

245 CYP102 Sequences aligned using Clustal omega (<https://www.ebi.ac.uk/Tools/msa/clustalo/>)

IDs are as follows:

sp|P14779.2|CPXB_PRIM2 *Priestia megaterium* NBRC 15308 = ATCC 14581
ADF40088.1 Riboflavin synthase/Ferredoxin reductase FAD binding domain protein [*Priestia megaterium* DSM 319]
ADE70259.1 Riboflavin synthase/Ferredoxin reductase FAD binding domain protein [*Priestia megaterium* QM B1551]
AEN88827.1 NADPH--cytochrome P450 reductase [*Priestia megaterium* WSH-002]
KFN05180.1 bifunctional reductase [*Priestia megaterium*] strain BMS
ACZ37122.1 cytochrome P450:NADPH P450 reductase [*Priestia megaterium*] Strain KCTC 2194
ADA57055.1 NADPH-cytochrome P450 reductase 102A1V2 [*Priestia megaterium*] Strain KCTC 3712
ADA57058.1 NADPH-cytochrome P450 reductase 102A1V7 [*Priestia megaterium*] Strain KCCM 11776
ADA57059.1 NADPH-cytochrome P450 reductase 102A1V3 [*Priestia megaterium*] Strain KCCM 12503
ADA57061.1 NADPH-cytochrome P450 reductase 102A1V8 [*Priestia megaterium*] Strain ATCC 14945
ADA57062.1 NADPH-cytochrome P450 reductase 102A1V4 [*Priestia megaterium*] Strain ATCC 15451
ADA57068.1 NADPH-cytochrome P450 reductase 102A1V10 [*Priestia megaterium*] Strain ATCC 19213
AAT62301.1 NADPH-cytochrome P450 reductase [[*Bacillus thuringiensis*] serovar konkukian str. 97-27]
AAM54108.1 cytochrome P450 [*Actinosynnema pretiosum* subsp. auranticum]
EFQ83738.1 unspecific monooxygenase [*Aeromicrobium marinum* DSM 15272]
EFL88452.1 bifunctional P-450:nadph-p450 reductase [*Ahrensia* sp. R2A130]
BAF89518.1 FAD-binding oxidoreductase [*Azorhizobium caulinodans* ORS 571]
CBI43648.1 cytochrome P450 CYP102A3 [*Bacillus amyloliquefaciens* DSM 7]
AEB22839.1 cytochrome P450 CYP102A2 [*Bacillus amyloliquefaciens* TA208]
EDT22025.1 bifunctional P-450:NADPH-P450 reductase 1 [*Bacillus anthracis* str. A0465]
AFH84458.1 NADPH-cytochrome P450 reductase [*Bacillus anthracis* str. H9401]
ADP31197.1 putative bifunctional P-450/NADPH-P450 reductase 1 [*Bacillus atrophaeus* 1942]
ACP19384.1 NADPH-cytochrome reductase [*Bacillus cereus*] Strain BC002
ADL27534.1 bifunctional CYP450 monooxygenase CYP102A5, partial [*Bacillus cereus*] Strain CYPPB-1
ACO29732.1 bifunctional P-450:NADPH-P450 reductase 1 [*Bacillus cereus* 03BB102]
EDX65100.1 bifunctional P-450:NADPH-P450 reductase 1 [*Bacillus cereus* 03BB108]
EEK61456.1 NADPH--cytochrome P450 reductase [*Bacillus cereus* 172560W]
EEL16232.1 NADPH--cytochrome P450 reductase [*Bacillus cereus* 95/8201]
EDZ53094.1 bifunctional P-450:NADPH-P450 reductase 1 [*Bacillus cereus* AH1134]
EEL81346.1 NADPH--cytochrome P450 reductase [*Bacillus cereus* AH1271]
EEL87105.1 NADPH--cytochrome P450 reductase [*Bacillus cereus* AH1272]
EEL75761.1 NADPH--cytochrome P450 reductase [*Bacillus cereus* AH676]
ACK88541.1 bifunctional P-450:NADPH-P450 reductase 1 [*Bacillus cereus* AH820]

