGNLTSSVKKPCLDSDGPFERYGIYRWALPVISSNSL---AVKILYPI-----FWG
Bra004537 : ISIERKDRQWREACAKI---EGCVHGN--LYCS-----GGEDNSQYLIGSCPLMDPEEIKN-STVENFGIFAEALQSGVVESM--DFPKKFFYCF-----WWG
BoCNGC2 : ISIERKDRQWREACAKI---EGCVHGN--LYCS-----GGEDNSQYLIGSCPLMDPEEIKN-STVENFGIFAEALQSGVVESM--DFPKKFFYCF-----WWG
AtCNGC3 : ISIERKDRQWREACAKI---EGCVHGN--LYCS-----GGEDNSQYLIGSCPLMDPEEIKN-STVENFGIFAEALQSGVVESM--DFPKKFFYCF-----WWG
Bra000937 : ISVEREDRCWREACEKR---QGCLELD--LYCDG-----NNNVINDYLTSCFPINPDDITN-STTENFGIFTDALKSGIVKSD--DFWKKFFYCF-----WWG
BoCNGC1 : ISVEREDRCWREACEKR---QGCLELD--LYCDG-----NNNVINDYLTSCFPINPDDITN-STTENFGIFTDALKSGIVKSD--DFWKKFFYCF-----WWG
AtCNGC13 : ISVEREDRCWREACEKR---QGCLELD--LYCDG-----NNNVINDYLTSCFPINPDDITN-STTENFGIFTDALKSGIVKSD--DFWKKFFYCF-----WWG
Bra034281 : ISVEREDRCWREACEKR---QGCLELD--LYCDG-----NNNVINDYLTSCFPINPDDITN-STTENFGIFTDALKSGIVKSD--DFWKKFFYCF-----WWG
BoCNGC3 : ISVEREDRCWREACEKR---QGCLELD--LYCDG-----NNNVINDYLTSCFPINPDDITN-STTENFGIFTDALKSGIVKSD--DFWKKFFYCF-----WWG
AtCNGC11 : ISVEREDRCWREACEKR---QGCLELD--LYCDG-----NNNVINDYLTSCFPINPDDITN-STTENFGIFTDALKSGIVKSD--DFWKKFFYCF-----WWG
Bra003323 : SVEKKNKQWRLECAKI---FGCNLRY--QYCAR-----GRQNGRYLNTCPFLIDPDIQIG-STVENFGIMYTDALRSKGVVESH--DFPKKFFYCF-----WWG
BoCNGC11 : SVEKKNKQWRLECAKI---FGCNLRY--QYCAR-----GRQNGRYLNTCPFLIDPDIQIG-STVENFGIMYTDALRSKGVVESH--DFPKKFFYCF-----WWG
AtCNGC12 : SVEKKNKQWRLECAKI---FGCNLRY--QYCAR-----GRQNGRYLNTCPFLIDPDIQIG-STVENFGIMYTDALRSKGVVESH--DFPKKFFYCF-----WWG
Bra031515 : SVEKKNKQWRLECAKI---FGCNLRY--QYCAR-----GRQNGRYLNTCPFLIDPDIQIG-STVENFGIMYTDALRSKGVVESH--DFPKKFFYCF-----WWG
BoCNGC3 : SVEKKNKQWRLECAKI---FGCNLRY--QYCAR-----GRQNGRYLNTCPFLIDPDIQIG-STVENFGIMYTDALRSKGVVESH--DFPKKFFYCF-----WWG
AtCNGC1 : SVEKKNKQWRLECAKI---FGCNLRY--QYCAR-----GRQNGRYLNTCPFLIDPDIQIG-STVENFGIMYTDALRSKGVVESH--DFPKKFFYCF-----WWG
Bra003081 : FSIERETVQWQACERN---NPPCISK--LYCDP-----ETAGGNAFLNESCPIQTP---N-TTLEDFGIFLDALQSGVVESQ--DFPKKFFYCF-----WWG
BoCNGC1 : FSIERETVQWQACERN---NPPCISK--LYCDP-----ETAGGNAFLNESCPIQTP---N-TTLEDFGIFLDALQSGVVESQ--DFPKKFFYCF-----WWG
AtCNGC7 : FSIERETVQWQACERN---NPPCISK--LYCDP-----ETAGGNAFLNESCPIQTP---N-TTLEDFGIFLDALQSGVVESQ--DFPKKFFYCF-----WWG
