

gi|6322701|ref|NP_012774.1|
gi|50306573|ref|XP_453260.1|
gi|45185739|ref|NP_983455.1|
gi|145611728|ref|XP_369076.2|
gi|32417808|ref|XP_329382.1| MSSNSAEIGELSPQQCKEACSNGSSAVEPSNALPFGSLPTREAVPAPLANKSPAVDGGQDDCALVSPRHMLTKGQEHYLRKRELVSEQVKWEISELNSPTALRRFGAPFKSDLGETISPLDSELPILRYIFVHHVREFPFLLDKAKEKEFWQ
gi|19115231|ref|NP_594319.1|
gi|15224174|ref|NP_179435.1|
gi|156416003|ref|NP_004159.2|
gi|74003072|ref|XP_856901.1|
gi|54607098|ref|NP_075770.1|
gi|18426858|ref|NP_569112.1|
gi|118086669|ref|XP_419054.2|
gi|41053873|ref|NP_957204.1|
gi|114592572|ref|XP_001173228.1|
gi|17550100|ref|NP_509446.1|
gi|17505833|ref|NP_492798.1|
gi|17137288|ref|NP_477210.1|
gi|158289891|ref|XP_311518.4|
gi|124802862|ref|XP_001347618.1|
1.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100.....110.....120.....130.....140.....150

gi|6322701|ref|NP_012774.1|
gi|50306573|ref|XP_453260.1|
gi|45185739|ref|NP_983455.1|
gi|145611728|ref|XP_369076.2|
gi|32417808|ref|XP_329382.1| DKLVFLESFASKNISSEDRLEETKRRKLALKAQKLVELMMVSGVRTSSGFEEIRIFSELEIVDANAIDTGVLSMPEGNYLHGWDVNIAGVRIISIKRNIRYKHAEYFVGRRYGDPSKLYKNLRLLEPGKVLPLPKNKISTIAIG
gi|19115231|ref|NP_594319.1|
gi|15224174|ref|NP_179435.1|
gi|156416003|ref|NP_004159.2|
gi|74003072|ref|XP_856901.1|
gi|54607098|ref|NP_075770.1|
gi|18426858|ref|NP_569112.1|
gi|118086669|ref|XP_419054.2|
gi|41053873|ref|NP_957204.1|
gi|114592572|ref|XP_001173228.1|
gi|17550100|ref|NP_509446.1|
gi|17505833|ref|NP_492798.1|
gi|17137288|ref|NP_477210.1|
gi|158289891|ref|XP_311518.4|
gi|124802862|ref|XP_001347618.1|
.....160.....170.....180.....190.....200.....210.....220.....230.....240.....250.....260.....270.....280.....290.....300

gi|6322701|ref|NP_012774.1|
gi|50306573|ref|XP_453260.1|
gi|45185739|ref|NP_983455.1|
gi|145611728|ref|XP_369076.2|
gi|32417808|ref|XP_329382.1| LFGGGDDSEVSSISSVSTQMVNKAQDPNGESGSTGGVSRFLSVREHRRITGSSSSRRSSPRREVDHRS DSPRKEENVTLFRESQRTSLRAFLRLLLONPQIAHTKAISDFLTNNPTTLKDEDEDIVRRKQMDKRVESQKRFYELARKR
gi|19115231|ref|NP_594319.1|
gi|15224174|ref|NP_179435.1|
gi|156416003|ref|NP_004159.2|
gi|74003072|ref|XP_856901.1|
gi|54607098|ref|NP_075770.1|
gi|18426858|ref|NP_569112.1|
gi|118086669|ref|XP_419054.2|
gi|41053873|ref|NP_957204.1|
gi|114592572|ref|XP_001173228.1|
gi|17550100|ref|NP_509446.1|
gi|17505833|ref|NP_492798.1|
gi|17137288|ref|NP_477210.1|
gi|158289891|ref|XP_311518.4|
gi|124802862|ref|XP_001347618.1|
.....310.....320.....330.....340.....350.....360.....370.....380.....390.....400.....410.....420.....430.....440.....450

gi|6322701|ref|NP_012774.1|
gi|50306573|ref|XP_453260.1|
gi|45185739|ref|NP_983455.1|
gi|145611728|ref|XP_369076.2|
gi|32417808|ref|XP_329382.1| AADLDVYMEKFRQDIVEHNLTLNLFKEIKETIIDLSIQYCKFAEWLRTEVAAITVHLFLAEDNSPELFAQAKKIHSILIPYTIMKNVIRIANPAAVMSNVLDIFLAQPFGRSLMQRIFSLILNDGIRSVQKSIDALAAKIGDPVFVDK 600
gi|19115231|ref|NP_594319.1|
gi|15224174|ref|NP_179435.1|
gi|156416003|ref|NP_004159.2|
gi|74003072|ref|XP_856901.1|
gi|54607098|ref|NP_075770.1|
gi|18426858|ref|NP_569112.1|
gi|118086669|ref|XP_419054.2|
gi|41053873|ref|NP_957204.1|
gi|114592572|ref|XP_001173228.1|
gi|17550100|ref|NP_509446.1|
gi|17505833|ref|NP_492798.1|
gi|17137288|ref|NP_477210.1|
gi|158289891|ref|XP_311518.4|
gi|124802862|ref|XP_001347618.1|
.....460.....470.....480.....490.....500.....510.....520.....530.....540.....550.....560.....570.....580.....590.....600