EJQ05303.1 hypothetical protein IC5_02130 [Bacillus cereus AND1407]
EEK50040.1 NADPH--cytochrome P450 reductase [Bacillus cereus ATCC 10876]
AAS42149.1 bifunctional P-450:NADPH-P450 reductase 1 [Bacillus cereus ATCC 10987]
AAP10153.1 NADPH-cytochrome P450 reductase [Bacillus cereus ATCC 14579]
EEK83466.1 NADPH--cytochrome P450 reductase [Bacillus cereus ATCC 4342]
ACK63698.1 bifunctional P-450:NADPH-P450 reductase 1 [Bacillus cereus B4264]
EJS57156.1 hypothetical protein ICE_02493 [Bacillus cereus BAG1X1-2]
EJS56605.1 hypothetical protein ICG_02407 [Bacillus cereus BAG1X1-3]
EJS68951.1 hypothetical protein ICU_02504 [Bacillus cereus BAG2X1-1]
EJQ10567.1 hypothetical protein IE1_02325 [Bacillus cereus BAG30-2]
EJQ13433.1 hypothetical protein IE3_02332 [Bacillus cereus BAG3X2-1]
EJQ20399.1 hypothetical protein IE5_02995 [Bacillus cereus BAG3X2-2]
EJQ30236.1 hypothetical protein IE9_02894 [Bacillus cereus BAG4X12-1]
EJQ51278.1 hypothetical protein IEQ_02218 [Bacillus cereus BAG6X1-2]
EEL10858.1 NADPH--cytochrome P450 reductase [Bacillus cereus BDRD-Cer4]
EEL05393.1 NADPH--cytochrome P450 reductase [Bacillus cereus BDRD-ST196]
EEK94080.1 NADPH--cytochrome P450 reductase [Bacillus cereus BDRD-ST24]
EEK99882.1 NADPH--cytochrome P450 reductase [Bacillus cereus BDRD-ST26]
EEK55784.1 NADPH--cytochrome P450 reductase [Bacillus cereus BGSC 6E1]
ADK05784.1 NADPH-cytochrome P450 reductase [Bacillus cereus biovar anthracis str. CI]
AAU17340.1 NADPH-cytochrome P450 reductase [Bacillus cereus E33L]
EEL64394.1 NADPH--cytochrome P450 reductase [Bacillus cereus F65185]
AEW56259.1 bifunctional P-450:NADPH-P450 reductase 1 [Bacillus cereus F837/76]
AFQ11690.1 bifunctional P-450:NADPH-P450 reductase 1 [Bacillus cereus FRI-35]
EAL16831.1 NADPH-cytochrome P450 reductase [Bacillus cereus G9241]
ACK94296.1 bifunctional P-450:NADPH-P450 reductase 1 [Bacillus cereus G9842]
EDZ58760.1 bifunctional P-450:NADPH-P450 reductase 1 [Bacillus cereus H3081.97]
EJV84218.1 hypothetical protein IG3_02639 [Bacillus cereus HuA2-1]
EJQ69212.1 hypothetical protein IG7_02949 [Bacillus cereus HuA2-4]
EJQ80339.1 hypothetical protein IGC_02351 [Bacillus cereus HuA4-10]
EJV81602.1 hypothetical protein IGE_02451 [Bacillus cereus HuB1-1]
EJQ95474.1 hypothetical protein IGW_01704 [Bacillus cereus ISP3191]
EEK44229.1 NADPH--cytochrome P450 reductase [Bacillus cereus m1293]
EEK88560.1 NADPH--cytochrome P450 reductase [Bacillus cereus m1550]
EJR07451.1 hypothetical protein II5_01805 [Bacillus cereus MSX-A1]
EJR16542.1 hypothetical protein II9_02398 [Bacillus cereus MSX-D12]
BAL18840.1 bifunctional P-450:NADPH-P450 reductase 1 [Bacillus cereus NC7401]
EDX69960.1 bifunctional P-450:NADPH-P450 reductase 1 [Bacillus cereus NVH0597-99]