Bra020402 : LALERNDAQWQACSDAG---KKICTTG--FLYCGNQNDG--YDWNKTKESVLSKCRADLDD---P-NPPDFGIFLRAALSSGIVSSQ--KFITKYCYCL-----WWG
BoCNGC7 : LALERNDAQWQACSDAG---KKICTTG--FLYCGNQNDG--YDWNKTKESVLSKCRADLDD---P-NPPDFGIFLRAALSSGIVSSQ--KFITKYCYCL-----WWG
AtCNGC5 : LALERNDAQWQACSDAG---KKICTTG--FLYCGNQNDG--YDWNKTKESVLSKCRADLDD---P-NPPDFGIFLRAALSSGIVSSQ--KFITKYCYCL-----WWG
Bra024067 : LALERNDAQWQACSDAG---KKICTTG--FLYCGNQNDG--YDWNKTKESVLSKCRADLDD---P-NPPDFGIFLRAALSSGIVSSQ--KFITKYCYCL-----WWG
BoCNGC6 : LALERNDAQWQACSDAG---KKICTTG--FLYCGNQNDG--YDWNKTKESVLSKCRADLDD---P-NPPDFGIFLRAALSSGIVSSQ--KFITKYCYCL-----WWG
AtCNGC9 : LALERNDAQWQACSDAG---KKICTTG--FLYCGNQNDG--YDWNKTKESVLSKCRADLDD---P-NPPDFGIFLRAALSSGIVSSQ--KFITKYCYCL-----WWG
Bra039221 : LALERNDAQWQACSDAG---KKICTTG--FLYCGNQNDG--YDWNKTKESVLSKCRADLDD---P-NPPDFGIFLRAALSSGIVSSQ--KFITKYCYCL-----WWG
BoCNGC4 : LALERNDAQWQACSDAG---KKICTTG--FLYCGNQNDG--YDWNKTKESVLSKCRADLDD---P-NPPDFGIFLRAALSSGIVSSQ--KFITKYCYCL-----WWG
Bra032132 : LALERNDAQWQACSDAG---KKICTTG--FLYCGNQNDG--YDWNKTKESVLSKCRADLDD---P-NPPDFGIFLRAALSSGIVSSQ--KFITKYCYCL-----WWG
BoCNGC5 : LALERNDAQWQACSDAG---KKICTTG--FLYCGNQNDG--YDWNKTKESVLSKCRADLDD---P-NPPDFGIFLRAALSSGIVSSQ--KFITKYCYCL-----WWG
AtCNGC6 : LALERNDAQWQACSDAG---KKICTTG--FLYCGNQNDG--YDWNKTKESVLSKCRADLDD---P-NPPDFGIFLRAALSSGIVSSQ--KFITKYCYCL-----WWG
Bra026086 : LSVERNDTCWRACKVQP---DPKLCVQ--ILYCGTKFVSSRETEWIKTVPELLKSNCSAKADD---AKENYGIYQCAISSGIVSST--TFFSKFCYCL-----WWG
BoCNGC8 : LSVERNDTCWRACKVQP---DPKLCVQ--ILYCGTKFVSSRETEWIKTVPELLKSNCSAKADD---AKENYGIYQCAISSGIVSST--TFFSKFCYCL-----WWG
AtCNGC7 : LSVERNDTCWRACKVQP---DPKLCVQ--ILYCGTKFVSSRETEWIKTVPELLKSNCSAKADD---AKENYGIYQCAISSGIVSST--TFFSKFCYCL-----WWG
BoCNGC8 : LSVERNDTCWRACKVQP---DPKLCVQ--ILYCGTKFVSSRETEWIKTVPELLKSNCSAKADD---AKENYGIYQCAISSGIVSST--TFFSKFCYCL-----WWG
Bra008733 : SSIGRQFSCWQVCKEDH--ALRVLDCLPSFLDCKS-----LQQPERQYQWNTQVLSHCATSS--TTNFKFGMAEAFQTQVATD---FVSNKYLYCI-----WWG
BoCNGC13 : SSIGRQFSCWQVCKEDH--ALRVLDCLPSFLDCKS-----LQQPERQYQWNTQVLSHCATSS--TTNFKFGMAEAFQTQVATD---FVSNKYLYCI-----WWG
AtCNGC18 : SSIGRQFSCWQVCKEDH--ALRVLDCLPSFLDCKS-----LQQPERQYQWNTQVLSHCATSS--TTNFKFGMAEAFQTQVATD---FVSNKYLYCI-----WWG
