

gi 112421039 ref NP_032935.2 ----- 150
gi 109487761 ref XP_220174.4 -----MVFWDCPGKPFSGARQLVCARWARPLRPGAGGPGVLA 150
gi 45439327 ref NP_002696.3 |----- 150
gi 73959238 ref XP_547141.2 |-----MNSLFRKRNK----- 150
gi 194678343 ref XP_601174.4 |MSLKLWSMVKNBESYTEFCPDRICRIITSTRVVSFATEELRDLDPDWGTSKAVRVIGKGGHLSGPAVPSRGLLNAPCYRGPPLAQGQTPGYRLSNCSLLHGHIAQQGPGVTGLYWHRSKRRPRPCPRGASETRIPGRAPSSLOQPGRGRAWK 150
gi 118098228 ref XP_414712.2 |----- 150
gi 125812931 ref XP_691611.2 |----- 150

1.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100.....110.....120.....130.....140.....150

gi 112421039 ref NP_032935.2 |----- 300
gi 109487761 ref XP_220174.4 |TGCAAEAVPGNRGGVRCGLG-----ECVRSFPACKVSAITFPGAAAAGAPRAAASAAAFHLSPPPAFGARRARSRVPGPSVPSAHTMHSFLFRKNKKGKYSPTVQTRSISNKLSDLLIELOKNADQVERNIVDTEAKMOSDLARMOEGQLPE 300
gi 45439327 ref NP_002696.3 |-----MNSLFRKRKNKGYSPITVQTRSISNKLSELIELOKNADQVERNIVDTEAKMOSDLARLOEGGRQPE 300
gi 73959238 ref XP_547141.2 |-----GKYSPITVQTR-----SAIMNSLFRKRKNKGYSPITVQTRSISNKLSELIELOKNADQVERNIVDTEAKMOSDLARLOEGGRQPE 300
gi 194678343 ref XP_601174.4 |FRPPGAPPGRVAPPSPREEREGEPGAGAPPTSSDRPPPPRRIRGRVVAARSAPAPALPSVRGASAAACPARRDPPPPFAAAMNSLFRKRKNKGYSPITVQTRSISNKLSELIELOKNADQVERNIVDTEAKMOSDLARLOEGGRQPE 300
gi 118098228 ref XP_414712.2 |-----MHSFLFRKRKNKGYSPSAKKSISSEKLELIERLOKNADQVERNIVDTEAKMOSDLARLOEGGRQPE 300
gi 125812931 ref XP_691611.2 |-----MFKKR-QTMSAATISEKRPPETDLASLIDKLQRNADQVERNIVDTEAKMOSDLARLOEGGRQPE 300

.....160.....170.....180.....190.....200.....210.....220.....230.....240.....250.....260.....270.....280.....290.....300

gi 112421039 ref NP_032935.2 |HRDAALQNVSDSEKLLYVLEADSAIAKHMKHPQGDMAIEDIRQLKERVTLNRGKHKOMYSLAVKEADPRVNWDTLVDEKLDKLSGSGFGTDLPLVDSQVEOHNFHNEVKAIGPHLAKD--KEONSELQAKYQKLLTASQAROOHLSLLO 450
gi 109487761 ref XP_220174.4 |HRDATALQNVSDSEKLLYVLEADSAIAKHMKHPQGDMAIEDIRQLKERVTLNRGKHKOMYSLAVREADPKVNWDAVDEKLDKLSGSGFGTDLPLVDSQVEOHNFHNEVKAIGPHLAKD--KEONSELQAKYQKLLAASQAROOHLSLLO 450
gi 45439327 ref NP_002696.3 |HRDVTLOKVLDSSEKLLYVLEADAAIAKHMKHPQGDMAIEDIRQLKERVTLNRGKHKQIYVRLAVKEVDPQVNWAAALVEEKLDKLNNQSGFGTDLPLVDHVEEHNIFHNEVKAIGPHLAKDGGKNSLRAKYQKLLAASQAROOHLSLLO 450
gi 73959238 ref XP_547141.2 |HRDVTLOKVLDSSEKLLYVLEADAAIAKHMKHPQGDMAIEDIRQLKERVTLNRGKHKQIYVRLAVKEVDPQVNWAAALVEEKLDKLGGGFGTDLPLVDHVEEHNIFHNEVKAIGPHLAKDGGKVRNSLRAKYQKLLAASQAROOHLSLLO 450
gi 194678343 ref XP_601174.4 |HRDVALQKVLDSSEKLLYVLEADAAIAKHMKHPQGDMAIEDIRQLKERVTLNRGKHKQIYVRLAVKEVDPQVNWAAALVEEKLDELSSGFGTDLPLVQVVEEHNIFHNEVKAIGPHLAKD-----QNGELQAKYQKLLAASQAROOHLSLLO 450
gi 118098228 ref XP_414712.2 |YKELTAQKLTESDKLLYVLDGDAAVARHMKHPQGDMAIEDIRQLKERVTLNRGKHKQIYVRLAVKEVDPQVNWAAALVEEKLDELSSGFGTDLPLVNSQVEEHNIFHNEVMAIGPHITKEGNKETSLOQAKYQKLLIGTSGWSTHWAAVA 450
gi 125812931 ref XP_691611.2 |YQEDTSEKRIANGLDLDLLELDDAALAVQLKHPQGEIMEKDMRQLRVRMKLDDHNRIYNTIIRSQVPTVNWGMIDEKLANLNNKGFGODLPTVNEVEEHNIFHNEVMAIGPHITKEGNKETSLOQAKYQKLLIGTSGWSTHWAAVA 450