gi|6322701|ref|NP_012774.1|
gi|50306573|ref|XP_453260.1|
gi|45185739|ref|NP_983455.1|
gi|145611728|ref|XP_369076.2|
gi|32417808|ref|XP_329382.1| LKCFSDGDEALKLAIREEAVDDVDLIIVAILRSEIYIPALNADQVTRLYNAVAFNSAVENVDEELKQGAQLFSYLKQLMKLYLRQDKSMMLNLTIEFVTLQLFRDLFIIFYEPLVRVYKSAENVNSVTDFAVFDLIDVVEKCRDD 750
gi|19115231|ref|NP_594319.1|
gi|15224174|ref|NP_179435.1|
gi|156416003|ref|NP_004159.2|
gi|74003072|ref|XP_856901.1|
gi|54607098|ref|NP_075770.1|
gi|18426858|ref|NP_569112.1|
gi|118086669|ref|XP_419054.2|
gi|41053873|ref|NP_957204.1|
gi|114592572|ref|XP_001173228.1|
gi|17550100|ref|NP_509446.1|
gi|17505833|ref|NP_492798.1|
gi|17137288|ref|NP_477210.1|
gi|158289891|ref|XP_311518.4|
gi|124802862|ref|XP_001347618.1|
.....610.....620.....630.....640.....650.....660.....670.....680.....690.....700.....710.....720.....730.....740.....750

gi|6322701|ref|NP_012774.1|
gi|50306573|ref|XP_453260.1|
gi|45185739|ref|NP_983455.1|
gi|145611728|ref|XP_369076.2|
gi|32417808|ref|XP_329382.1| ASADPNQIVQAFIDLQRHEQHFFYKQVHVEVHTDNLGFLQLMGWIEGILEFLRHGPKNGFLDINALFEGAVQSGAIDHDKAIDEINKLIAWQEARKKWHQDKTRQKMAAEGGAMGIDAVPGGFSAQDFGLDQMDLEDQVYEDDLSSEAR 900
gi|19115231|ref|NP_594319.1|
gi|15224174|ref|NP_179435.1|
gi|156416003|ref|NP_004159.2|
gi|74003072|ref|XP_856901.1|
gi|54607098|ref|NP_075770.1|
gi|18426858|ref|NP_569112.1|
gi|118086669|ref|XP_419054.2|
gi|41053873|ref|NP_957204.1|
gi|114592572|ref|XP_001173228.1|
gi|17550100|ref|NP_509446.1|
gi|17505833|ref|NP_492798.1|
gi|17137288|ref|NP_477210.1|
gi|158289891|ref|XP_311518.4|
gi|124802862|ref|XP_001347618.1|
.....760.....770.....780.....790.....800.....810.....820.....830.....840.....850.....860.....870.....880.....890.....900

gi|6322701|ref|NP_012774.1| ---MLSLKKS---ALSKLTLRLNTR-- 19
gi|50306573|ref|XP_453260.1| ---MLRIVRGRVGLAQANFKSLVQAR-- 24
gi|45185739|ref|NP_983455.1| ---MLSVTR---APCVRTRALK-- 17
gi|145611728|ref|XP_369076.2| ---MAMRAARNVFRITTAARQIR-- 19
gi|32417808|ref|XP_329382.1| QEVQEMDPIDAERRRRKTKCDLRRNAGEPKPEVSEVHKLKDDFLAKLRDDNVCGFVRFPCPKTSSWCWRARDESLEEQCCORREKEGDAFGLLEVVLVLDLGLCREORSRASSEANTPLALAARSFAVVRMDVVAVVRVRSASKG 1050
gi|19115231|ref|NP_594319.1| ---MLRFKVAFSLKNGGNLKLFTSS-- 24
gi|15224174|ref|NP_179435.1| ---MWRCLRVAS---SSRRSESNGL-- 18
gi|156416003|ref|NP_004159.2| ---MSGVRLSRLLSARRLALAKA-WFTV 25
gi|74003072|ref|XP_856901.1| ---MSGVRAVSRLLGARRLALTRAQWPA 26
gi|54607098|ref|NP_075770.1| ---MAGVAVSRLLRGRRLLALTGAWPGTL 26
gi|18426858|ref|NP_569112.1| ---MAGVAVSRLLRGRRLLALAGATR-- 23
gi|118086669|ref|XP_419054.2| ---MAAVVAASRLAKCWLRFPAVRAWPA 26
gi|41053873|ref|NP_957204.1| ---MAAVCAASRVLGTK--ILSSKSLPAV 24
gi|114592572|ref|XP_001173228.1| ---MLRAASNGLRNTVAARSVS-- 19
gi|17550100|ref|NP_509446.1| ---MLNVVKSINRAKTFVR-- 16
gi|17505833|ref|NP_492798.1| ---MSGIMRVPSILAKNAVSMQRAAVG 26
gi|17137288|ref|NP_477210.1| ---MSGMIRLPTVLAKNALSAVRGLTAG 26
gi|158289891|ref|XP_311518.4| ---MTRNNKYYIRFMQSSPCR-- 18
gi|124802862|ref|XP_001347618.1|