Bra018089 : LSIQRQHECWRRECIKEMNATHSPSCNLLFLDCGS-----LRDPGRQAWMRTIRVLSNCDARNDDDQHFQFGMFGDAFTNDVTSSP---FFDKYFYCL-----WWG
BoCNGC14 : LSIQRQHECWRRECIKEMNATHSPSCNLLFLDCGS-----LRDPGRQAWMRTIRVLSNCDARNDDDQHFQFGMFGDAFTNDVTSSP---FFDKYFYCL-----WWG
AtCNGC16 : LSIQRQHECWRRECIKEMNATHSPSCNLLFLDCGS-----LRDPGRQAWMRTIRVLSNCDARNDDDQHFQFGMFGDAFTNDVTSSP---FFDKYFYCL-----WWG
Bra011186 : LSIQRQHECWRRECIKEMNATHSPSCNLLFLDCGS-----LRDPGRQAWMRTIRVLSNCDARNDDDQHFQFGMFGDAFTNDVTSSP---FFDKYFYCL-----WWG
BoCNGC10 : LSIQRQHECWRRECIKEMNATHSPSCNLLFLDCGS-----LRDPGRQAWMRTIRVLSNCDARNDDDQHFQFGMFGDAFTNDVTSSP---FFDKYFYCL-----WWG
AtCNGC17 : LSIQRQHECWRRECIKEMNATHSPSCNLLFLDCGS-----LRDPGRQAWMRTIRVLSNCDARNDDDQHFQFGMFGDAFTNDVTSSP---FFDKYFYCL-----WWG
Bra007839 : LSIQRQHECWRRECIKEMNATHSPSCNLLFLDCGS-----LRDPGRQAWMRTIRVLSNCDARNDDDQHFQFGMFGDAFTNDVTSSP---FFDKYFYCL-----WWG
BoCNGC12 : LSIQRQHECWRRECIKEMNATHSPSCNLLFLDCGS-----LRDPGRQAWMRTIRVLSNCDARNDDDQHFQFGMFGDAFTNDVTSSP---FFDKYFYCL-----WWG
Bra032081 : LSIQRQHECWRRECIKEMNATHSPSCNLLFLDCGS-----LRDPGRQAWMRTIRVLSNCDARNDDDQHFQFGMFGDAFTNDVTSSP---FFDKYFYCL-----WWG
BoCNGC11 : LSIQRQHECWRRECIKEMNATHSPSCNLLFLDCGS-----LRDPGRQAWMRTIRVLSNCDARNDDDQHFQFGMFGDAFTNDVTSSP---FFDKYFYCL-----WWG
AtCNGC14 : LSIQRQHECWRRECIKEMNATHSPSCNLLFLDCGS-----LRDPGRQAWMRTIRVLSNCDARNDDDQHFQFGMFGDAFTNDVTSSP---FFDKYFYCL-----WWG
Bra011963 : LAVERQEAQRHACNIEK---PICQYRFFECRR-----LEDPQRNSWFWSNITTICKPGR---FYDFGIFGDAVSTVTSN---FISKYFYCL-----WWG
BoCNGC9 : LAVERQEAQRHACNIEK---PICQYRFFECRR-----LEDPQRNSWFWSNITTICKPGR---FYDFGIFGDAVSTVTSN---FISKYFYCL-----WWG
AtCNGC15 : LAVERQEAQRHACNIEK---PICQYRFFECRR-----LEDPQRNSWFWSNITTICKPGR---FYDFGIFGDAVSTVTSN---FISKYFYCL-----WWG
Bra021266 : FGLQRVNCQLRD--ACGNS---DHECRNLDICG-----RGESSE--AF-AAWKGNASASACFQEDGEGFYGYLKMVNLTHS---LFTRYYSYL-----FWG
BoCNGC21 : FGLQRVNCQLRD--ACGNS---DHECRNLDICG-----RGESSE--AF-AAWKGNASASACFQEDGEGFYGYLKMVNLTHS---LFTRYYSYL-----FWG
BoCNGC20 : FGLQRVNCQLRD--ACGNS---DHECRNLDICG-----RGESSE--AF-AAWKGNASASACFQEDGEGFYGYLKMVNLTHS---LFTRYYSYL-----FWG
AtCNGC20 : FGLQRVNCQLRD--ACGNS---DHECRNLDICG-----RGESSE--AF-AAWKGNASASACFQEDGEGFYGYLKMVNLTHS---LFTRYYSYL-----FWG