.....310.....320.....330.....340.....350.....360.....370.....380.....390.....400.....410.....420.....430.....440.....450

gi 112421039 ref NP_032935.2 |DYMORCTNELYWLD-----QAKGRMIDYDWS-----DRNLDYPSRRROVENFIRNLEAKEERINKLHTEGDQLLTAEHFGRNSIEAHMEAVHAWEKYLNLLICEESHLYMEDYHQFHDKMKDAQELLRKVDSLNLQKYSPPDFK 600
gi 109487761 ref XP_220174.4 |DYMORCTNELYWLD-----QAKGRMIDYDWS-----DRNLDYPSRRROVENFIRNLEAKEERINKLHTEGDQLLTAEHFGRNSIEAHMEAVHAWEKYLNLLICEESHLYMEDYHQFHDKMKDAQELLRKVDSLNLQKYSPPDFK 600
gi 45439327 ref NP_002696.3 |DYMORCTNELYWLD-----QAKGRMIDYDWS-----DRNLDYPSRRROVENFIRNLEAKEERINKLHTEGDQLLTAEHFGRNSIEAHMEAVHADWKEYLNLLICEESHLYMEDYHQFHEDVKDAQELLRKVDSLNLQKYSPPDFK 600
gi 73959238 ref XP_547141.2 |DYMORCTNELYWLD-----QAKGRVQYDWS-----DRNLDYPSRRROVENFIRNLEAKEERINKLHTEGDQLLTAEHFGRNSIEAHMEAVHADWKEYLNLLICEESHLYMEDYHQFHRDKMKDAQELLHKLVDLNLQKYSPPDFK 600
gi 194678343 ref XP_601174.4 |DYMORCTNELYWLD-----QACGRIQYDWS-----DRNLDYPSRRROVENFIRNLEAKEERINKLHTEGDQLLTAEHFGRNSIEAHMEAVHADWKEYLNLLICEESHLYMEDYHQFHDKMKDAQELLRKVDSLNLQKYSPPDFK 600
gi 118098228 ref XP_414712.2 |GSLRXLISALAWQESHLOQLGCKGRKPRWGSIALVVSFVNLGVSSLLLSIXNFTHRKLKLEKELNKLHADGDLAQNHPGKNVIAEHMVAHVSDWKEYLNLLICEESHLYMEDYHQFHDKMKDAQELLKVDLNLQKYSPPDFK 600
gi 125812931 ref XP_691611.2 |DYMORCTNELYWLD-----QAEERTAYDWS-----DNNLDYFARKROVENFIRNLEAKEERINKLHTEGDQLLTAEHFGRNSIEAHMEAVHADWKEYLNLLICEESHLYMEDYHQFHDKMKDAQELLKVDLNLQKYSPPDFK 600