ACM13462.1 bifunctional P-450:NADPH-P450 reductase 1 [Bacillus cereus Q1]
EEK75631.1 NADPH--cytochrome P450 reductase [Bacillus cereus R309803]
EEL25491.1 NADPH--cytochrome P450 reductase [Bacillus cereus Rock1-15]
EEL21990.1 NADPH--cytochrome P450 reductase [Bacillus cereus Rock1-3]
EEL33825.1 NADPH--cytochrome P450 reductase [Bacillus cereus Rock3-28]
EEL44933.1 NADPH--cytochrome P450 reductase [Bacillus cereus Rock3-42]
EEL50167.1 NADPH--cytochrome P450 reductase [Bacillus cereus Rock3-44]
EJR22930.1 hypothetical protein IIA_02965 [Bacillus cereus VD014]
EJP91231.1 hypothetical protein IC1_01786 [Bacillus cereus VD022]
EJR37623.1 hypothetical protein IIE_01787 [Bacillus cereus VD045]
EJR50635.1 hypothetical protein IIK_01704 [Bacillus cereus VD102]
EJR64551.1 hypothetical protein IIO_01875 [Bacillus cereus VD115]
EJR75620.1 hypothetical protein IK5_01158 [Bacillus cereus VD154]
EJR82049.1 hypothetical protein IK7_02513 [Bacillus cereus VD156]
EJR83659.1 hypothetical protein IK9_01715 [Bacillus cereus VD166]
EJR91135.1 hypothetical protein IKG_05772 [Bacillus cereus VD200]
EJR97241.1 hypothetical protein IKG_03039 [Bacillus cereus VD200]
EJS05852.1 hypothetical protein IKO_02508 [Bacillus cereus VDM034]
EDX58768.1 bifunctional P-450:NADPH-P450 reductase 1 [Bacillus cereus W]
AAU24352.1 cytochrome P450 / NADPH-ferrihemoprotein reductase [Bacillus licheniformis DSM 13 = ATCC 14580]
ABY44122.1 cytochrome P450 [Bacillus mycoides KBAB4]
EDW23201.1 bifunctional P-450/nadph-p450 reductase (cytochrome p450 (bm-3)) (p450bm-3) [Bacillus pumilus ATCC 7061]
ABV62358.1 NADPH--cytochrome reductase [Bacillus pumilus SAFR-032]
EIF12263.1 NADPH-ferrihemoprotein reductase [Bacillus sp. 5B6]
EIF14027.1 NADPH-ferrihemoprotein reductase [Bacillus sp. 5B6]
EHL75405.1 hypothetical protein HMPREF1014_01714 [Bacillus sp. 7_6_55CFAA_CT2]
EJD67577.1 YetO [Bacillus sp. 916]
EJD68347.1 YrhJ [Bacillus sp. 916]
EFV73436.1 YrhJ protein [Bacillus sp. BT1B_CT2]
CBY93692.1 cytochrome P450 [Bacillus sp. C3]
AFI27355.1 cytochrome P450 [Bacillus sp. JS]
AFI29229.1 cytochrome P450 [Bacillus sp. JS]
EIL85422.1 P-450/nadph-p450 reductase [Bacillus sp. M 2-6]
ADV93500.1 cytochrome P450 CYP102A3 [Bacillus subtilis BSn5]
ADV95715.1 putative cytochrome P450 CYP102A2 [Bacillus subtilis BSn5]
BAI84248.1 hypothetical protein BSNT_07111 [Bacillus subtilis subsp. natto BEST195]

EFG90288.1 cytochrome P450 CYP102A3 [Bacillus subtilis subsp. spizizenii ATCC 6633 = JCM 2499]
EFG91781.1 putative cytochrome P450 CYP102A2 [Bacillus subtilis subsp. spizizenii ATCC 6633 = JCM 2499]
AEP85668.1 cytochrome P450 family [Bacillus subtilis subsp. spizizenii TU-B-10]
AEP87558.1 cytochrome P450 family [Bacillus subtilis subsp. spizizenii TU-B-10]
sp|O08336.1|CYPB_BACSU Bacillus subtilis subsp. subtilis str. 168
sp|O08394.1|CYPD_BACSU Bacillus subtilis subsp. subtilis str. 168
AEP89812.1 cytochrome P450 family [Bacillus subtilis subsp. subtilis str. RO-NN-1]
AEP91702.1 cytochrome P450 family [Bacillus subtilis subsp. subtilis str. RO-NN-1]
EHA31094.1 cytochrome P450 [Bacillus subtilis subsp. subtilis str. SC-8]
ADH07708.1 NADPH-cytochrome P450 reductase [Bacillus thuringiensis BMB171]
EEM28177.1 NADPH--cytochrome P450 reductase [Bacillus thuringiensis Bt407]
AFQ14162.1 bifunctional P-450:NADPH-P450 reductase 1 [Bacillus thuringiensis HD-771]
EEM95517.1 NADPH--cytochrome P450 reductase [Bacillus thuringiensis IBL 200]
EEN02344.1 NADPH--cytochrome P450 reductase [Bacillus thuringiensis IBL 4222]
AFU13781.1 NADPH--cytochrome P450 reductase [Bacillus thuringiensis MC28]
EEM70897.1 NADPH--cytochrome P450 reductase [Bacillus thuringiensis serovar andalousiensis BGSC 4AW1]
ADY22413.1 bifunctional P-450:NADPH-P450 reductase 1 [Bacillus thuringiensis serovar finitimus YBT-020]
EEM82895.1 NADPH--cytochrome P450 reductase [Bacillus thuringiensis serovar huazhongensis BGSC 4BD1]
EEM52818.1 NADPH--cytochrome P450 reductase [Bacillus thuringiensis serovar kurstaki str. T03a001]
EEM59126.1 NADPH--cytochrome P450 reductase [Bacillus thuringiensis serovar monterrey BGSC 4AJ1]
EEM47193.1 NADPH--cytochrome P450 reductase [Bacillus thuringiensis serovar pakistani str. T13001]
EEM76899.1 NADPH--cytochrome P450 reductase [Bacillus thuringiensis serovar pondicheriensis BGSC 4BA1]
EEM88909.1 NADPH--cytochrome P450 reductase [Bacillus thuringiensis serovar pulsiensis BGSC 4CC1]
EEM38196.1 NADPH--cytochrome P450 reductase [Bacillus thuringiensis serovar sotto str. T04001]
EEM21858.1 NADPH--cytochrome P450 reductase [Bacillus thuringiensis serovar tochiensis BGSC 4Y1]
ABK86139.1 NADPH-cytochrome P450 reductase [Bacillus thuringiensis str. Al Hakam]
EJQ37805.1 hypothetical protein IEC_02333 [Bacillus toyonensis]
CCF04242.1 NADPH-ferrihemoprotein reductase [Bacillus velezensis CAU B946]
CCF05972.1 NADPH-ferrihemoprotein reductase [Bacillus velezensis CAU B946]
ABS73124.1 cytochrome P450 [Bacillus velezensis FZB42]
ABS74786.1 cytochrome P450 [Bacillus velezensis FZB42]
EKE46398.1 NADPH-ferrihemoprotein reductase [Bacillus velezensis M27]
EKE48022.1 NADPH-ferrihemoprotein reductase [Bacillus velezensis M27]
CCG48683.1 NADPH-ferrihemoprotein reductase [Bacillus velezensis YAU B9601-Y2]
AFJ60789.1 NADPH-ferrihemoprotein reductase, unspecific monooxygenase [Bacillus velezensis YAU B9601-Y2]