BoCNGC22 : FGLQRVNCQLRD--ACGNS---DHECRNLDICG-----RGESSE--AF-AAWKGNASASACFQEDGEGFYGYLKMVNLTHS---LFTRYYSYL-----FWG
Bra029958 : FGLQRVNCQLRD--ACGNS---DHECRNLDICG-----RGESSE--AF-AAWKGNASASACFQEDGEGFYGYLKMVNLTHS---LFTRYYSYL-----FWG
BoCNGC23 : FGLQRVNCQLRD--ACGNS---DHECRNLDICG-----RGESSE--AF-AAWKGNASASACFQEDGEGFYGYLKMVNLTHS---LFTRYYSYL-----FWG
Bra021265 : SGIERVKKCLLYAAWNS---VDERRNLDICG-----RGNIYASASLRAWRSDSVNACFQESGEGFYGYLKMVNLTHS---LFTRYYSYL-----FWG
BoCNGC24 : SGIERVKKCLLYAAWNS---VDERRNLDICG-----RGNIYASASLRAWRSDSVNACFQESGEGFYGYLKMVNLTHS---LFTRYYSYL-----FWG
AtCNGC19 : SGIERVKKCLLYAAWNS---VDERRNLDICG-----RGNIYASASLRAWRSDSVNACFQESGEGFYGYLKMVNLTHS---LFTRYYSYL-----FWG
Bra022232 : AGLQRVVKCLLH--AGNYT---MDERRNLDICG-----HGVNYARESIALWRDSESVNACFQESGEGFYGYLKMVNLTHS---LFTRYYSYL-----FWG
BoCNGC25 : AGLQRVVKCLLH--AGNYT---MDERRNLDICG-----HGVNYARESIALWRDSESVNACFQESGEGFYGYLKMVNLTHS---LFTRYYSYL-----FWG
Bra022233 : AGLQRVVKCLLH--AGNYT---MDERRNLDICG-----HGVNYARESIALWRDSESVNACFQESGEGFYGYLKMVNLTHS---LFTRYYSYL-----FWG
BoCNGC26 : AGLQRVVKCLLH--AGNYT---MDERRNLDICG-----HGVNYARESIALWRDSESVNACFQESGEGFYGYLKMVNLTHS---LFTRYYSYL-----FWG
Bra001676 : LGLQRVNCQLRD--ACGN---SSFECKQLIDCG-----RENRTVHLHAWKINVSANACFQEDGEGFYGYLKMVNLTHS---LFTRYYSYL-----FWG
BoCNGC18 : LGLQRVNCQLRD--ACGN---SSFECKQLIDCG-----RENRTVHLHAWKINVSANACFQEDGEGFYGYLKMVNLTHS---LFTRYYSYL-----FWG
Bra001678 : LGLQRVNCQLRD--ACGN---SSFECKQLIDCG-----RENRTVHLHAWKINVSANACFQEDGEGFYGYLKMVNLTHS---LFTRYYSYL-----FWG
BoCNGC19 : LGLQRVNCQLRD--ACGN---SSFECKQLIDCG-----RENRTVHLHAWKINVSANACFQEDGEGFYGYLKMVNLTHS---LFTRYYSYL-----FWG
Bra031529 : FGLQRVNCQLRD--ACGN---DTRACRELIDCG-----RGSSDVVLAALKYNTSASACFQESGEGFYGYLKMVNLTHS---LFTRYYSYL-----FWG

BoCNGC4 : LRKEEEEEESSAA-----RLIAGGSSPYSIRATFLASRFAANALRGVRKNRTAKL---LALSQPTKELLKVKQKPEPDFSADC-----
Bra032132 : LRKEEEEEESSAA-----RLIAGGS-PYSIRATFLASKFAANALRSVHKNRIRKS---NLAPPSTKELVKFKQKPEPDFSADC-----
BoCNGC5 : LRKEEEEEEE-TAA-----RLIAGGS-PYSIRATFLASKFAANALRSVHKNRIRKS---NLAPPSTKELVKFKQKPEPDFSADC-----
AtCNGC6 : LRKEEEEEEEA-AAA-----SVIAGGS-PYSIRATFLASKFAANALRSVHKNRTAKS---TLLSSTKELVKFKQKPEPDFSAEDH-----
