

gi | 47419907 | ref | NP\_057653.3 | MSLSMRDPVPIPTGSMAYHPLPHRAPDFAMSAVLGHQPPFPALTLPPNGAAALSLPGALAKPIMDQLVGAAETGIPFSSSLG--PQAHRLRLKLTMEPEEVEEDDPKVHLEAKELWDFHKGRTQEMVIKSGRRMFPFFKVRCSGLDKKAK 150  
gi | 114647148 | ref | XP\_001154426.1 | MSLSMRDPVPIPTGSMAYHPLPHRAPDFAMSAVLGHQPPFPALTLPPNGAAALSLPGALAKPIMDQLVGAAETGIPFSSSLG--PQAHRLRLKLTMEPEEVEEDDPKVHLEAKELWDFHKGRTQEMVIKSGRRMFPFFKVRCSGLDKKAK 150  
gi | 73995264 | ref | XP\_534692.2 | MSLSMRDPVPIPTGSMAYHPLPHRAPDFAMSAVLGHQPPFPALTLPPNGAAALSLPGALAKPIMDQLVGAAETGIPFSSSLG--PQAHRLRLKLTMEPEEVEEDDPKVHLEAKELWDFHKGRTQEMVIKSGRRMFPFFKVRCSGLDKKAK 150  
gi | 194674676 | ref | XP\_001787873.1 | MSLSMRDPVPIPTGSMAYHPLPHRAPDFAMSAVLGHQPPFPALTLPPNGAAALSLPGALAKPIMDQLVGAAETGIPFSSSLG--PQAHRLRLKLTMEPEEVEEDDPKVHLEAKELWDFHKGRTQEMVIKSGRRMFPFFKVRCSGLDKKAK 150  
gi | 37622347 | ref | NP\_035665.2 | MSLSMRDPVPIPTGSMAYHPLPHRAPDFAMSAVLGHQPPFPALTLPPNGAAALSLPGALAKPIMDQLVGAAETGIPFSSSLG--PQAHRLRLKLTMEPEEVEEDDPKVHLEAKELWDFHKGRTQEMVIKSGRRMFPFFKVRCSGLDKKAK 150  
gi | 31745146 | ref | NP\_853669.1 | MSLSMRDPVPIPTGSMAYHPLPHRAPDFAMSAVLGHQPPFPALTLPPNGAAALSLPGALAKPIMDQLVGAAETGIPFSSSLG--PQAHRLRLKLTMEPEEVEEDDPKVHLEAKELWDFHKGRTQEMVIKSGRRMFPFFKVRCSGLDKKAK 150  
gi | 118098874 | ref | XP\_001234535.1 | -----MAYHPLPHRAPDFAMSAVLGHQPPFPALALPPNGAAALSLPGALAKPIMDQLVGAAETGIPFSSSLG--PQAHRLRLKLTMEPEEVEEDDPKVHLEAKELWDFHKGRTQEMVIKSGRRMFPFFKVRCSGLDKKAK 150  
gi | 156104899 | ref | NP\_001095140.1 | ----MRDPVIOGSSMAYHPLPHRGPEFAMSAVLGHQPPFPALALPPNGAAALSLPGALAKPIMDQLVGAAETGIPFSSSLG--PQAHRLRLKLTMEPEEVEEDDPKVHLEAKELWDFHKGRTQEMVIKSGRRMFPFFKVRCSGLDKKAK 150  
1.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100.....110.....120.....130.....140.....150