AFJ62808.1 NADPH-ferrihemoprotein reductase [Bacillus velezensis YAU B9601-Y2]
EEK66903.1 NADPH--cytochrome P450 reductase [Bacillus wiedmannii]
EJQ52935.1 hypothetical protein IEI_01923 [Bacillus wiedmannii]
EJS69574.1 hypothetical protein ICW_02513 [Bacillus wiedmannii]
EJV63294.1 hypothetical protein IEO_02651 [Bacillus wiedmannii]
EKF35778.1 NADPH--hemoprotein reductase [Bacillus xiamenensis]
EGP08506.1 cytochrome P450 [Bradyrhizobiaceae bacterium SG-6C]
BAL78328.1 probable P-450/NADPH-P450 reductase [Bradyrhizobium cosmicum]
BAC48147.1 blr2882 [Bradyrhizobium diazoefficiens USDA 110]
BAL12135.1 hypothetical protein BJ6T_68860 [Bradyrhizobium japonicum USDA 6]
CCE00185.1 putative bifunctional P-450/NADPH-P450 reductase 1 (Includes: Cytochrome P450 102; NADPH--
cytochrome P450 reductase) [Bradyrhizobium sp. STM 3809]
EIG57609.1 sulfite reductase, alpha subunit (flavoprotein) [Bradyrhizobium sp. WSM1253]
EHR02046.1 sulfite reductase, alpha subunit (flavoprotein) [Bradyrhizobium sp. WSM471]
EJN11211.1 cytochrome P450, partial [Bradyrhizobium sp. YR681]
CCF15606.1 bifunctional P-450/NADPH-P450 reductase [Brevibacillus laterosporus GI-9]
CCF12687.1 bifunctional P-450/NADPH-P450 reductase [Brevibacillus laterosporus GI-9]
ABB05850.1 Cytochrome P450 [Burkholderia lata]
EHP43606.1 bifunctional P-450:NADPH-P450 reductase [Cupriavidus basilensis OR16]
ABF10339.1 putative bifunctional P-450:NADPH-P450 reductase 2 (Includes: Cytochrome P450 102; NADPH--
cytochrome P450 reductase) [Cupriavidus metallidurans CH34]
CAJ95800.1 probable bifunctional P-450:NADPH-P450 reductase [Cupriavidus necator H16]
AEI79937.1 bifunctional P-450/NADPH-P450 reductase [Cupriavidus necator N-1]
AFD27790.1 Bifunctional P-450:NADPH-P450 reductase 1 (plasmid) [Deinococcus gobiensis I-0]
ABC62112.1 probable bifunctional P-450:NADPH-P450 reductase [Erythrobacter litoralis HTCC2594]
EAQ27850.1 probable bifunctional P-450:NADPH-P450 reductase [Erythrobacter sp. NAP1]
EIT84377.1 cytochrome P450 family protein [Fictibacillus macauensis ZFHKF-1]
CCG43686.1 NADPH--cytochrome P450 oxidoreductase [Halobacillus halophilus DSM 2266]
ABX05160.1 cytochrome P450 [Herpetosiphon aurantiacus DSM 785]
BAJ96920.1 predicted protein [Hordeum vulgare subsp. vulgare]
GAB96874.1 putative cytochrome P450 [Kineosphaera limosa NBRC 100340]
EFH80345.1 cytochrome P450 [Ktedonobacter racemifer DSM 44963]
EFH88481.1 cytochrome P450 [Ktedonobacter racemifer DSM 44963]
EAW32450.1 probable bifunctional P-450:NADPH-P450 reductase [marine gamma proteobacterium HTCC2143]
EIZ82104.1 cytochrome P450 family protein [Methylobacterium sp. GXF4]
AEV70722.1 sulfite reductase, alpha subunit (flavoprotein) [Mycolicibacterium rhodesiae NBB3]
EFC41452.1 cytochrome p450 [Naegleria gruberi]
ACV78954.1 cytochrome P450 [Nakamurella multipartita DSM 44233]