.....460.....470.....480.....490.....500.....510.....520.....530.....540.....550.....560.....570.....580.....590.....600

gi 112421039 ref NP_032935.2 |DRYQIELLRLRELDDEKALDKYEDVVRGLQKRGQOQVPLKYRRETPLKPIPVEALCDFEGDGQLISRGYSYTLQKNNGESWELTDSGKLLAPAVCFIIPPTDPEALALADSLGQYRSVRQKATGSKHALQORHEVLRTEINPGDASDL 750
gi 109487761 ref XP_220174.4 |DRYQIELLRLRELDDEKALDKYEDVVRGLQKRGQOQVPLKYRRETPLKPIPVEALCDFEGDGQLISRGYSYTLQKNNGESWELTDSGKLLAPAVCFIIPPTDPEALALADSLGQYRSVRQKAAAGSKHALQORHEVLRTEINPGDASDL 750
gi 45439327 ref NP_002696.3 |DRYQIELLRLRELDDEKALDKYEDVVRGLQKRGQOQVPLKYRRETPLKPIPVEALCDFEGDGQLISRGYSYTLQKNNGESWELTDSGKLLAPAVCFIIPPTDPEALALADSLGQYRSVRQKAAAGSKRLQORHEVLRTEINPGDASDL 750
gi 73959238 ref XP_547141.2 |DKYQIELLRLRELDDEKALDKYEHVVRGLEKRGQOQVPLKYRRETPLKPIPVEALCDFEGDGQLISRGYSYTLQKNNGESWELTDSGKLLAPAVCFIIPPTDPEALALADSLGQYRSVRQKAAAGSKALQORHEVLRTEINPGDASDL 750
gi 194678343 ref XP_601174.4 |DRYQIELLRLRELDDEKALDKYQHVVVRGLQKRGQOQVPLKYRRETPLKPIPVEALCDFEGDGQLISRGYSYTLQKNNGESWELTDSGKLLAPAVCFIIPPTDPEALALADSLGQYRSVRQKAAAGSKALQORHEVLRTEINPGDASDL 750
gi 118098228 ref XP_414712.2 |DRYQIELLRLRELDDEKALEKQVDAVVSQLEERSQHILPLRYRRLPPPPIPVEALCEYEGEGQITIRGAHYTLQKNNGESWELTDSGKLLAPAVCFIIPPTDPEALALADSLGQYRSVRQKAAAGSKALQORHEVLRTEINPGDASDL 750
gi 125812931 ref XP_691611.2 |DMYQIEGLIADLDDAKAMDFHDELRNLRSLQVPLKYRRETQKLLPIEALCEYDAEGRSILRGERVYTLRNNNGPKVDKDNRTMSAPGVCFIIPPTDPEAVASADLNINQHSIKQKVASKALQARLAELKKESTGKQEQ 750

.....610.....620.....630.....640.....650.....660.....670.....680.....690.....700.....710.....720.....730.....740.....750

gi|112421039|ref|NP_032935.2|CGRLLAGLDKVASDLDRQEKATIGILRPPLLEQGRATEDSAERAKHLKNIITNELLQIEPEKIQRTAECEAFVQALPGSGTTPLLKTRVEDTNOKYERLVWLLLEAAQEKVDVANRLENLQGRRELLASVENRLIODDTPMPESGHVLDSKR 900
gi|109487761|ref|XP_220174.4|CGRLLAGLDKVASDLDRQEKATIGILRPPLLEQGRATEDSAERAKHLKNIITNELLQIEPEKIQRTAECEAFVQALPGSGTTPLLKTRVEDTNOKYERLVWLLLEAAQEKVDVANRLENLQGRRELLASVENRLIODDTPMPESGHVLDSKR 900
gi|45439327|ref|NP_002696.3|CGRLLAGLDKVASDLDRQEKATIGILRPPLLEQGRATEDSAERAKHLKNIITNELLQIEPEKIQRTAECEAFVQALPGSGTTPLLKTRVEDTNOKYERLVWLLLEAAQEKVDVANRLENLQGRRELLASVENRLIODDTPMPESGHVLDSKR 900
gi|73959238|ref|XP_547141.2|CGRLLAGLDKVASDLDRQEKATIGILRPPLLEQGRATEDSAERAKHLKNIITNELLQIEPEKIQRTAECEAFVQALPGSGTTPLLKTRVEDTNOKYERLVWLLLEAAQEKVDVANRLENLQGRRELLASVENRLIODDTPMPESGHVLDSKR 900
gi|194678343|ref|XP_601174.4|CGRLLAGLDKVASDLDRQEKATIGILRPPLLEQGRATEDSAERAKHLKNIITNELLQIEPEKIQRTAECEAFVQALPGSGTTPLLKTRVEDTNOKYERLVWLLLEAAQEKVDVANRLENLQGRRELLASVENRLIODDTPMPESGHVLDSKR 900
gi|118098228|ref|XP_414712.2|CGRLLAGLDKVASDLDRQEKATIGILRPPLLEQGRATEDSAERAKHLKNIITNELLQIEPEKIQRTAECEAFVQALPGSGTTPLLKTRVEDTNOKYERLVWLLLEAAQEKVDVANRLENLQGRRELLASVENRLIODDTPMPESGHVLDSKR 900
gi|125812931|ref|XP_691611.2|CGRLLAGLDKVASDLDRQEKATIGILRPPLLEQGRATEDSAERAKHLKNIITNELLQIEPEKIQRTAECEAFVQALPGSGTTPLLKTRVEDTNOKYERLVWLLLEAAQEKVDVANRLENLQGRRELLASVENRLIODDTPMPESGHVLDSKR 900