gi | 47419907 | ref | NP\_057653.3 | YILLMDIIAADDCKRYKFNHRMVMVAGKADPEMPKRMYLHPDSPAATGEQWMSKVVTFHKLKLTNNISDKHGFILAFPSDHATWQGNYSFGTQILNSMHKYQPRFHIVRANDILKLPYSTFRITVLPPEFEFIAVAYONDKITQLKIDNNP 300  
gi | 114647148 | ref | XP\_001154426.1 | YILLMDIIAADDCKRYKFNHRMVMVAGKADPEMPKRMYLHPDSPAATGEQWMSKVVTFHKLKLTNNISDKHGFILAFPSDHATWQGNYSFGTQILNSMHKYQPRFHIVRANDILKLPYSTFRITVLPPEFEFIAVAYONDKITQLKIDNNP 300  
gi | 73995264 | ref | XP\_534692.2 | YILLMDIIAADDCKRYKFNHRMVMVAGKADPEMPKRMYLHPDSPAATGEQWMSKVVTFHKLKLTNNISDKHGFILAFPSDHATWQGNYSFGTQILNSMHKYQPRFHIVRANDILKLPYSTFRITVLPPEFEFIAVAYONDKITQLKIDNNP 300  
gi | 194674676 | ref | XP\_001787873.1 | YILLMDIIAADDCKRYKFNHRMVMVAGKADPEMPKRMYLHPDSPAATGEQWMSKVVTFHKLKLTNNISDKHGFILAFPSDHATWQGNYSFGTQILNSMHKYQPRFHIVRANDILKLPYSTFRITVLPPEFEFIAVAYONDKITQLKIDNNP 300  
gi | 37622347 | ref | NP\_035665.2 | YILLMDIIAADDCKRYKFNHRMVMVAGKADPEMPKRMYLHPDSPAATGEQWMSKVVTFHKLKLTNNISDKHGFILAFPSDHATWQGNYSFGTQILNSMHKYQPRFHIVRANDILKLPYSTFRITVLPPEFEFIAVAYONDKITQLKIDNNP 300  
gi | 31745146 | ref | NP\_853669.1 | YILLMDIIAADDCKRYKFNHRMVMVAGKADPEMPKRMYLHPDSPAATGEQWMSKVVTFHKLKLTNNISDKHGFILAFPSDHATWQGNYSFGTQILNSMHKYQPRFHIVRANDILKLPYSTFRITVLPPEFEFIAVAYONDKITQLKIDNNP 300  
gi | 118098874 | ref | XP\_001234535.1 | YILLMDIIAADDCKRYKFNHRMVMVAGKADPEMPKRMYLHPDSPAATGEQWMSKVVTFHKLKLTNNISDKHGFILAFPSDHATWQGNYSFGTQILNSMHKYQPRFHIVRANDILKLPYSTFRITVLPPEFEFIAVAYONDKITQLKIDNNP 300  
gi | 156104899 | ref | NP\_001095140.1 | YILLMDIIAADDCKRYKFNHRMVMVAGKADPEMPKRMYLHPDSPAATGEQWMSKVVTFHKLKLTNNISDKHGFILAFPSDHATWQGNYSFGTQILNSMHKYQPRFHIVRANDILKLPYSTFRITVLPPEFEFIAVAYONDKITQLKIDNNP 300  
.....160.....170.....180.....190.....200.....210.....220.....230.....240.....250.....260.....270.....280.....290.....300



gi | 47419907 | ref | NP\_057653.3 | FAKGFRDTGNRRREKRKQLILOSRRVDFDRHKKENGTSDSSSEQAAFNCFQAQSSPAVSTVGTSNLKDLCPSSEGESDAEAEKKEEHPGPEACDAAKISTTTSEEPF-----RDKGSPAVKAHLFAAE---RPRDSGRLDKKASP 450  
gi | 114647148 | ref | XP\_001154426.1 | FAKGFRDTGNRRREKRKQLILOSRRVDFDRHKKENGTSDSSSEQAAFNCFQAQSSPAVSTVGTSNLKDLCPSSEGESDAEAEKKEEHPGPEACDAAKISTTTSEEPF-----RDKGSPAVKAHLFAAE---RPRDSGRLDKKASP 450  
gi | 73995264 | ref | XP\_534692.2 | FAKGFRDTGNRRREKRKQLILOSRRVDFDRHKKENGTSDSSSEQAAFNCFQAQSSPAVSTVGTSNLKDLCPSSEGESDAEAEKKEEHPGPEACDAAKISTTTSEEPF-----RDKGSPAVKAHLFAAE---RPRDSGRLDKKASP 450  
gi | 194674676 | ref | XP\_001787873.1 | FAKGFRDTGNRRREKRKQLILOSRRVDFDRHKKENGTSDSSSEQAAFNCFQAQSSPAVSTVGTSNLKDLCPSSEGESDAEAEKKEEHPGPEACDAAKISTTTSEEPF-----RDKGSPAVKAHLFAAE---RPRDSGRLDKKASP 450  
gi | 37622347 | ref | NP\_035665.2 | FAKGFRDTGNRRREKRKQLILOSRRVDFDRHKKENGTSDSSSEQAAFNCFQAQSSPAVSTVGTSNLKDLCPSSEGESDAEAEKKEEHPGPEACDAAKISTTTSEEPF-----RDKGSPAVKAHLFAAE---RPRDSGRLDKKASP 450  
gi | 31745146 | ref | NP\_853669.1 | FAKGFRDTGNRRREKRKQLILOSRRVDFDRHKKENGTSDSSSEQAAFNCFQAQSSPAVSTVGTSNLKDLCPSSEGESDAEAEKKEEHPGPEACDAAKISTTTSEEPF-----RDKGSPAVKAHLFAAE---RPRDSGRLDKKASP 450  
gi | 118098874 | ref | XP\_001234535.1 | FAKGFRDTGNRRREKRKQLILOSRRVDFDRHKKENGTSDSSSEQAAFNCFQAQSSPAVSTVGTSNLKDLCPSSEGESDAEAEKKEEHPGPEACDAAKISTTTSEEPF-----RDKGSPAVKAHLFAAE---RPRDSGRLDKKASP 450  
gi | 156104899 | ref | NP\_001095140.1 | FAKGFRDTGNRRREKRKQLILOSRRVDFDRHKKENGTSDSSSEQAAFNCFQAQSSPAVSTVGTSNLKDLCPSSEGESDAEAEKKEEHPGPEACDAAKISTTTSEEPF-----RDKGSPAVKAHLFAAE---RPRDSGRLDKKASP 450  
.....310.....320.....330.....340.....350.....360.....370.....380.....390.....400.....410.....420.....430.....440.....450



