

gi | 40254257 | ref | NP_766460.2 | -----MEKIDGKDOSSOGDEEKEPPKSY 150
gi | 109475171 | ref | XP_233215.4 | MEFAMEFLRRGQREPPGDGELCVERRRVVEAPGDEFORMLGTKLKSAVAALAEQLSTNHADSVDEVYLRDDGEDGRISFSVILVKKPPISKVKFSSMSKKICPETGKSQSVKETTVDCCARDTALFAAALDPKDOPOGDDEEKEPPKSY 150
gi | 156104862 | ref | NP_859063.3 | -----MEKTDADKDOSSOGDEEKEPPKSH 150
gi | 156120753 | ref | NP_001095523.1 | ----- 150
gi | 118094733 | ref | XP_422516.2 | -----MEKTDAGQPPLPNGDGEQPRSL 150
gi | 292615012 | ref | XP_002662510.1 | -----MDKKSANGFAKASESGVQRKOL 150
1.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100.....110.....120.....130.....140.....150



gi | 40254257 | ref | NP_766460.2 | PYSVETPYGFHLLDFLKYVDDIEKGHTIKRIPIHRRRAKQAKFSTLPRNFSLPNSGDRTYAVPPOQNNWSPVVRKIE-----LGTQEPSPPLPLGDLFOASVOGSELNVHRKALLAKDARQAEAGSLEDV---GSRPQLLR 300
gi | 109475171 | ref | XP_233215.4 | PYSVETPYGFHLLDFLKYVDDIEKGHTIKRIPIHRRRAKQAKFSTLPRNFSLPNSGDRSHAAAPQNNWSPVVRKIE-----LGTQEQSOSVPLGDLFOATVHGNELSYHRKALLAKDTRQVEAGSLEDA---GSRPQLLR 300
gi | 156104862 | ref | NP_859063.3 | PYSVETPYGFHLLDFLKYVDDIEKGHTIKRIPIHRRRAKQAKFSTLPRNFSLPNSGDRPFAAPPLQNNWSPVVRKIE-----LGTQEQSOSVPLGNAPQASTSRSEVSYHRKALLAEARQLEAAEPEDAELTFGSRPQLLR 300
gi | 156120753 | ref | NP_001095523.1 | PYSVETPYGFHLLDFLKYVDDIEKGHTIKRIPIHRRRAKQAKFSTLPRNFSLPNSGDRPFAAPPLQNNWSPVVRKIE-----LGTQEQSOSVPLGNAPQASTSRSEVSYHRKALLAEARQLEAAEPEDAELTFGSRPQLLR 300
gi | 118094733 | ref | XP_422516.2 | PYSLETPTVGFHLLDFLKYVDDIEKGNITRRVHIHRRAKQPKFSTLPRNFSLPENSHGYAASTGPGNPAATYR-----AQRKASLGAEISRAPLPSEEPSYRRKALLAETRRHAELVRCDELR---GRPQLLR 300
gi | 292615012 | ref | XP_002662510.1 | PYSVETPYGFHLLDFLKYVDDIEKGNITIKRVHIQRKNRGPKYSTLPRNFSLPGHGARPLAKDTWANTSTLGSKPKSRVTEVQQLFEFRASDATGGSSTISGSEATQSKISGSSYLPSPKVAEESQVQTSQNEQSIG---LVRPHLLR 300
.....160.....170.....180.....190.....200.....210.....220.....230.....240.....250.....260.....270.....280.....290.....300



gi | 40254257 | ref | NP_766460.2 | ASSMPATLLQNOVPEEPLSTLGGPSTLLALPLLDEGSCVCGAFDPAEGLMGFOASQVDRLEGELEPAIPEQVWEGAEPEEGDLKASSHLSQPGPSSAVQSVPMDLLEEVEIEHHMREAEVLTPGS 450
gi | 109475171 | ref | XP_233215.4 | ASSMPATLLPQNOAPEVFNLTSGPSALLVLPPLDEGSCVDRGTFDPAEGLMGFOAAAQSTDRAVEELEPAIPEVWEGAEPEEGDIKAAHLSQPPAPSSVQNVSVLDLEEVDIQHTRTADLALSPGS 450
gi | 156104862 | ref | NP_859063.3 | ASSMPATLLHSRASPEEPLSLGPPAPPALPLLQEGSCVCGDGFPAEGLMGFOASQVDRLEGELEPAIPEQVWEGAEPEEGDIKAAHLSQPPAPSSVQNVSVLDLEEVDIQHTRTADLALSPGS 450
gi | 156120753 | ref | NP_001095523.1 | ASSMPATLLHSRASPEEPLSLGPPAPPALPLLQEGSCVCGDGFPAEGLMGFOASQVDRLEGELEPAIPEQVWEGAEPEEGDIKAAHLSQPPAPSSVQNVSVLDLEEVDIQHTRTADLALSPGS 450
gi | 118094733 | ref | XP_422516.2 | ASSLPAALPPGAPASDGCVCPLRP-----SDNGSCPESTFRPMRSPDGLASLPSLMS-----PGAELASQEQEWGKGLVYRVPKERAQPLWQGHSAVQLQVVMESRGEEDASDATNGS 450
gi | 292615012 | ref | XP_002662510.1 | ASSMPVNVPRRKGSDDSTDEQISQVQNGSEKILFRPADGDRRGSIPDRASLHQQTAAALKRVRELEQVVRTIPELKAICSLRTEREQLLQKILQEQEKRPRLQQLKEIEVLQADLQVSALEPPSTSGKEDALFLSKNKVADHEIVVE 450
.....310.....320.....330.....340.....350.....360.....370.....380.....390.....400.....410.....420.....430.....440.....450