ACV78964.1 cytochrome P450 [Nakamurella multipartita DSM 44233]
ACV81379.1 cytochrome P450 [Nakamurella multipartita DSM 44233]
EIZ78677.1 cytochrome P450 family protein [Novosphingobium sp. Rr 2-17]
EJW15291.1 NADPH-cytochrome P450 reductase [Paenibacillus alvei DSM 29]
EJW16173.1 NADPH-cytochrome P450 reductase [Paenibacillus alvei DSM 29]
EHQ58913.1 CypD [Paenibacillus dendritiformis C454]
EHQ59900.1 CypD [Paenibacillus dendritiformis C454]
EHB66924.1 cytochrome P450 [Paenibacillus lactis 154]
AFH60445.1 NADPH--cytochrome P450 reductase [Paenibacillus mucilaginosus K02]
AEI42011.1 CypD [Paenibacillus mucilaginosus KNP414]
ADO57681.1 NADPH--cytochrome P450 reductase [Paenibacillus polymyxa SC2]
EGG32133.1 bifunctional P-450/NADPH-P450 reductase [Paenibacillus sp. HGF5]
EGL17662.1 FAD binding domain protein [Paenibacillus sp. HGF7]
ACX65034.1 cytochrome P450 [Paenibacillus sp. Y412MC10]
ACT11327.1 cytochrome P450 [Pectobacterium carotovorum subsp. carotovorum PC1]
AEA28016.1 Unspecific monooxygenase., NADPH--hemoprotein reductase [Pseudonocardia dioxanivorans CB1190]
EFP68091.1 FAD binding domain protein [Ralstonia pickettii]
EGY61507.1 hypothetical protein HMPREF0989_04160 [Ralstonia sp. 5_2_56FAA]
EIE85788.1 hypothetical protein RO3G_10498 [Rhizopus delemar RA 99-880]
EIE92534.1 hypothetical protein RO3G_17132 [Rhizopus delemar RA 99-880]
BAE46296.1 cytochrome P450 (plasmid) [Rhodococcus erythropolis PR4]
BAH31604.1 cytochrome P450 [Rhodococcus erythropolis PR4]
EEN84644.1 unspecific monooxygenase [Rhodococcus erythropolis SK121]
EEN88978.1 unspecific monooxygenase [Rhodococcus erythropolis SK121]
ABG96413.1 cytochrome P450 CYP102 [Rhodococcus jostii RHA1]
BAH52971.1 cytochrome P450 [Rhodococcus opacus B4]
EHI44575.1 cytochrome P450 CYP102 [Rhodococcus opacus PD630]
EID73168.1 cytochrome P450 [Rhodococcus opacus RKJ300 = JCM 13270]
EHK83749.1 cytochrome P450 [Rhodococcus pyridinivorans AK37]
EJI96173.1 cytochrome P-450 [Rhodococcus sp. JVH1]
ABI79384.1 cytochrome P450 (plasmid) [Rhodococcus sp. NS1]
CAR47816.1 putative cytochrome P450 [Rhodococcus sp. PY11]
AEK26937.1 cytochrome P450 [Rhodococcus sp. R04]
ABE39056.1 cytochrome P450 [Rhodopseudomonas palustris BisB5]
ABD08340.1 FAD-binding oxidoreductase [Rhodopseudomonas palustris HaA2]
CAM03474.1 bifunctional P-450:NADPH-P450 reductase 1 [Saccharopolyspora erythraea NRRL 2338]
EJF54063.1 sulfite reductase, alpha subunit (flavoprotein) [Saprospira grandis DSM 2844]