.....910.....920.....930.....940.....950.....960.....970.....980.....990.....1000.....1010.....1020.....1030.....1040.....1050



gi|6322701|ref|NP_012774.1| ---TFTSSALVR--- 65
gi|50306573|ref|XP_453260.1| ---KFSSQMLR--- 76
gi|45185739|ref|NP_983455.1| ---LFSSGRAAS--- 58
gi|145611728|ref|XP_369076.2| ---PFSSTRP--- 68
gi|32417808|ref|XP_329382.1| TGGALESNRPKCHVVGFRS RGT KAGRNVVRRRRRRRRRRRRENEALGDLQSQCAHGDKRKSLSHTPREKNIVIDSLVFTPARACRQSPESLFLDKAGRLTGVITARVIAAGPLRAKEASPHLSKHYVIDHEFDAIVVGAGGAGL 1200
gi|19115231|ref|NP_594319.1| TLKKTASQQLR--- 67
gi|15224174|ref|NP_179435.1| ---AFISQLSR--- 60
gi|156416003|ref|NP_004159.2| LDTGTRGFHFIV--- 74
gi|74003072|ref|XP_856901.1| WDTGTRGFHFIV--- 75
gi|54607098|ref|NP_075770.1| QKQ---CGFHFV--- 74
gi|18426858|ref|NP_569112.1| ---GFHFV--- 66
gi|118086669|ref|XP_419054.2| CQTHARNFHFIV--- 75
gi|41053873|ref|NP_957204.1| CQAN-RQLHFSI--- 71
gi|114592572|ref|XP_001173228.1| ---L--- 55
gi|17550100|ref|NP_509446.1| ---L--- 48
gi|17505833|ref|NP_492798.1| VQRS---YHIT--- 71
gi|17137288|ref|NP_477210.1| SQRN---LHFT--- 70
gi|158289891|ref|XP_311518.4| ---L--- 46
gi|124802862|ref|XP_001347618.1|

.....1060.....1070.....1080.....1090.....1100.....1110.....1120.....1130.....1140.....1150.....1160.....1170.....1180.....1190.....1200