gi|112421039|ref|NP_032935.2|CELEAMAS ELQAKSLLGVEONLQVAKCCSSSLASRFQEHCPDLEROEAEVHKLNRFPNNLSOOVERRAQSLOSARAAYDEVCSGVNVRVLOFLAKTPSYEPOETDLSGOMETKLNQKLLDDEIASREQEVQKVLADSOOYQOAVKDYE 1050
gi|109487761|ref|XP_220174.4|CELEAMAS ELQAKSLLGVEONLQVAKCCSSSLASRFQEHCPDLEROEAEVHKLNRFPNNLSOOVERRAQSLOSARAAYDEVCSGVNVRVLOFLAKTPSYEPOETDLSGOMETKLNQKLLDDEIASREQEVQKVLADSOOYQOAVKDYE 1050
gi|45439327|ref|NP_002696.3|CELEAMAS ELQAKSLLGVEONLQVAKCCSSSLASRFQEHCPDLEROEAEVHKLNRFPNNLSOOVERRAQSLOSARAAYDEVCSGVNVRVLOFLAKTPSYEPOETDLSGOMETKLNQKLLDDEIASREQEVQKVLADSOOYQOAVKDYE 1050
gi|73959238|ref|XP_547141.2|CELEAMAS ELQAKSLLGVEONLQVAKCCSSSLASRFQEHCPDLEROEAEVHKLNRFPNNLSOOVERRAQSLOSARAAYDEVCSGVNVRVLOFLAKTPSYEPOETDLSGOMETKLNQKLLDDEIASREQEVQKVLADSOOYQOAVKDYE 1050
gi|194678343|ref|XP_601174.4|CELEAMAS ELQAKSLLGVEONLQVAKCCSSSLASRFQEHCPDLEROEAEVHKLNRFPNNLSOOVERRAQSLOSARAAYDEVCSGVNVRVLOFLAKTPSYEPOETDLSGOMETKLNQKLLDDEIASREQEVQKVLADSOOYQOAVKDYE 1050
gi|118098228|ref|XP_414712.2|CELEAMAS ELQAKSLLGVEONLQVAKCCSSSLASRFQEHCPDLEROEAEVHKLNRFPNNLSOOVERRAQSLOSARAAYDEVCSGVNVRVLOFLAKTPSYEPOETDLSGOMETKLNQKLLDDEIASREQEVQKVLADSOOYQOAVKDYE 1050
gi|125812931|ref|XP_691611.2|CELEAMAS ELQAKSLLGVEONLQVAKCCSSSLASRFQEHCPDLEROEAEVHKLNRFPNNLSOOVERRAQSLOSARAAYDEVCSGVNVRVLOFLAKTPSYEPOETDLSGOMETKLNQKLLDDEIASREQEVQKVLADSOOYQOAVKDYE 1050