gi | 40254257 | ref | NP_766460.2 | -----ATPSPPLPSPILLENDLSLDEIELSISEIPPPPIEVDVRSIGIRVTEE-----SLGLETDSISSISLK 600
gi | 109475171 | ref | XP_233215.4 | -----STPSPPLPSPIPENELLEEIELNISEIPPPPIEVDVRSVGVVREE-----SLGLVEFASISSISLK 600
gi | 156104862 | ref | NP_859063.3 | -----PTPSPPLPSPIPENELLEEIELNISEIPPPPIEVDVRSVGVVREE-----SLGLARVDPGSSISLK 600
gi | 156120753 | ref | NP_001095523.1 | -----PTPSPPLPSPIPENELLEEIELNISEIPPPPIEVDVRSVGVVREE-----SLGLARVDPGSSISLK 600
gi | 118094733 | ref | XP_422516.2 | -----TLVASPGALQLADESINHGKAGGSVEIALNVLKEGEDRCAHAQEKKE-----QGGDAG-EPGGTAAK 600
gi | 292615012 | ref | XP_002662510.1 | SDRSTEQLPEKPHFEVQLNVCPDSKINKPVLDIESEKQVPAVSVPVILIDKAEPTDPEEEELQEPPLQEEASKSPSEVKEQERSEILLEDKQPLLEGIPASESECTSTQEVMTVQRPVILIIENITIAQPAEQQLVSNLE 600
.....460.....470.....480.....490.....500.....510.....520.....530.....540.....550.....560.....570.....580.....590.....600



gi | 40254257 | ref | NP_766460.2 | NVLALAEKLSGRTEELARVRAALEQOEEETKAREQRIQELCTVAHLEEKLSQERASEAPDR-----TDAVMNTPDLQELTPRE-----SHDKNIGVNLNLPDPECRAPRAEKNG 750
gi | 109475171 | ref | XP_233215.4 | SQVLDLEDKLSGRTEELARVRAALEQOEEETKAREQRIQELCTVAHLEEKLSQERASEAPDR-----TDAVMNTPDLQELTPRE-----SODKNIGVNLNLPDPECRAPRAEKNG 750
gi | 156104862 | ref | NP_859063.3 | QQVSALEGELSGRTEELARVRAALEQOEEETKAREQRIQELCTVAHLEEKLSQERASEAPDR-----TDAVMNTPDLQELTPRE-----SCDKGIEVNLNLPDPECRAPRAEKNG 750
gi | 156120753 | ref | NP_001095523.1 | QQVSALEGELSGRTEELARVRAALEQOEEETKAREQRIQELCTVAHLEEKLSQERASEAPDR-----TDAVMNTPDLQELTPRE-----SCDKGIEVNLNLPDPECRAPRAEKNG 750
gi | 118094733 | ref | XP_422516.2 | QHIAALEQLDRKKEELETTRAVLKDODHKIKEKSTOLLASAKALEGOLCRENTRERDAVSMDRGSMLQCNDAVANTELSYVNGSKQ-----VHDKNIGVNLNLPDPECRAPRAEKNG 750
gi | 292615012 | ref | XP_002662510.1 | AKLKLLEBSLKAQCELEKINVLLEEMDKNRQKDERIQELTDQVKEQIQLGRIETEPQPEVVKCDASVSTDEKSVLEKIGISTEPOPTEDPKVTESSQCSSTQINIVEARDIEVLAQVITAEKIVGVVEVMCDQISEIDVLDNLEGNNSL 750
.....610.....620.....630.....640.....650.....660.....670.....680.....690.....700.....710.....720.....730.....740.....750