gi|6322701|ref|NP_012774.1| RAAFGLAEAGYKTAACISKLFPTTRSHTVAAQGGINAALGNMHKDNWKMWHYDVTVKGSDWLDGDDSIHYMTRAPKSIIELEHGVVPSRTENGIYQRAFGGQTKYKGGQAYRTCAVADRTGHALLHTLYGALRHDTHFFIEYFALDL 215
gi|50306573|ref|XP_453260.1| RAAFGLAEAGYKTAACISKLFPTTRSHTVAAQGGINAALGNMHKDDWKMWHYDVTVKGSDWLDGDDSIHYMTRAPKSIIELEHGVVPSRTENGIYQRAFGGQTKYKGGQAYRTCAVADRTGHALLHTLYGALRHDTHFFIEYFAMDL 226
gi|45185739|ref|NP_983455.1| LQAFGLAEAGYKTAACISKLFPTTRSHTVAAQGGINAALGNMHKDDWKMWHYDVTVKGSDWLDGDDSIHYMTRAPKSIIELEHGVVPSRTENGIYQRAFGGQTKYKGGQAYRTCAVADRTGHALLHTLYGALRHDTHFFIEYFAMDL 208
gi|145611728|ref|XP_369076.2| RAAFGLAEAGYKTAACISKLFPTTRSHTVAAQGGINAALGNMHKDDWKMWHYDVTVKGSDWLDGDDSIHYMTRAPKSIIELEHGVVPSRTENGIYQRAFGGQTKYKGGQAYRTCAVADRTGHALLHTLYGALRHDTHFFIEYFAMDL 218
gi|32417808|ref|XP_329382.1| RAAFGLAEAGYKTAACISKLFPTTRSHTVAAQGGINAALGNMHKDDWKMWHYDVTVKGSDWLDGDDSIHYMTRAPKSIIELEHGVVPSRTENGIYQRAFGGQTKYKGGQAYRTCAVADRTGHALLHTLYGALRHDTHFFIEYFAMDL 1350
gi|19115231|ref|NP_594319.1| RAATFGLAEAGYKTAACISKLFPTTRSHTVAAQGGINAALGNMKTDDWKMWHYDVTVKGSDWLDGDDSIHYMTRAPKSIIELEHGVVPSRTENGIYQRAFGGQTKYKGGQAYRTCAVADRTGHALLHTLYGALRHDTHFFIEYFAMDL 217
gi|15224174|ref|NP_179435.1| RAAIGLSEHGFTNACIKLFPTRSHTVAAQGGINAALGNMSEDDNRRWHFYDVTVKGSDWLDGDDSIHYMTRAPKSIIELEHGVVPSRTENGIYQRAFGGQTKYKGGQAYRTCAVADRTGHALLHTLYGALRHDTHFFIEYFAMDL 210
gi|156416003|ref|NP_004159.2| RAAFGLSEAGFNTACVTKLFPTRSHTVAAQGGINAALGNMSEDDNRRWHFYDVTVKGSDWLDGDDSIHYMTRAPKSIIELEHGVVPSRTENGIYQRAFGGQTKYKGGQAYRTCAVADRTGHALLHTLYGALRHDTHFFIEYFAMDL 224
gi|74003072|ref|XP_856901.1| RAAFGLSEAGFNTACVTKLFPTRSHTVAAQGGINAALGNMSEDDNRRWHFYDVTVKGSDWLDGDDSIHYMTRAPKSIIELEHGVVPSRTENGIYQRAFGGQTKYKGGQAYRTCAVADRTGHALLHTLYGALRHDTHFFIEYFAMDL 225
gi|54607098|ref|NP_075770.1| RAAFGLSEAGFNTACVTKLFPTRSHTVAAQGGINAALGNMSEDDNRRWHFYDVTVKGSDWLDGDDSIHYMTRAPKSIIELEHGVVPSRTENGIYQRAFGGQTKYKGGQAYRTCAVADRTGHALLHTLYGALRHDTHFFIEYFAMDL 224
gi|18426858|ref|NP_569112.1| RAAFGLSEAGFNTACVTKLFPTRSHTVAAQGGINAALGNMSEDDNRRWHFYDVTVKGSDWLDGDDSIHYMTRAPKSIIELEHGVVPSRTENGIYQRAFGGQTKYKGGQAYRTCAVADRTGHALLHTLYGALRHDTHFFIEYFAMDL 216
gi|118086669|ref|XP_419054.2| RAAFGLSEAGFNTACVTKLFPTRSHTVAAQGGINAALGNMSEDDNRRWHFYDVTVKGSDWLDGDDSIHYMTRAPKSIIELEHGVVPSRTENGIYQRAFGGQTKYKGGQAYRTCAVADRTGHALLHTLYGALRHDTHFFIEYFAMDL 225
gi|41053873|ref|NP_957204.1| RAAFGLSEAGFNTACVTKLFPTRSHTVAAQGGINAALGNMSEDDNRRWHFYDVTVKGSDWLDGDDSIHYMTRAPKSIIELEHGVVPSRTENGIYQRAFGGQTKYKGGQAYRTCAVADRTGHALLHTLYGALRHDTHFFIEYFAMDL 221
gi|114592572|ref|XP_001173228.1| ---MEEDNRRWHFYDVTVKGSDWLDGDDSIHYMTRAPKSIIELEHGVVPSRTENGIYQRAFGGQTKYKGGQAYRTCAVADRTGHALLHTLYGALRHDTHFFIEYFAMDL 94
gi|17550100|ref|NP_509446.1| RAAMGLSEGGMKTAVIKLFPTRSHTVAAQGGINAALGNMNPDNRRWHFYDVTVKGSDWLDGDDSIHYMTRAPKSIIELEHGVVPSRTENGIYQRAFGGQTKYKGGQAYRTCAVADRTGHALLHTLYGALRHDTHFFIEYFAMDL 205
gi|17505833|ref|NP_492798.1| RAAMGLSEGGMKTAVIKLFPTRSHTVAAQGGINAALGNMNPDNRRWHFYDVTVKGSDWLDGDDSIHYMTRAPKSIIELEHGVVPSRTENGIYQRAFGGQTKYKGGQAYRTCAVADRTGHALLHTLYGALRHDTHFFIEYFAMDL 198
gi|17137288|ref|NP_477210.1| RAAFGLVAEGFKTAVIKLFPTRSHTVAAQGGINAALGNMSEDDNRRWHFYDVTVKGSDWLDGDDSIHYMTRAPKSIIELEHGVVPSRTENGIYQRAFGGQTKYKGGQAYRTCAVADRTGHALLHTLYGALRHDTHFFIEYFAMDL 221
gi|158289891|ref|XP_311518.4| RAAFGLVAEGFKTAVIKLFPTRSHTVAAQGGINAALGNMSEDDNRRWHFYDVTVKGSDWLDGDDSIHYMTRAPKSIIELEHGVVPSRTENGIYQRAFGGQTKYKGGQAYRTCAVADRTGHALLHTLYGALRHDTHFFIEYFAMDL 220
gi|124802862|ref|XP_001347618.1| RSALELSEKMKVACISKLFPTTRSHTVAAQGGINAALGNMSEDDNRRWHFYDVTVKGSDWLDGDDSIHYMTRAPKSIIELEHGVVPSRTENGIYQRAFGGQTKYKGGQAYRTCAVADRTGHALLHTLYGALRHDTHFFIEYFAMDL 196

.....1210.....1220.....1230.....1240.....1250.....1260.....1270.....1280.....1290.....1300.....1310.....1320.....1330.....1340.....1350