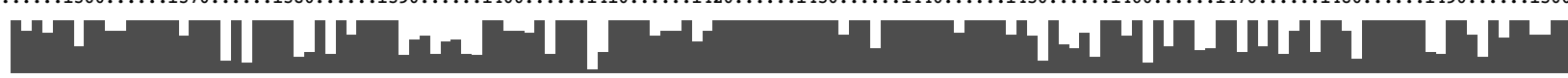
gi|112421039|ref|NP_032935.2|LEAEKLRSLLDLENGRSHVNRKARLOS PAAKVKEEBAALAAKFTVEVNAINRQRLONLEFALNLLRQPEAGVHEITLOGGKLSGMEETWKIKKLEBEEIERRQLENEVKSAQEEITQTLKDGPEESLVRKVEVLKVPDPALEESFQ 1200
gi|109487761|ref|XP_220174.4|LEAEKLRSLLDLENGRSHVNRKARLOS PAAKVKEEBAALAAKFTVEVNAINRQRLONLEFALNLLRQPEAGVHEITLOGGKLSGMEETWKIKKLEBEEIERRQLENEVKSAQEEITQTLKDGPEESLVRKVEVLKVPDPALEESFQ 1200
gi|45439327|ref|NP_002696.3|LEAEKLRSLLDLENGRSHVNRKARLOS PAAKVKEEBAALAAKFTVEVNAINRQRLONLEFALNLLRQPEAGVHEITLOGGKLSGMEETWKIKKLEBEEIERRQLENEVKSAQEEITQTLKDGPEESLVRKVEVLKVPDPALEESFQ 1200
gi|73959238|ref|XP_547141.2|LEAEKLRSLLDLENGRSHVNRKARLOS PAAKVKEEBAALAAKFTVEVNAINRQRLONLEFALNLLRQPEAGVHEITLOGGKLSGMEETWKIKKLEBEEIERRQLENEVKSAQEEITQTLKDGPEESLVRKVEVLKVPDPALEESFQ 1200
gi|194678343|ref|XP_601174.4|LEAEKLRSLLDLENGRSHVNRKARLOS PAAKVKEEBAALAAKFTVEVNAINRQRLONLEFALNLLRQPEAGVHEITLOGGKLSGMEETWKIKKLEBEEIERRQLENEVKSAQEEITQTLKDGPEESLVRKVEVLKVPDPALEESFQ 1200
gi|118098228|ref|XP_414712.2|LEAEKLRSLLDLENGRSHVNRKARLOS PAAKVKEEBAALAAKFTVEVNAINRQRLONLEFALNLLRQPEAGVHEITLOGGKLSGMEETWKIKKLEBEEIERRQLENEVKSAQEEITQTLKDGPEESLVRKVEVLKVPDPALEESFQ 1200
gi|125812931|ref|XP_691611.2|LEAEKLRSLLDLENGRSHVNRKARLOS PAAKVKEEBAALAAKFTVEVNAINRQRLONLEFALNLLRQPEAGVHEITLOGGKLSGMEETWKIKKLEBEEIERRQLENEVKSAQEEITQTLKDGPEESLVRKVEVLKVPDPALEESFQ 1200



gi|112421039|ref|NP_032935.2|LOOTLAEQHKNOQLLEALQALRQALEQETRDGGOEYVVKVLRLEPDRACAEVQLREELALRRQKGAEEVLLLOORVAALAEKSRVQEKVTEREVVVKLQNDPQLEAEYRRLQEBEHOREGLTREKQEEELSFQAKLRRLE 1350
gi|109487761|ref|XP_220174.4|LOOTLAEQHKNOQLLEALQALRQALEQETRDGGOEYVVKVLRLEPDRACAEVQLREELALRRQKGAEEVLLLOORVAALAEKSRVQEKVTEREVVVKLQNDPQLEAEYRRLQEBEHOREGLTREKQEEELSFQAKLRRLE 1350
gi|45439327|ref|NP_002696.3|LOOTLAEQHKNOQLLEALQALRQALEQETRDGGOEYVVKVLRLEPDRACAEVQLREELALRRQKGAEEVLLLOORVAALAEKSRVQEKVTEREVVVKLQNDPQLEAEYRRLQEBEHOREGLTREKQEEELSFQAKLRRLE 1350
gi|73959238|ref|XP_547141.2|LOOTLAEQHKNOQLLEALQALRQALEQETRDGGOEYVVKVLRLEPDRACAEVQLREELALRRQKGAEEVLLLOORVAALAEKSRVQEKVTEREVVVKLQNDPQLEAEYRRLQEBEHOREGLTREKQEEELSFQAKLRRLE 1350
gi|194678343|ref|XP_601174.4|LOOTLAEQHKNOQLLEALQALRQALEQETRDGGOEYVVKVLRLEPDRACAEVQLREELALRRQKGAEEVLLLOORVAALAEKSRVQEKVTEREVVVKLQNDPQLEAEYRRLQEBEHOREGLTREKQEEELSFQAKLRRLE 1350
gi|118098228|ref|XP_414712.2|LOOTLAEQHKNOQLLEALQALRQALEQETRDGGOEYVVKVLRLEPDRACAEVQLREELALRRQKGAEEVLLLOORVAALAEKSRVQEKVTEREVVVKLQNDPQLEAEYRRLQEBEHOREGLTREKQEEELSFQAKLRRLE 1350
gi|125812931|ref|XP_691611.2|LOOTLAEQHKNOQLLEALQALRQALEQETRDGGOEYVVKVLRLEPDRACAEVQLREELALRRQKGAEEVLLLOORVAALAEKSRVQEKVTEREVVVKLQNDPQLEAEYRRLQEBEHOREGLTREKQEEELSFQAKLRRLE 1350