gi | 40254257 | ref | NP_766460.2 | -----FPWVQNNHKSYSPPEEPVLP-QLSLPRGPEQILASSLCSCLSMELRIEEEGS-EOEGGQE-EGAGGLSRAAGESSWS-RESAPVIREEA-----TSELPGAERPGRPASSPODATIGQYVKKIQELLHEQWNCLEHGYPE 900
gi | 109475171 | ref | XP_233215.4 | -----FPWVQNNHKSYSPPEEPVLP-QLSLPRGPEQILASSLCSCLSMELRIEEEGS-EOEGGQE-EGAGGLSRAAGESSWS-RESAPVIREEA-----SSQLPGAERPGRPASSPODATIGQYVKKIQELLHEQWNCLEHGYPE 900
gi | 156104862 | ref | NP_859063.3 | -----LLWGPDGHKQGNQSPAERVLLP-QLSLPRGPEQILASSLCSCLSMELRIEEEGS-EOEGGQE-EGAGGLSRAAGESSWS-RESAPVIREEA-----SSQLPGAERPGRPASSPODATIGQYVKKIQELLHEQWNCLEHGYPE 900
gi | 156120753 | ref | NP_001095523.1 | -----LLWGPDGHKQGNQSPAERVLLP-QLSLPRGPEQILASSLCSCLSMELRIEEEGS-EOEGGQE-EGAGGLSRAAGESSWS-RESAPVIREEA-----SSQLPGAERPGRPASSPODATIGQYVKKIQELLHEQWNCLEHGYPE 900
gi | 118094733 | ref | XP_422516.2 | -----NLLAAELSAQWADVGTSGGDGHFAKLSSETAAGLEPGLHAPGFTLKIIDEQLS-DDNQNRNCDTQSLAARAAAESYRKRKRTGSSADENAEAGFGEDKTEDGMGEEGLPDKDFPAVDP-IGQYVKKIQELLHEQWNCLEHGYPE 900
gi | 292615012 | ref | XP_002662510.1 | EVLEMLENTDSIKNKQEQCIKDSLSLITDKVSNVAEEDTEYVMVSESAMVETLAEIEVTEPTVTKTESAESLGISTVTEKEREGSGLTQEPKELCGDPPHQSQRASEAASFAAIGVVRNRIQGLNEQWASLGSGQD 900
.....760.....770.....780.....790.....800.....810.....820.....830.....840.....850.....860.....870.....880.....890.....900



gi | 40254257 | ref | NP_766460.2 | LAS--AIKQPASKLSSIQNQLLSSLNLLLSAYSQAQAPPEPEKPTAPPPPTPPPPPPPPPEISPTSLKSIKMKKDYGFRAGNGTKKNLQFVGVNGGYETTSSEETSSEDSSPEDLSDSETEKKQDCSESPREDRDLHPCEAGQGVF-E 1050
gi | 109475171 | ref | XP_233215.4 | LAS--AIKQPASKLSSIQNQLLSSLNLLLSAYSQAQAPPE--KESPVPPSSTPPP---PPEISPTSLKSIKMKKDYGFRAGNGTKKNLQFVGVNGGYETTSSEETSSEDSSPEDLSDSETEKKQDCSESPREDRDMHLSCVAGQGVV-K 1050
gi | 156104862 | ref | NP_859063.3 | LAS--AIKQPASKLSSIQSLLSSLNLLLSAYSQAQAPPP---KEPPASSSSP---PVEISPTSLKSIKMKKDYGFRAGNGTKKNLQFVGVNGGYETTSSEETSSEDSTPEDLSDSEAEKKCDGPDHKKVDAHLSCVAGQGVF-E 1050
gi | 156120753 | ref | NP_001095523.1 | MAS--IWTWTSKIS-----PSTSLKSIKMKKDYGFRAGNGTKKNLQFVGVNGGYETTSSEETSSEDSSPEDLSDSEAEKKCDGPEPRGKDAHLSCRVGQGVF-E 1050
gi | 118094733 | ref | XP_422516.2 | LAS--AIKQPASKLSSIQNQLVNSLNSLLSAYSQRPAD-----KENENHNYQ---QLETSSPTSLKSIKMKKDYGSHAGNGTKKNLQFVGVNGGYETTSSEETSSEDSSPDGDMESDIERGAGGLEPTQEGGGGEGASFVHSVQ 1050
gi | 292615012 | ref | XP_002662510.1 | AKGESSQKPHSSKISSIQSHLRGSLSALAFYSPVQKGG-----AARQSLKSIKMKKNDCPDKQNGGAKKNLKFVGVNGGYESTSEEDSSGEENQDAVEEVESSEPEVEVQGEEDSGAAQEEAAAGEQSEGV 1050
.....910.....920.....930.....940.....950.....960.....970.....980.....990.....1000.....1010.....1020.....1030.....1040.....1050