gi | 47419907 | ref | NP\_057653.3 | DSRHSPATISSSTR--GLGAEERRSPVREGTAPAK--VEEARALPGKEAFAPLIVQDAAAHLAAGPLPLGLGFAPGLAGQOFF---NGHPLFLHPSQFAMGGAFSSMAAAGMGPPLLATVSGASTVSGGLDSTAMASAAAQGLSGASAA 600  
gi | 114647148 | ref | XP\_001154426.1 | DSRHSPATISSSTR--GLGAEERRSPVREGTAPAK--VEEARALPGKEAFAPLIVQDAAAHLAAGPLPLGLGFAPGLAGQOFF---NGHPLFLHPSQFAMGGAFSSMAAAGMGPPLLATVSGASTVSGGLDSTAMASAAAQGLSGASAA 600  
gi | 73995264 | ref | XP\_534692.2 | DSRHSPATISSSTR--GLGAEERRSPVREGTAPAK--VEEARALPGKEAFAPLIVQDAAAHLAAGPLPLGLGFAPGLAGQOFF---NGHPLFLHPSQFAMGGAFSSMAAAGMGPPLLATVSGASTVSGGLDSTAMASAAAQGLSGASAA 600  
gi | 194674676 | ref | XP\_001787873.1 | DSRHSPATISSSTR--GLGAEERRSPVREGTAPAK--VEEARALPGKEAFAPLIVQDAAAHLAAGPLPLGLGFAPGLAGQOFF---NGHPLFLHPSQFAMGGAFSSMAAAGMGPPLLATVSGASTVSGGLDSTAMASAAAQGLSGASAA 600  
gi | 37622347 | ref | NP\_035665.2 | DSRHSPATISSSTR--VPGADERRSPGREGPVATR--VDEARALPAKDAFAPLIVQD--ATAHLAAGPLPLGLGFAPGLAGQOFF---NGHPLFLHPSQFAMGGAFSSMAAAGMGPPLLATVSGASTVSGGLDSTAMASAAAQGLSGASAA 600  
gi | 31745146 | ref | NP\_853669.1 | DSRHSPATISSSTR--VPGADERRSPGREGPVATR--VDEARALPAKDAFAPLIVQD--ATAHLAAGPLPLGLGFAPGLAGQOFF---NGHPLFLHPSQFAMGGAFSSMAAAGMGPPLLATVSGASTVSGGLDSTAMASAAAQGLSGASAA 600  
gi | 118098874 | ref | XP\_001234535.1 | DSRHSPATISSSTR--VPGADERRSPGREGPVATR--VDEARALPAKDAFAPLIVQD--ATAHLAAGPLPLGLGFAPGLAGQOFF---NGHPLFLHPSQFAMGGAFSSMAAAGMGPPLLATVSGASTVSGGLDSTAMASAAAQGLSGASAA 600  
gi | 156104899 | ref | NP\_001095140.1 | DSRSPITLISSTR---SGEELKSPVREP---AKTIDDCRTVSK--ENYMLIVQD--GAHLNHLNHPGPTGLAGQOFFNHLGGAHPLLHPSQFAMGGAFSSMAAAGMGPPLAAYS---SGVSLDGLSGLP---SRSPSLTAP-- 600  
.....460.....470.....480.....490.....500.....510.....520.....530.....540.....550.....560.....570.....580.....590.....600