AFC23737.1 cytochrome P450 [*Saprospira grandis* str. Lewin]
ADG98903.1 cytochrome P450 [*Segniliparus rotundus* DSM 44985]
EGI54680.1 cytochrome P450 family protein [*Sphingomonas* sp. S17]
AEW97204.1 bifunctional P-450:NADPH-P450 reductase 1 [*Streptantibioticus cattleyicolor* NRRL 8057 = DSM 46488]
CAJ88567.1 putative cytochrome P450 [*Streptomyces ambofaciens* ATCC 23877]
BAC68285.1 putative cytochrome P450 / NADPH-ferrihemoprotein reductase [*Streptomyces avermitilis* MA-4680 = NBRC 14893]
BAC75137.1 cytochrome P450 hydroxylase [*Streptomyces avermitilis* MA-4680 = NBRC 14893]
EDY51256.1 bifunctional P-450:NADPH-P450 reductase [*Streptomyces clavuligerus*]
EFG07822.1 bifunctional P-450:NADPH-P450 reductase 1 [*Streptomyces clavuligerus*]
EHN78335.1 cytochrome P450 [*Streptomyces coelicoflavus* ZG0656]
CAB66201.1 putative cytochrome P450 [*Streptomyces coelicolor* A3(2)]
EGG48117.1 P450-like protein [*Streptomyces griseoaurantiacus* M045]
EFL20831.1 probable bifunctional P-450/NADPH-P450 reductase 1 [*Streptomyces himastatinicus* ATCC 53653]
EFL28515.1 bifunctional P-450/NADPH-P450 reductase [*Streptomyces himastatinicus* ATCC 53653]
AEY93311.1 cytochrome P450 [*Streptomyces hygrosopicus* subsp. *jinggangensis* 5008]
AEY93321.1 bifunctional P-450:NADPH-P450 reductase 1 [*Streptomyces hygrosopicus* subsp. *jinggangensis* 5008]
EFD71156.1 cytochrome P450 [*Streptomyces lividans* TK24]
CBG67789.1 putative P450-like protein [*Streptomyces scabiei* 87.22]
CBG68112.1 P450-like protein [*Streptomyces scabiei* 87.22]
EFL10082.1 cytochrome P450 [*Streptomyces* sp. AA4]
EFF88741.1 conserved hypothetical protein [*Streptomyces* sp. e14]
EDY58112.1 cytochrome P450 [*Streptomyces sviveus* ATCC 29083]
EFL36674.1 cytochrome P450 [*Streptomyces viridochromogenes* DSM 40736]
EFL36680.1 bifunctional P-450:NADPH-P450 reductase 1, partial [*Streptomyces viridochromogenes* DSM 40736]
EFE65335.1 cytochrome P450 [*Streptomyces viridosporus* ATCC 14672]
EGX54696.1 cytochrome P450, partial [*Streptomyces zinciresistens* K42]
ACZ89135.1 cytochrome P450 [*Streptosporangium roseum* DSM 43021]
ABD83817.1 P450 hydroxylase [uncultured soil bacterium]
ADU39615.1 cytochrome P450 [*Variovorax paradoxus* EPS]
EJL72014.1 sulfite reductase, alpha subunit (flavoprotein) [*Variovorax* sp. CF313]

Alignment:

sp P14779.2 CPXB_PRIM2	-----	0
ADF40088.1	-----	0
ADE70259.1	-----	0
AEN88827.1	-----	0
KFN05180.1	-----	0
ACZ37122.1	-----	0
ADA57055.1	-----	0
ADA57058.1	-----	0
ADA57059.1	-----	0
ADA57061.1	-----	0
ADA57062.1	-----	0
ADA57068.1	-----	0
AAT62301.1	-----	0
AAM54108.1	-----	0
EFQ83738.1	-----	0
EFL88452.1	-----	0
BAF89518.1	-MSETSTPPALKSVDLGLAAGTVRVGWFFPGASREAVLAAVRGAAG----LSGE-----T	49
CBI43648.1	-----	0
AEB22839.1	-----	0
EDT22025.1	-----	0
AFH84458.1	-----	0
ADP31197.1	-----	0
ACP19384.1	-----	0
ADL27534.1	-----	0
ACO29732.1	-----	0
EDX65100.1	-----	0
EEK61456.1	-----	0
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EDZ53094.1	-----	0
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ACK88541.1	-----	0
EJQ05303.1	-----	0
EEK50040.1	-----	0
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EEK83466.1	-----	0
ACK63698.1	-----	0
EJS57156.1	-----	0
EJS56605.1	-----	0
EJS68951.1	-----	0
EJQ10567.1	-----	0
EJQ13433.1	-----	0
EJQ20399.1	-----	0
EJQ30236.1	-----	0
EJQ51278.1	-----	0
EEL10858.1	-----	0
EEL05393.1	-----	0
EEK94080.1	-----	0
EEK99882.1	-----	0
EEK55784.1	-----	0
ADK05784.1	-----	0
AAU17340.1	-----	0
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AEW56259.1	-----	0
AFQ11690.1	-----	0
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ACK94296.1	-----	0
EDZ58760.1	-----	0
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EJQ80339.1	-----	0
EJV81602.1	-----	0
EJQ95474.1	-----	0
EEK44229.1	-----	0
EEK88560.1	-----	0
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EJR16542.1	-----	0
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ACM13462.1	-----	0
EEK75631.1	-----	0
EEL25491.1	-----	0