gi|112421039|ref|NP_032935.2|KERAMAEKGIITVKEVLKVEKDAAREVNDLTRYEDEBAKARSGOREKTELLRKIWALEENAKVVVQEKVREIVRPPDKAESEVANLRLLELVEQERKFRGAEBQLKSYQSEALRRRGPQVEVKEVKEVIKKTDPETEBELQRLR 1500
gi|109487761|ref|XP_220174.4|KERAMAEKGIITVKEVLKVEKDAAREVNDLTRYEDEBAKARSGOREKTELLRKIWALEENAKVVVQEKVREIVRPPDKAESEVANLRLLELVEQERKFRGAEBQLKSYQSEALRRRGPQVEVKEVKEVIKKTDPETEBELQRLR 1500
gi|45439327|ref|NP_002696.3|KERAMAEKGIITVKEVLKVEKDAAREVNDLTRYEDEBAKARSGOREKTELLRKIWALEENAKVVVQEKVREIVRPPDKAESEVANLRLLELVEQERKFRGAEBQLKSYQSEALRRRGPQVEVKEVKEVIKKTDPETEBELQRLR 1500
gi|73959238|ref|XP_547141.2|KERAMAEKGIITVKEVLKVEKDAAREVNDLTRYEDEBAKARSGOREKTELLRKIWALEENAKVVVQEKVREIVRPPDKAESEVANLRLLELVEQERKFRGAEBQLKSYQSEALRRRGPQVEVKEVKEVIKKTDPETEBELQRLR 1500
gi|194678343|ref|XP_601174.4|KERAMAEKGIITVKEVLKVEKDAAREVNDLTRYEDEBAKARSGOREKTELLRKIWALEENAKVVVQEKVREIVRPPDKAESEVANLRLLELVEQERKFRGAEBQLKSYQSEALRRRGPQVEVKEVKEVIKKTDPETEBELQRLR 1500
gi|118098228|ref|XP_414712.2|KERAMAEKGIITVKEVLKVEKDAAREVNDLTRYEDEBAKARSGOREKTELLRKIWALEENAKVVVQEKVREIVRPPDKAESEVANLRLLELVEQERKFRGAEBQLKSYQSEALRRRGPQVEVKEVKEVIKKTDPETEBELQRLR 1500
gi|125812931|ref|XP_691611.2|KERAMAEKGIITVKEVLKVEKDAAREVNDLTRYEDEBAKARSGOREKTELLRKIWALEENAKVVVQEKVREIVRPPDKAESEVANLRLLELVEQERKFRGAEBQLKSYQSEALRRRGPQVEVKEVKEVIKKTDPETEBELQRLR 1500