gi | 47419907 | ref | NP\_057653.3 | LPPFHLQOHVLASQGLAMSPFGSLFPYPTVMAAAAAASAAASSVHRHPFLNLTMRPRLRYSPTSIPVPPVDSGLLTLALPMAAAAGPLDGKVAALAAAPASVAVDVGSELNSRSSLSSSSVSLPKLCAEKAATSELOSIQR 750  
gi | 114647148 | ref | XP\_001154426.1 | LPPFHLQOHVLASQGLAMSPFGSLFPYPTVMAAAAAASAAASSVHRHPFLNLTMRPRLRYSPTSIPVPPVDSGLLTLALPMAAAAGPLDGKVAALAAAPASVAVDVGSELNSRSSLSSSSVSLPKLCAEKAATSELOSIQR 750  
gi | 73995264 | ref | XP\_534692.2 | LPPFHLQOHVLASQGLAMSPFGSLFPYPTVMAAAAAASAAASSVHRHPFLNLTMRPRLRYSPTSIPVPPVDSGLLTLALPMAAAAGPLDGKVAALAAAPASVAVDVGSELNSRSSLSSSSVSLPKLCAEKAATSELOSIQR 750  
gi | 194674676 | ref | XP\_001787873.1 | LPPFHLQOHVLASQGLAMSPFGSLFPYPTVMAAAAAASAAASSVHRHPFLNLTMRPRLRYSPTSIPVPPVDSGLLTLALPMAAAAGPLDGKVAALAAAPASVAVDVGSELNSRSSLSSSSVSLPKLCAEKAATSELOSIQR 750  
gi | 37622347 | ref | NP\_035665.2 | LPPFHLQOHVLASQGLAMSPFGSLFPYPTVMAAAAAASAAASSVHRHPFLNLTMRPRLRYSPTSIPVPPVDSGLLTLALPMAAAAGPLDGKVAALAAAPASVAVDVGSELNSRSSLSSSSVSLPKLCAEKAATSELOSIQR 750  
gi | 31745146 | ref | NP\_853669.1 | LPPFHLQOHVLASQGLAMSPFGSLFPYPTVMAAAAAASAAASSVHRHPFLNLTMRPRLRYSPTSIPVPPVDSGLLTLALPMAAAAGPLDGKVAALAAAPASVAVDVGSELNSRSSLSSSSVSLPKLCAEKAATSELOSIQR 750  
gi | 118098874 | ref | XP\_001234535.1 | ALPPFHLQOHVLASQGLAMSPFGSLFPYPTVMAAAAAASAAASSVHRHPFLNLTMRPRLRYSPTSIPVPPVDSGLLTLALPMAAAAGPLDGKVAALAAAPASVAVDVGSELNSRSSLSSSSVSLPKLCAEKAATSELOSIQR 750  
gi | 156104899 | ref | NP\_001095140.1 | MPFHLQOHVLASQGLAMSPFGSLFPYPTVMAAAAAASAAASSVHRHPFLNLTMRPRLRYSPTSIPVPPVDSGLLTLALPMAAAAGPLDGKVAALAAAPASVAVDVGSELNSRSSLSSSSVSLPKLCAEKAATSELOSIQR 750  
.....610.....620.....630.....640.....650.....660.....670.....680.....690.....700.....710.....720.....730.....740.....750



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*****:. * ** : * **
gi |47419907|ref|NP_057653.3|LVSGLEAKPDRSRASG-----822
gi |114647148|ref|XP_001154426.1|LVSGLEAKPDRSRASG-----822
gi |73995264|ref|XP_534692.2|LVSGLEAKPDRSRASG-----822
gi |194674676|ref|XP_001787873.1|LVSGLEAKPDRSRASG-----822
gi |37622347|ref|NP_035665.2|LVSGLEAKPDRSRASG-----822
gi |31745146|ref|NP_853669.1|LVSGLEAKPDRSRASG-----822
gi |118098874|ref|XP_001234535.1|LVSGLEAKPDRSRASG-----822
gi |156104899|ref|NP_001095140.1|LVSGLEPKDRARVSP-----822
.....760.....770.....780.....790.....800.....810.....820..

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