Bra026086 : RRIEEEEDEMGEYED-EYDDD-----DAEEEDERTPVFTRTESSRLRSTIFASRFAANALRG-HRLRST-----ESSKRLNLQKPEPDFDAE-----
BoCNGC8 : RRIEEEEDEMGEYED-EYDDD-----DAEEEDERTPVFTRTESSRLRSTIFASRFAANALRG-HRLRST-----ESSKRLNLQKPEPDFDAE-----
AtCNGC7 : RRIEEEEELGYED-EYDD-----ESDKRPMVITRSESSRLRSTIFASRFAANALRG-HRLRST-----ESSKTLNLQKPEPDFDAE-----
AtCNGC8 : RRKEEEEEEMDYEDDEYDD-----N-MGGMVTRSDSSVGSSTLRSTVFASRFAANALRG-HKLRVT-----ESSKSLMNLTKPEPDFEALDTDDLN-----
Bra008733 : LSLHESSGYRDETGYNEEGDE--ENYGSDDDDFEGERLSVDNTNNSQNLGATMLASKFAANTRRGTNQKASSSTSAGKKDGSNSLKMPLFKPEPDFSMDKEDV-----
BoCNGC13 : LSLHESSGYRDETGYNEEGDE--ENYGSDDDDFEGERLSVDNTNNSQNLGATMLASKFAANTRRGTNQKASSSTSAGKKDGSNSLKMPLFKPEPDFSMDKEDV-----
AtCNGC18 : LSLHESSGYRDETGYNEEDEETREYYGSDE--EGG--SMDNTN---LGATILASKFAANTRRGTNQKASS--STGKKDGSSTSLKMPLFKPEPDFSIDKEDV-----
Bra018089 : LARQEEGDDYYDDDD-----DDQYGGEDMPESNN-VDDNSNSQNLSATILASKFAANTRRGVNLGNQRGS---SRIDPDDPTLKMPKMFKPEPDFGFF-----
BoCNGC14 : LARQEEGDDYYDDDD-----DDQYGGEDMPESNN-VDDNSNSQNLSATILASKFAANTRRGVNLGNQRGS---SRIDPDDPTLKMPKMFKPEPDFGFF-----
AtCNGC16 : LARQEEEDDYFYDDDG-----DYQF-EEDMPESNNNGDENSSNNQNLSATILASKFAANTRRGVNLGNQRGS---TRIDPDHPTLKMPKMFKPEPDFGFF-----
Bra011186 : LTAVESKQS-DEDEEEEE---VVVRKVVEEEEEEGVGSPPK-----TKMNLGVMVLASRFAANTRRGVAAQVRVKD-----VEMPRFKKPEPDFSAEPDD-----
BoCNGC10 : LTAVESKQS-DEE-EEEE---VVVGKVVVEEEEEEGVGSPPN-----TKMNLGVMVLASRFAANTRRGVAAQVRVKD-----VEMPRFKKPEPDFSAEPDD-----
AtCNGC17 : LTAIESMEN-EEG---E---VGEELVVVEEEECVEESPR-----TKMNLGVMVLASRFAANTRRGVAAQVRVKD-----VELPRFKKPEPDFSAEHDD-----
Bra007839 : LSLAESYSSYEEEEALAA---AAAEIMSQQEERQSSSTPSRHHTSIGKPHFAATVLASRFAKNTRR---ASRKMKD-----VDVPLPKPEPDFSVDAD-----
BoCNGC12 : LSLAESYSSYEEEEALAT---AAAEIMSQQEERQSSSTPSRHHTSIGKPHFAATVLASRFAKNTRR---ASRKIKD-----VDVPLPKPEPDFSVDAD-----
Bra032081 : LSLAESFSSYEEEEAVA---VAAEIMSQQGERQSSNPSRHSTSIGKPHFAATILASRFAKNTRR---TAHKLK-----VEVPLPKPEPDFSVDGD-----
BoCNGC11 : LSLAESFSSYEEEEAVA---VAAEIMSQQGERQSSNPSRHSTSIGKPHFAATILASRFAKNTRR---TAHKLK-----VEVPLPKPEPDFSVDGD-----
AtCNGC14 : LSLAESFSSYDEEEAVA---VAATEEMSHHEGAQSGAKARHHTSNVVKPHFAATILASRFAKNTRR---TAHKLK-----VEIPMLPKPEPDFSVDGD-----