gi 112421039 ref NP_032935.2 EEIMDKTRLIERCDLEIYOLKQEIQLKDKTKPOVOTREVVQEILOFQEDPOTKKEVESLRIOQSEKQKQVDLEGERASQEEKIKRKEBELAQKERIVROEVVQYEDPDLRAEVTAFDINSIDAEIROIDKLVHELRRLOHRRRAELERO 1650
gi 109487761 ref XP_220174.4 EEIMDKTRLIERCDLEIYOLKQEIQLKDKTKPOVOTREVVQEILOFQEDPOTKKEVESLRIOQSEKQKQVDLEGERASQEEKIKRKEBELAQKERIVROEVVQYEDPDLRAEVTAFDINSIDAEIROIDKLVHELRRLOHRRRAELERO 1650
gi 45439327 ref NP_002696.3 EEIVDKTRLIERCDLEIYOLKQEIQLKDKTKPOVOTREVVQEILOFQEDPOTKKEVASLRRAKLESEKQKQVDLERERASQEQIARKKEBELSRVKERVVQEVVRYEPEPLRAEASAFASIDVDELROIDKLAELRRLOHRRRAELERO 1650
gi 73959238 ref XP_547141.2 EEIVDKTRLIERCDLEIYOLKQEIQLKDKTKPOVOTREVVQEILOFQEDPOTKKEVQSLRARLSEKQKQVDLERERASQEEKIQKKEBELSHVKEKVVQEVVRYEPEPLRAEAVNAFTESIDAEIROIDTLRGELRRLOHRRRAELERO 1650
gi 194678343 ref XP_601174.4 EEIVDKTRLIERCDLEIYOLKQEIQLKDKTKPOVOTREVVQEILOFQEDPOTKKEVQSLRARLSEKQKQVDLERERASQEEKIQKKEBELSRVKERVVQEVVRYEPEPLRAEAVNAFTESIDAEIROIDTLRGELRRLOHRRRAELERO 1650
gi 118098228 ref XP_414712.2 EEIERTAAERADLEIYOLKQEIQLKDKTKPOVOTREVVQEILOFQEDPOTKKEVQSLRARLSEKQKQVDLERERASQEEKIQKKEBELSRVKERVVQEVVRYEPEPLRAEAVNAFTESIDAEIROIDTLRGELRRLOHRRRAELERO 1650
gi 125812931 ref XP_691611.2 NEIVDKTHQTERFEMEITLQKDEIQALQKDKTKPOVOTREVVQEILOFQEDPOTKKEVESLRIOQSEKQKQVDLEGERALSQEEKIRIKKILSQRVREKLVQEVVRYEPEPLRAEAVNAFTESIDAEIROIDTLRGELRRLOHRRRAELERO 1650
.....1510.....1520.....1530.....1540.....1550.....1560.....1570.....1580.....1590.....1600.....1610.....1620.....1630.....1640.....1650



gi 112421039 ref NP_032935.2 LEELELRRERQARRAAELEVORLQORLAALQEEAAKTGEKVTHTKQVVLQDDPQOTREHALLRAOLEEERHRRRLLEGELEPLRRKLAALAEKAEIKKEVVFSESVQVEKGDTEQEIORLKKSLBEEESQSKRELDSEVTRLEAKLSELEFYN 1800
gi 109487761 ref XP_220174.4 LEELELRRERQARRAAELEVORLQORLAALQEEAAKTGEKVTHTKQVVLQDDPQOTREHALLRAOLEEERHRRRLLEGELEPLRRKLAALAEKAEIKKEVVFSESVQVEKGDTEQEIORLKKSLBEEESQSKRELDSEVTRLEAKLSELEFYN 1800
gi 45439327 ref NP_002696.3 LEELELRRERQARRAAELEVORLQORLAALQEEAAAREKVVTHTKQVVLQDDPQAREHALLRLQLEEEQHRRRLLEGELEPLRRKLAALAEKAEIKKEVVFSESVQVEKGDTEQEIORLKKSLBEEESQSKRELDSEVTRLEAKLSELEFYN 1800
gi 73959238 ref XP_547141.2 LEELELRRERQARRAAELEVORLQORLAALQEEAQAQEKVTLKQVVLQDDPQAREHALLKVLQEEERHRRRLLEGELEPLRRKLAALAEKAEIKKEVVFSESVQVEKGDTEQEIORLKKSLBEEESQSKRELDSEVTRLEAKLSELEFYN 1800
gi 194678343 ref XP_601174.4 LEELELRRERQARRAAELEVORLQORLAALQEEAQAQEKVTLKQVVLQDDPQAREHALLKVLQEEERHRRRLLEGELEPLRRKLAALAEKAEIKKEVVFSESVQVEKGDTEQEIORLKKSLBEEESQSKRELDSEVTRLEAKLSELEFYN 1800
gi 118098228 ref XP_414712.2 LEELELRRERQARRAAELEVORLQORLAALQEEAQAQEKVTLKQVVLQDDPQAREHALLKVLQEEERHRRRLLEGELEPLRRKLAALAEKAEIKKEVVFSESVQVEKGDTEQEIORLKKSLBEEESQSKRELDSEVTRLEAKLSELEFYN 1800
gi 125812931 ref XP_691611.2 LEELELRRERARRDAELEIQRVRLNLELRDKENREKVVQKVVVLQDDPQAREHALLKVLQEEERHRRRLLEGELEPLRRKLAALAEKAEIKKEVVFSESVQVEKGDTEQEIORLKKSLBEEESQSKRELDSEVTRLEAKLSELEFYN 1800
.....1660.....1670.....1680.....1690.....1700.....1710.....1720.....1730.....1740.....1750.....1760.....1770.....1780.....1790.....1800