gi | 40254257 | ref | NP_766460.2 | GTRNFGHTSDRGEVSHLRAERYKPS----EEFLNACQLLSQHLPEAGDNTKOLLRQSLNLSIQEWFVRVSSRKLSSPEAVAAYLLEVPQSPHYLLKLLVNLADRSNTALHYSVSHSNFAIVKLLLDIGVCNVVDHONKAGYTAVMITPL 1200
gi | 109475171 | ref | XP_233215.4 | GTRNFGHMSERKGVSHMKAERYKPS----EEFLNACQALSQHLPEAGATNKOLLRQSLNLSIQEWFVRVSSRKLSSPEAVAACLLLEVPQSPHYLLKLLVNLADRSNTALHYSVSHSNFAIAKLLLDIGVCNVVDHONKAGYTAVMITPL 1200
gi | 156104862 | ref | NP_859063.3 | GTRNFGHTSDRGEVSHLRAERYKPS----EEFLNACRALSQHLPEAGTNTDOLLRQSLNLSIQEWFVRVSSRKLSSPEAVVAVYLVHGVQSPHYLLKLLVNLADRSNTALHYSVSHSNFAIVKLLLDIGVCNVVDHONKAGYTAVMITPL 1200
gi | 156120753 | ref | NP_001095523.1 | GTRNFGHTSDRGEVSHLRAERYKPS----EEFLNACRVLVQHLPEAGTNTDOLLRQSLNLSIQEWFVRVSSRKLSSPEAVVAVYLVHGVQSPHYLLKLLVNLADRSNTALHYSVSHSNFAIVKLLLDIGVCNVVDHONKAGYTAVMITPL 1200
gi | 118094733 | ref | XP_422516.2 | ETRRDDDLQEPGAEIYFP--FSCKPS----EDFLAACQLLSQHLSEIRATSDOHLRHVLSIQEWFVRVSSRKLSSPEAVVAVYLVHGVQSPHYLLKLLVNLADRSNTALHYSVSHSNFAIAKLLLDIGVCNVVDHONKAGYTAVMITPL 1200
gi | 292615012 | ref | XP_002662510.1 | QAEGTEGSEEPDVCQASMSPEEQLVSLVDKFMACCHFLKDRMAEVSAP--NKEMRQVLMMLYQEWFRVSSRKLSSPEAVVAVYLVHGVQSPHYLLKLLVNLADRSNTALHYSVSHSNFAIVKLLLDIGVCNVVDHONKAGYTAVMITPL 1200
.....1060.....1070.....1080.....1090.....1100.....1110.....1120.....1130.....1140.....1150.....1160.....1170.....1180.....1190.....1200



gi | 40254257 | ref | NP_766460.2 | ASAEIKEDMAVVVKLLREGNVNIOATOGGOTALMLGVSHDREDMVAALLSCQADVNLQDHDGSSALMLACHGQADLVRLLLLAHPACNSSSLTDKAGRTALSIVLNSPAHVEIAELLRAHSEQGRSLGPKELQKN 1334
gi | 109475171 | ref | XP_233215.4 | ASAEIKEDMAVVVKLLREGNVNIOATOGGOTALMLGVSHDREDMVAALLSCQADVNLQDHDGSSALMLACHGQADLVRLLLLAHADCNENLTDKAGRTALSIVLNSPAHVEIAELLRAHSEQGRSLGPKELQKN 1334
gi | 156104862 | ref | NP_859063.3 | ASAEIKEDMAVVVKLLREGNVNIOATOGGOTALMLGVSHDREDMVAALLSCQADVNLQDHDGSSALMVACHGQADLVRLLLLAHPACNSSSLTDKAGRTALSIVLNSPAHVEIAELLRAHSEQGRSLGPKELQKN 1334
gi | 156120753 | ref | NP_001095523.1 | ASAEIKEDMAVVVKLLREGNVNIOATOGGOTALMLGVSHDREDMVAALLSCQADVNLQDHDGSSALMLACHGQADLVRLLLLAHPACNSSSLTDKAGRTALSIVLNSPAHVEIAELLRAHSEQGRSLGPKELQKN 1334
gi | 118094733 | ref | XP_422516.2 | VAAEIKEDMAVVVKLLREGNVNIOATOGGOTALMLGVSHDREDMVAALLSCQADVNLQDHDGSSALMVACHGQADLVRLLLLAHPACNSSSLTDKAGRTALSIVLNSPAHVEIAELLRAHSEQGRSLGPKELQKN 1334
gi | 292615012 | ref | XP_002662510.1 | VAAEIKEDMVAQQLLRMGKINARAQSGOTALMLAVSHGRATMVQVLLDGAEVNLDQDHDGSSALMLACHGQADLVRLLLLAHPACNSSSLTDKAGRTALSIVLNSPAHVEIAELLRAHSEQGRSLGPKELQKN 1334
.....1210.....1220.....1230.....1240.....1250.....1260.....1270.....1280.....1290.....1300.....1310.....1320.....1330.....