Bra011963 : LRVKEEFQCMFET-----ASM-VRLNSGKPTRSGSDSGMVSS-----IQKPEPDFSSE-----
BoCNGC9 : LRVKEEFQCMFET-----ASM-VRLNSGKPTRSGSDSGMVSS-----IQKPEPDFSSE-----
AtCNGC15 : LRAKEEFHYRFEA-----ATARLAVNGGKYTRSGSDSGMMSS-----IQKPEPDFSSE-----
Bra021266 : TAQS-SYSL-----
BoCNGC21 : TAQS-SYSL-----
BoCNGC20 : TDQS-SYSL-----
AtCNGC20 : TPQS-SYSL-----
BoCNGC22 : SAQS-SYSL-----
Bra029958 : TAQKKQYSSSELIQKDMAKT-----
BoCNGC23 : TAQKKQYSSLELIKDMAKT-----
Bra021265 : TAQSTSR-----
BoCNGC24 : TAQSTSR-----
AtCNGC19 : TAHSNSNR-----
Bra022232 : LQDNRMKEMSDVRIQYRLSWSGVVEGSGKQLDTRGSS-----
BoCNGC25 : LQDNRMKEMSDVPIQYRLSWSGVVEGSGK-----
Bra022233 : KKQNGDIDE-----
BoCNGC26 : RKQNGEMDE-----
Bra001676 : -----
BoCNGC18 : -----
Bra001678 : -----
BoCNGC19 : -----
Bra031529 : -----

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Bra022702 : -----
BoCNGC15 : -----
AtCNGC4 : -----
Bra003001 : -----
BoCNGC16 : -----
Bra008699 : -----
BoCNGC17 : -----
AtCNGC2 : -----
Bra004537 : -----
BoCNGC2 : -----
AtCNGC3 : -----
Bra000937 : -----
BoCNGC1 : -----
AtCNGC13 : ALRNLRAAAAARNSRFPHMLTLLPQKPADPEFPMDET
AtCNGC10 : -----
Bra034281 : -----
BoCNGC3 : -----
AtCNGC11 : -----
AtCNGC12 : -----
Bra003323 : -----
Bra031515 : -----
Bra022632 : -----
AtCNGC1 : -----
Bra003081 : RSL-----
Bra020402 : -----
BoCNGC7 : -----
AtCNGC5 : -----
Bra024067 : -----
BoCNGC6 : -----
AtCNGC9 : -----
Bra039221 : -----
BoCNGC4 : -----
Bra032132 : -----
BoCNGC5 : -----
AtCNGC6 : -----
Bra026086 : -----
BoCNGC8 : -----
AtCNGC7 : -----
AtCNGC8 : -----
Bra008733 : -----
BoCNGC13 : -----
AtCNGC18 : -----
Bra018089 : -----
BoCNGC14 : -----
AtCNGC16 : -----
Bra011186 : -----
BoCNGC10 : -----
AtCNGC17 : -----
Bra007839 : -----
BoCNGC12 : -----
Bra032081 : -----
BoCNGC11 : -----
AtCNGC14 : -----
Bra011963 : -----
BoCNGC9 : -----
AtCNGC15 : -----
Bra021266 : -----
BoCNGC21 : -----
BoCNGC20 : -----
AtCNGC20 : -----
BoCNGC22 : -----
Bra029958 : -----
BoCNGC23 : -----
Bra021265 : -----
BoCNGC24 : -----
AtCNGC19 : -----
Bra022232 : -----
BoCNGC25 : -----
Bra022233 : -----
BoCNGC26 : -----
Bra001676 : -----
BoCNGC18 : -----
Bra001678 : -----
BoCNGC19 : -----
Bra031529 : -----