EEL21990.1	-----	0
EEL33825.1	-----	0
EEL44933.1	-----	0
EEL50167.1	MFSQTS----IRRNSLSCCYHPLHINWPHSCF-----GELYNCNKRQKEMETSY-----	45
EJR22930.1	-----	0
EJP91231.1	-----	0
EJR37623.1	-----	0
EJR50635.1	-----	0
EJR64551.1	-----	0
EJR75620.1	-----	0
EJR82049.1	-----	0
EJR83659.1	-----	0
EJR91135.1	-----	0
EJR97241.1	-----	0
EJS05852.1	-----	0
EDX58768.1	-----	0
AAU24352.1	-----	0
ABY44122.1	-----	0
EDW23201.1	-----	0
ABV62358.1	-----	0
EIF12263.1	-----	0
EIF14027.1	-----	0
EHL75405.1	-----	0
EJD67577.1	-----	0
EJD68347.1	-----	0
EFV73436.1	-----	0
CBY93692.1	-----	0
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AFI29229.1	-----	0
EIL85422.1	-----	0
ADV93500.1	-----	0
ADV95715.1	-----	0
BAI84248.1	-----	0
EFG90288.1	-----	0
EFG91781.1	-----	0
AEP85668.1	-----	0
AEP87558.1	-----	0
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AEP91702.1	-----	0
EHA31094.1	-----	0
ADH07708.1	-----	0
EEM28177.1	-----	0
AFQ14162.1	-----	0
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AFU13781.1	-----	0
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ADY22413.1	-----	0
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EEM52818.1	-----	0
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EEM47193.1	-----	0
EEM76899.1	-----	0
EEM88909.1	-----	0
EEM38196.1	-----	0
EEM21858.1	-----	0
ABK86139.1	-----	0
EJQ37805.1	-----	0
CCF04242.1	-----	0
CCF05972.1	-----	0
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EJQ52935.1	-----	0
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EJV63294.1	-----	0
EKF35778.1	-----	0
EGP08506.1	-----	0
BAL78328.1	-----	0

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BAL12135.1	-----	0
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EHR02046.1	-----	0
EJN11211.1	-----	0
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CCF12687.1	-----	0
ABB05850.1	-----	0
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ABF10339.1	-----	0
CAJ95800.1	-----MPPPI-	5
AEI79937.1	-----MPPPI-	5
AFD27790.1	-----	0
ABC62112.1	-----	0
EAQ27850.1	-----	0
EIT84377.1	-----	0
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EAW32450.1	-----	0
EIZ82104.1	-----	0
AEV70722.1	-----	0
EFC41452.1	-----MSTQ-	4
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ACV78964.1	-----	0
ACV81379.1	-----	0
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EHQ59900.1	-----	0
EHB66924.1	-----	0
AFH60445.1	-----	0
AEI42011.1	-----	0

ADO57681.1	-----	0
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EGL17662.1	-----	0
ACX65034.1	-----	0
ACT11327.1	-----	0
AEA28016.1	-----	0
EFP68091.1	-----	0
EGY61507.1	-----	0
EIE85788.1	-MSTENLTTLIVA--LKNATNIEKEGCI IQFGNGANLDTIRALAAEKLNITDGYANIRLL	57
EIE92534.1	-MSTDNTTSLIVV--LRNTSDVEKDGRIIRFGNGANLDTIRSLAAEKLAITGGYANIQLF	57
BAE46296.1	-----MNG-----PRGS	7
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EEN88978.1	-MQNASSEGFRKT-----VGSENGWINTRRSASGSLSRQPWFSR----SVGA-LLPPGW	47
ABG96413.1	-----MPV-	3
BAH52971.1	-----	0
EHI44575.1	-----MVMPV-	5
EID73168.1	-----	0
EHK83749.1	-----	0
EJI96173.1	-----	0
ABI79384.1	-----M-	1
CAR47816.1	-----MVS-G-	4
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ABE39056.1	-----	0
ABD08340.1	-----	0
CAM03474.1	-----	0
EJF54063.1	-----	0
AFC23737.1	-----	0
ADG98903.1	-----	0
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BAC68285.1	-----	0
BAC75137.1	-----	0
EDY51256.1	-----	0
EFG07822.1	-----MNP----	3
EHN78335.1	-----	0
CAB66201.1	-----	0

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EFL20831.1	-----	0
EFL28515.1	-----	0
AEY93311.1	-----	0
AEY93321.1	-----	0
EFD71156.1	-----	0
CBG67789.1	-----	0
CBG68112.1	-----	0
EFL10082.1	-----MLPPLF	6
EFF88741.1	-----	0
EDY58112.1	-----	0
EFL36674.1	-----	0
EFL36680.1	-MPPCH-----AG-----APRARAERVPLHN-----HVGPPCGPPGA	32
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EGX54696.1	-----	0
ACZ89135.1	-----	0
ABD83817.1	-----	0
ADU39615.1	-----	0
EJL72014.1	-----	0