gi | 6322701 | ref | NP_012774.1 | LTH-NGEVVGVIAYNQEDGIIHRFRRAHKIIATGGYGRAYPSCSAHTCTGDGNAMVSRAGFPLODLEFVQFHPSPGIYGGCLITGARGEGGFLVNSEGERFMERYAPTAKDLACRDVVSRAITMEIREGRGVGKCKDHMLYQLSHLPP 364
gi | 50306573 | ref | XP_453260.1 | LTH-NGEVVGVIAYNQEDGIIHRFRRAHKIIATGGYGRAYPSCSAHTCTGDGNAMVSRAGFPLODLEFVQFHPSPGIYGGCLITGARGEGGFLVNSEGERFMERYAPTAKDLACRDVVSRAITMEIREGRGVGPEKDHMLYQLSHLPP 375
gi | 45185739 | ref | NP_983455.1 | LTH-NGEVVGVIAYNQEDGIIHRFRRAHKIIATGGYGRAYPSCSAHTCTGDGNAMVSRAGFPLODLEFVQFHPSPGIYGGCLITGARGEGGFLVNSEGERFMERYAPTAKDLACRDVVSRAITMEIREGRGVGPEKDHMLYQLSHLPP 357
gi | 145611728 | ref | XP_369076.2 | LMC-DGECVGVVAYNQEDGIIHRFRRAHKIIATGGYGRAYPSCSAHTCTGDGNAMVSRAGFPLODLEFVQFHPSPGIYGGCLITGARGEGGFLVNSEGERFMERYAPTAKDLACRDVVSRAITMEIREGRGVGPEKDHMLYQLSHLPP 367
gi | 32417808 | ref | XP_329382.1 | LMC-DGECVGVVAYNQEDGIIHRFRRAHKIIATGGYGRAYPSCSAHTCTGDGNAMVSRAGFPLODLEFVQFHPSPGIYGGCLITGARGEGGFLVNSEGERFMERYAPTAKDLACRDVVSRAITMEIREGRGVGPEKDHMLYQLSHLPP 1499
gi | 19115231 | ref | NP_594319.1 | LME-GGECRGMVIANLEDGSIHRFRRAHKIIATGGYGRAYPSCSAHTCTGDGNAMVSRAGFPLODLEFVQFHPSPGIYGGCLITGARGEGGFLVNSEGERFMERYAPTAKDLACRDVVSRAITMEIREGRGVGPEKDHMLYQLSHLPP 366
gi | 15224174 | ref | NP_179435.1 | LMSDGTCCGVIALNMGEDGIIHRFRRAHKIIATGGYGRAYPSCSAHTCTGDGNAMVSRAGFPLODLEFVQFHPSPGIYGGCLITGARGEGGFLVNSEGERFMERYAPTAKDLACRDVVSRAITMEIREGRGVGPEKDHMLYQLSHLPP 360
gi | 156416003 | ref | NP_004159.2 | LME-NGECRGMVIALCIEDGSIHRFRRAHKIIATGGYGRAYPSCSAHTCTGDGNAMVSRAGFPLODLEFVQFHPSPGIYGGCLITGARGEGGFLVNSEGERFMERYAPTAKDLACRDVVSRAITMEIREGRGVGPEKDHMLYQLSHLPP 373
gi | 74003072 | ref | XP_856901.1 | LME-NGECRGMVIALCIEDGSIHRFRRAHKIIATGGYGRAYPSCSAHTCTGDGNAMVSRAGFPLODLEFVQFHPSPGIYGGCLITGARGEGGFLVNSEGERFMERYAPTAKDLACRDVVSRAITMEIREGRGVGPEKDHMLYQLSHLPP 374
gi | 54607098 | ref | NP_075770.1 | LME-NGECRGMVIALCIEDGSIHRFRRAHKIIATGGYGRAYPSCSAHTCTGDGNAMVSRAGFPLODLEFVQFHPSPGIYGGCLITGARGEGGFLVNSEGERFMERYAPTAKDLACRDVVSRAITMEIREGRGVGPEKDHMLYQLSHLPP 373
gi | 18426858 | ref | NP_569112.1 | LME-NGECRGMVIALCIEDGSIHRFRRAHKIIATGGYGRAYPSCSAHTCTGDGNAMVSRAGFPLODLEFVQFHPSPGIYGGCLITGARGEGGFLVNSEGERFMERYAPTAKDLACRDVVSRAITMEIREGRGVGPEKDHMLYQLSHLPP 365
gi | 118086669 | ref | XP_419054.2 | LME-NGECRGMVIALCIEDGSIHRFRRAHKIIATGGYGRAYPSCSAHTCTGDGNAMVSRAGFPLODLEFVQFHPSPGIYGGCLITGARGEGGFLVNSEGERFMERYAPTAKDLACRDVVSRAITMEIREGRGVGPEKDHMLYQLSHLPP 374
gi | 41053873 | ref | NP_957204.1 | LME-DGECCKGVIALCMEDGSIHRFRRAHKIIATGGYGRAYPSCSAHTCTGDGNAMVSRAGFPLODLEFVQFHPSPGIYGGCLITGARGEGGFLVNSEGERFMERYAPTAKDLACRDVVSRAITMEIREGRGVGPEKDHMLYQLSHLPP 370
gi | 114592572 | ref | XP_001173228.1 | LME-NGCVGVGIAMLEDGSIHRFRRAHKIIATGGYGRAYPSCSAHTCTGDGNAMVSRAGFPLODLEFVQFHPSPGIYGGCLITGARGEGGFLVNSEGERFMERYAPTAKDLACRDVVSRAITMEIREGRGVGPEKDHMLYQLSHLPP 94
gi | 17550100 | ref | NP_509446.1 | IMD-RGKICIGVVALDIETGIIHRFRRAHKIIATGGYGRAYPSCSAHTCTGDGNAMVSRAGFPLODLEFVQFHPSPGIYGGCLITGARGEGGFLVNSEGERFMERYAPTAKDLACRDVVSRAITMEIREGRGVGPEKDHMLYQLSHLPP 354
gi | 17505833 | ref | NP_492798.1 | LFM-DGECRGMVIALNLEDGSIHRFRRAHKIIATGGYGRAYPSCSAHTCTGDGNAMVSRAGFPLODLEFVQFHPSPGIYGGCLITGARGEGGFLVNSEGERFMERYAPTAKDLACRDVVSRAITMEIREGRGVGPEKDHMLYQLSHLPP 347
gi | 17137288 | ref | NP_477210.1 | LMC-NGECVGVGIAMLEDGSIHRFRRAHKIIATGGYGRAYPSCSAHTCTGDGNAMVSRAGFPLODLEFVQFHPSPGIYGGCLITGARGEGGFLVNSEGERFMERYAPTAKDLACRDVVSRAITMEIREGRGVGPEKDHMLYQLSHLPP 370
gi | 158289891 | ref | XP_311518.4 | LMLNSNCEICIGVICINADGKIHRFRRAHKIIATGGYGRAYPSCSAHTCTGDGNAMVSRAGFPLODLEFVQFHPSPGIYGGCLITGARGEGGFLVNSEGERFMERYAPTAKDLACRDVVSRAITMEIREGRGVGPEKDHMLYQLSHLPP 369
gi | 124802862 | ref | XP_001347618.1 | LMLNSNCEICIGVICINADGKIHRFRRAHKIIATGGYGRAYPSCSAHTCTGDGNAMVSRAGFPLODLEFVQFHPSPGIYGGCLITGARGEGGFLVNSEGERFMERYAPTAKDLACRDVVSRAITMEIREGRGVGPEKDHMLYQLSHLPP 346