gi 112421039 ref NP_032935.2 SKSSKELDFLREENHKLQERONLQLETRRLOSEIEMAAETETRDLDK---NITMIDSGTHLNSRLWSLEKELDDLKMKSKDKLEIDELQRRLGSVAVKREORENHLRRSIVVIDPDTGRELSPEEAHRAGLIDWKMVFVLRQEQCDWEEI 1950
gi 109487761 ref XP_220174.4 SKSSKELDFLREENHKLQERONLQLETRRLOSEIEMAAETETRDLDK---NITMIDSGTHLNSRLWSLEKELDDLKMKSKDKLEIDELQRRLGSVAVKREORENHLRRSIVVIDPDTGRELSPEEAHRAGLIDWKMVFVLRQEQCDWEEI 1950
gi 45439327 ref NP_002696.3 SKSSKELDFLREENHKLQERONLQLETRRLOSEIEMAAETETRDLDK---NITMIDSGTHLNSRLWSLEKELDDLKMKSKDKLEIDELQRRLGSVAVKREORENHLRRSIVVIDPDTGRELSPEEAHRAGLIDWKMVFVLRQEQCDWEEI 1950
gi 73959238 ref XP_547141.2 SKSSKELDFLREENHKLQERONLQLETRRLOSEIEMAAETETRDLDK---NITMIDSGTHLNSRLWSLEKELDDLKMKSKDKLEIDELQRRLGSVAVKREORENHLRRSIVVIDPDTGRELSPEEAHRAGLIDWKMVFVLRQEQCDWEEI 1950
gi 194678343 ref XP_601174.4 SKSSKELDFLREENHKLQERONLQLETRRLOSEIEMAAETETRDLDK---NITMIDSGTHLNSRLWSLEKELDDLKMKSKDKLEIDELQRRLGSVAVKREORENHLRRSIVVIDPDTGRELSPEEAHRAGLIDWKMVFVLRQEQCDWEEI 1950
gi 118098228 ref XP_414712.2 SKSSKELDFLREENHKLQERONLQLETRRLOSEIEMAAETETRDLDK---NITMIDSGTHLNSRLWSLEKELDDLKMKSKDKLEIDELQRRLGSVAVKREORENHLRRSIVVIDPDTGRELSPEEAHRAGLIDWKMVFVLRQEQCDWEEI 1950
gi 125812931 ref XP_691611.2 SKSSKELDFLREENHKLQERONLQLETRRLOSEIEMAAETETRDLDK---NITMIDSGTHLNSRLWSLEKELDDLKMKSKDKLEIDELQRRLGSVAVKREORENHLRRSIVVIDPDTGRELSPEEAHRAGLIDWKMVFVLRQEQCDWEEI 1950
.....1810.....1820.....1830.....1840.....1850.....1860.....1870.....1880.....1890.....1900.....1910.....1920.....1930.....1940.....1950



gi 112421039 ref NP_032935.2 SVKGPNGESSVIHDRKSGKKFSEIEDALQSGRLTAAQYDRVYVVKDMSIQELAVLVSGQK----- 2015
gi 109487761 ref XP_220174.4 SVKGPNGESSVIHDRKSGKKFSEIEDALQSGRLTAAQYDRVYVVKDMSIQELAVLVSGQK----- 2015
gi 45439327 ref NP_002696.3 SVKGPNGESSVIHDRKSGKKFSEIEDALQSGRLTAAQYDRVYVVKDMSIQELAVLVSGQK----- 2015
gi 73959238 ref XP_547141.2 SVKGPNGESSVIHDRKSGKKFSEIEDALQSGRLTAAQYDRVYVVKDMSIQELAVLVSGQK----- 2015
gi 194678343 ref XP_601174.4 SVKGPNGESSVIHDRKSGKKFSEIEDALQSGRLTAAQYDRVYVVKDMSIQELAVLVSGQK----- 2015
gi 118098228 ref XP_414712.2 SVKGPNGESSVIHDRKSGKKFSEIEDALQSGRLTAAQYDRVYVVKDMSIQELAVLVSGQK----- 2015
gi 125812931 ref XP_691611.2 SVKGPNGESSVIHDRKSGKKFSEIEDALQSGRLTAAQYDRVYVVKDMSIQELAVLVSGQK----- 2015
.....1960.....1970.....1980.....1990.....2000.....2010.....