gi | 6322701 | ref | NP_012774.1 | EVLKERLPGISETAAIFAGVDVTKPEIPVLPVHYNMGGIPITKWNQ-----EALTIDEETGEDKVIPLGLMACGEAACVSVHGANRLGANSLLDLVVFGRVAHTVADTLQPLPHKPLPSDLGKESIANLDKLRNANGRSFABTRMN 507
gi | 50306573 | ref | XP_453260.1 | SVLHERLPGISETAAIFAGVDVTKPEIPVLPVHYNMGGIPITKWNQ-----EALTIDEETGEDVLIPLGLLACGEAACVSVHGANRLGANSLLDLVVFGRVAHTVADTLQPLPHKPLPADLKGESIANLDKLRNATGHRPADIIRA 518
gi | 45185739 | ref | NP_983455.1 | SVLKERLPGISETAAIFAGVDVTKPEIPVLPVHYNMGGIPITRWG-----EALTIDEETGEDKVIPLGLLACGEAACVSVHGANRLGANSLLDLVVFGRVAHTVADTLQPLPHKPLPADLKGESIANLDRMRTASGFLITPSIIRLN 500
gi | 145611728 | ref | XP_369076.2 | EVLAERLPGISETAAIFAGVDVTKPEIPVLPVHYNMGGIPITRWG-----EVLITVDES-GKDKVVPGLFACGEAACVSVHGANRLGANSLLDLVVFGRVAHTVADTLQPLPHKPLPADLKGESIANLDRMRTASGFLITPSIIRLN 509
gi | 32417808 | ref | XP_329382.1 | ELLAERLPGISETAAIFAGVDVTKPEIPVLPVHYNMGGIPITRWG-----EVLITVDEQ-GNKDVPGLFACGEAACVSVHGANRLGANSLLDLVVFGRVAHTVADTLQPLPHKPLPADLKGESIANLDRMRTASGFLITPSIIRLN 1641
gi | 19115231 | ref | NP_594319.1 | ELLKERLPGISETAAIFAGVDVTKPEIPVLPVHYNMGGIPITRWG-----EVLITIDEN-GKDKVVPGLFACGEAACVSVHGANRLGANSLLDLVVFGRVAHTVADTLQPLPHKPLPADLKGESIANLDRMRTASGFLITPSIIRLN 508
gi | 15224174 | ref | NP_179435.1 | EVLKERLPGISETAAIFAGVDVTKPEIPVLPVHYNMGGIPITRWG-----EVLITLRGD-DPDAVVPGLMAAGEAACVSVHGANRLGANSLLDLVVFGRACANRVAEIQKPGKLPKLEKDGKESIEWLDLRIRNSGSLPTSKIRLN 502
gi | 156416003 | ref | NP_004159.2 | EQLATRLPGISETAMIFAGVDVTKPEIPVLPVHYNMGGIPITRWG-----QVLRHV-NGDQIVPGLYACGEAACVSVHGANRLGANSLLDLVVFGRACALSTAEACRCP-DKIPPIKANAGEEVMMLDKLRFADGSRVPSERLN 514
gi | 74003072 | ref | XP_856901.1 | EQLATRLPGISETAMIFAGVDVTKPEIPVLPVHYNMGGIPITRWG-----QVLRHV-NGDQIVPGLYACGEAACVSVHGANRLGANSLLDLVVFGRACALSTAEACRCP-DKIPPIKANAGEEVMMLDKLRFADGSRVPSERLN 522
gi | 54607098 | ref | NP_075770.1 | EQLATRLPGISETAMIFAGVDVTKPEIPVLPVHYNMGGIPITRWG-----QVLRHV-NGDQIVPGLYACGEAACVSVHGANRLGANSLLDLVVFGRACALSTAEACRCP-DKIPPIKANAGEEVMMLDKLRFADGSRVPSERLN 514
gi | 18426858 | ref | NP_569112.1 | EQLATRLPGISETAMIFAGVDVTKPEIPVLPVHYNMGGIPITRWG-----QVLRHV-NGDQIVPGLYACGEAACVSVHGANRLGANSLLDLVVFGRACALSTAEACRCP-DKIPPIKANAGEEVMMLDKLRFADGSRVPSERLN 506
gi | 118086669 | ref | XP_419054.2 | EQLATRLPGISETAMIFAGVDVTKPEIPVLPVHYNMGGIPITRWG-----QVLRHV-NGDQIVPGLYACGEAACVSVHGANRLGANSLLDLVVFGRACALSTAEACRCP-DKIPPIKANAGEEVMMLDKLRFADGSRVPSERLN 515
gi | 41053873 | ref | NP_957204.1 | EQLATRLPGISETAMIFAGVDVTKPEIPVLPVHYNMGGIPITRWG-----QVLRHV-NGDQIVPGLYACGEAACVSVHGANRLGANSLLDLVVFGRACALSTAEACRCP-DKIPPIKANAGEEVMMLDKLRFADGSRVPSERLN 511
gi | 114592572 | ref | XP_001173228.1 | EQLATRLPGISETAMIFAGVDVTKPEIPVLPVHYNMGGIPITRWG-----QVLRHV-NGDQIVPGLYACGEAACVSVHGANRLGANSLLDLVVFGRACALSTAEACRCP-DKIPPIKANAGEEVMMLDKLRFADGSRVPSERLN 94
gi | 17550100 | ref | NP_509446.1 | EQLOQRLPGISETAMIFAGVDVTKPEIPVLPVHYNMGGIPITRWG-----QVLRHV-NGDQIVPGLYACGEAACVSVHGANRLGANSLLDLVVFGRACALSTAEACRCP-DKIPPIKANAGEEVMMLDKLRFADGSRVPSERLN 496
gi | 17505833 | ref | NP_492798.1 | EQLOQRLPGISETAMIFAGVDVTKPEIPVLPVHYNMGGIPITRWG-----QVLRHV-NGDQIVPGLYACGEAACVSVHGANRLGANSLLDLVVFGRACALSTAEACRCP-DKIPPIKANAGEEVMMLDKLRFADGSRVPSERLN 489
gi | 17137288 | ref | NP_477210.1 | EQLOQRLPGISETAMIFAGVDVTKPEIPVLPVHYNMGGIPITRWG-----QVLRHV-NGDQIVPGLYACGEAACVSVHGANRLGANSLLDLVVFGRACALSTAEACRCP-DKIPPIKANAGEEVMMLDKLRFADGSRVPSERLN 512
gi | 158289891 | ref | XP_311518.4 | EQLOQRLPGISETAMIFAGVDVTKPEIPVLPVHYNMGGIPITRWG-----QVLRHV-NGDQIVPGLYACGEAACVSVHGANRLGANSLLDLVVFGRACALSTAEACRCP-DKIPPIKANAGEEVMMLDKLRFADGSRVPSERLN 510
gi | 124802862 | ref | XP_001347618.1 | ETLKERLPGISETAAIFAGVDVTKPEIPVLPVHYNMGGIPITRWG-----QVLRHV-NGDQIVPGLYACGEAACVSVHGANRLGANSLLDLVVFGRACALSTAEACRCP-DKIPPIKANAGEEVMMLDKLRFADGSRVPSERLN 496



gi | 6322701 | ref | NP_012774.1 | MKQTMOKDVSFRTQSSLDGEGVNIHAEKTFDDVK--ITDRSMIWNSDLVETLELQNLITCASQAVSAANRKESSRGAHAREDPNRDD-----EHWKHTLSWQKDV--AAFVTLKYRVRVIDHLDKEKCPVPPF 636
gi | 50306573 | ref | XP_453260.1 | MKQTMOKDVSFRTQSSLDGEGVNIHAEKTFDDVK--ITDRSMIWNSDLVETLELQNLITCASQAVSAANRKESSRGAHAREDPNRDD-----EHWKHTLSWQKDV--AAFVTLKYRVRVIDHLDKEKCPVPPF 647
gi | 45185739 | ref | NP_983455.1 | MQKAMOKDVSFRTQSSLDGEGVNIHAEKTFDDVK--ITDRSMIWNSDLVETLELQNLITCASQAVSAANRKESSRGAHAREDPNRDD-----EHWKHTLSWQKDV--AAFVTLKYRVRVIDHLDKEKCPVPPF 629
gi | 145611728 | ref | XP_369076.2 | MQKAMOKDVSFRTQSSLDGEGVNIHAEKTFDDVK--ITDRSMIWNSDLVETLELQNLITCASQAVSAANRKESSRGAHAREDPNRDD-----EHWKHTLSWQKDV--AAFVTLKYRVRVIDHLDKEKCPVPPF 638
gi | 32417808 | ref | XP_329382.1 | MKQTMORDVSFRTQSSLDGEGVNIHAEKTFDDVK--ITDRSMIWNSDLVETLELQNLITCASQAVSAANRKESSRGAHAREDPNRDD-----EHWKHTLSWQKDV--AAFVTLKYRVRVIDHLDKEKCPVPPF 1770
gi | 19115231 | ref | NP_594319.1 | MKQTMORDVSFRTQSSLDGEGVNIHAEKTFDDVK--ITDRSMIWNSDLVETLELQNLITCASQAVSAANRKESSRGAHAREDPNRDD-----EHWKHTLSWQKDV--AAFVTLKYRVRVIDHLDKEKCPVPPF 637
gi | 15224174 | ref | NP_179435.1 | MORVMONNAVFRRTQSSLDGEGVNIHAEKTFDDVK--ITDRSMIWNSDLVETLELQNLITCASQAVSAANRKESSRGAHAREDPNRDD-----EHWKHTLSWQKDV--AAFVTLKYRVRVIDHLDKEKCPVPPF 628
gi | 156416003 | ref | NP_004159.2 | MQKSMONHAAVFRVGSVLEGGCKIKSLYGLDLKHLK--HFRDGMVWVNDLVELELQNLMLCALQIYGAERKESRGAHAREDPNRDD-----EHWKHTLSWQKDV--AAFVTLKYRVRVIDHLDKEKCPVPPF 660
gi | 74003072 | ref | XP_856901.1 | MQKSMONHAAVFRVGSVLEGGCKIKSLYGLDLKHLK--HFRDGMVWVNDLVELELQNLMLCALQIYGAERKESRGAHAREDPNRDD-----EHWKHTLSWQKDV--AAFVTLKYRVRVIDHLDKEKCPVPPF 668
gi | 54607098 | ref | NP_075770.1 | MQKSMONHAAVFRVGSVLEGGCKIKSLYGLDLKHLK--HFRDGMVWVNDLVELELQNLMLCALQIYGAERKESRGAHAREDPNRDD-----EHWKHTLSWQKDV--AAFVTLKYRVRVIDHLDKEKCPVPPF 660
gi | 18426858 | ref | NP_569112.1 | MQKSMONHAAVFRVGSVLEGGCKIKSLYGLDLKHLK--HFRDGMVWVNDLVELELQNLMLCALQIYGAERKESRGAHAREDPNRDD-----EHWKHTLSWQKDV--AAFVTLKYRVRVIDHLDKEKCPVPPF 652
gi | 118086669 | ref | XP_419054.2 | MQKSMONHAAVFRVGSVLEGGCKIKSLYGLDLKHLK--HFRDGMVWVNDLVELELQNLMLCALQIYGAERKESRGAHAREDPNRDD-----EHWKHTLSWQKDV--AAFVTLKYRVRVIDHLDKEKCPVPPF 661
gi | 41053873 | ref | NP_957204.1 | MQKSMONHAAVFRVGSVLEGGCKIKSLYGLDLKHLK--HFRDGMVWVNDLVELELQNLMLCALQIYGAERKESRGAHAREDPNRDD-----EHWKHTLSWQKDV--AAFVTLKYRVRVIDHLDKEKCPVPPF 657
gi | 114592572 | ref | XP_001173228.1 | MQKSMONHAAVFRVGSVLEGGCKIKSLYGLDLKHLK--HFRDGMVWVNDLVELELQNLMLCALQIYGAERKESRGAHAREDPNRDD-----EHWKHTLSWQKDV--AAFVTLKYRVRVIDHLDKEKCPVPPF 94
gi | 17550100 | ref | NP_509446.1 | MQKSMONHAAVFRVGSVLEGGCKIKSLYGLDLKHLK--HFRDGMVWVNDLVELELQNLMLCALQIYGAERKESRGAHAREDPNRDD-----EHWKHTLSWQKDV--AAFVTLKYRVRVIDHLDKEKCPVPPF 642
gi | 17505833 | ref | NP_492798.1 | MQKSMONHAAVFRVGSVLEGGCKIKSLYGLDLKHLK--HFRDGMVWVNDLVELELQNLMLCALQIYGAERKESRGAHAREDPNRDD-----EHWKHTLSWQKDV--AAFVTLKYRVRVIDHLDKEKCPVPPF 636
gi | 17137288 | ref | NP_477210.1 | MQKSMONHAAVFRVGSVLEGGCKIKSLYGLDLKHLK--HFRDGMVWVNDLVELELQNLMLCALQIYGAERKESRGAHAREDPNRDD-----EHWKHTLSWQKDV--AAFVTLKYRVRVIDHLDKEKCPVPPF 657
gi | 158289891 | ref | XP_311518.4 | MQKSMONHAAVFRVGSVLEGGCKIKSLYGLDLKHLK--HFRDGMVWVNDLVELELQNLMLCALQIYGAERKESRGAHAREDPNRDD-----EHWKHTLSWQKDV--AAFVTLKYRVRVIDHLDKEKCPVPPF 655
gi | 124802862 | ref | XP_001347618.1 | MQKSMONHAAVFRVGSVLEGGCKIKSLYGLDLKHLK--HFRDGMVWVNDLVELELQNLMLCALQIYGAERKESRGAHAREDPNRDD-----EHWKHTLSWQKDV--AAFVTLKYRVRVIDHLDKEKCPVPPF 627



gi	6322701	ref	NP_012774.1	VRAY	640
gi	50306573	ref	XP_453260.1	VRAY	651
gi	45185739	ref	NP_983455.1	VRAY	633
gi	145611728	ref	XP_369076.2	KRVY	642
gi	32417808	ref	XP_329382.1	KRVY	1774
gi	19115231	ref	NP_594319.1	KRVY	641
gi	15224174	ref	NP_179435.1	PRVY	632
gi	156416003	ref	NP_004159.2	IRSY	664
gi	74003072	ref	XP_856901.1	IRSY	672
gi	54607098	ref	NP_075770.1	IRSY	664
gi	18426858	ref	NP_569112.1	IRSY	656
gi	118086669	ref	XP_419054.2	IRSY	665
gi	41053873	ref	NP_957204.1	IRSY	661
gi	114592572	ref	XP_001173228.1	----	94
gi	17550100	ref	NP_509446.1	VRSY	646
gi	17505833	ref	NP_492798.1	VRSY	640
gi	17137288	ref	NP_477210.1	IRSY	661
gi	158289891	ref	XP_311518.4	IRSY	659
gi	124802862	ref	XP_001347618.1	KRVY	631

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