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ADE70259.1 -----M-PIKEMPQPKT 11
AEN88827.1 -----M-TIKEMPQPKT 11
KFN05180.1 -----M-TIKEMPQPKT 11
ACZ37122.1 -----M-TIKEMPQPKT 11
ADA57055.1 -----M-TIKEMPQPKT 11
ADA57058.1 -----M-TIKEMPQPKT 11
ADA57059.1 -----M-TIKEMPQPKT 11
ADA57061.1 -----M-TIKEMPQPKT 11
ADA57062.1 -----M-TIKEMPQPKT 11
ADA57068.1 -----M-TIKEMPQPKT 11
AAT62301.1 -----MDKKVSAIPQPKT 13
AAM54108.1 -----MVATGTRIPGPK 13
EFQ83738.1 -----MRNDWS-GQTFPHPPG 15
EFL88452.1 -----MSQTTVRIPTPKK 13
BAF89518.1 AF----HVETADGVTIA----LDDSVFVMDKKVSAIPQPKT 98
CBI43648.1 -----MK-QLSAIPQPKT 12
AEB22839.1 -----MK-ETSPIPKPKT 12
EDT22025.1 -----MDKKVSAIPQPKT 13
AFH84458.1 -----MLFERVFVMDKKVSAIPQPKT 21
ADP31197.1 -----MK-KTSPPIQPKT 12
ACP19384.1 -----MDKKVSAIPQPKT 13
ADL27534.1 -----MEKKVSAIPQPKT 13
ACO29732.1 -----MDKKVSAIPQPKT 13
EDX65100.1 -----MDKKVSAIPQPKT 13
EEK61456.1 -----MEKKVSAIPQPKT 13
EEL16232.1 -----MLFERVFVMDKKVSAIPQPKT 21
EDZ53094.1 -----MEKKVSAIPQPKT 13
EEL81346.1 -----MG---YFILCFFERVFLMDKKVSDIPQPKT 27
EEL87105.1 -----MG---YFISCFFERVFLMDKKVSAIPQPKT 27
EEL75761.1 -----0
ACK88541.1 -----MDKKVSAIPQPKT 13
EJQ05303.1 -----MDKKVSAIPQPKT 13
EEK50040.1 -----MEKKVSAIPQPKT 13
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AAP10153.1 -----MEKKVSAIPQPKT 13
EEK83466.1 -----MLFERVFVMDKKVSGIPQPKT 21

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EJS57156.1	-----MEKKVSAIPQPKT	13
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EJQ13433.1	-----MDKKVSAIPQPKT	13
EJQ20399.1	-----MEKKVSAIPQPKT	13
EJQ30236.1	-----MEKKVSAIPQPKT	13
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EEK99882.1	-----MFVMDKKVSAIPQPKT	16
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AAU17340.1	-----MDKKVSAIPQPKT	13
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EAL16831.1	-----MDKKVSGIPQPKT	13
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EEL33825.1	-----MLFERVFLMDKKVSAIPQPKT	21

EEL44933.1	-----MLFERVFVMDKKVSAIPQPKT	21
EEL50167.1	QTHLKSCLKVQIGKIS-----QARI---ITKTCSFERMFLMK-KLNDIPQPKT	91
EJR22930.1	-----MEKKVSAIPQPKT	13
EJP91231.1	-----MEKKVSAIPQPKT	13
EJR37623.1	-----MEKKVSAIPQPKT	13
EJR50635.1	-----MDKKVSAIPQPKT	13
EJR64551.1	-----MDKKVSAIPQPKT	13
EJR75620.1	-----MEKKVSAIPQPKT	13
EJR82049.1	-----MEKKVSAIPQPKT	13
EJR83659.1	-----MEKKVSAIPQPKT	13
EJR91135.1	-----MR-KFMPIQPKT	12
EJR97241.1	-----MEKKVSAIPQPKT	13
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ABV62358.1	-----MQ-QTSIIPKPKT	12
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EIF14027.1	-----MK-QLSAIPQPKT	12
EHL75405.1	-----MEKKVSAIPQPKT	13
EJD67577.1	-----MK-ETGPIQPKT	12
EJD68347.1	-----MK-QLSAIPQPKT	12
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CBY93692.1	-----MDKKVSAIPQPKT	13
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ADV95715.1	-----MK-ETSPIQPKT	12
BAI84248.1	-----MK-ETSPIQPKT	12
EFG90288.1	-----MK-QASAIQPKT	12
EFG91781.1	-----MK-ETSPIQPKT	12
AEP85668.1	-----MK-ETSPIQPKT	12
AEP87558.1	-----MK-QASAIQPKT	12
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EEN02344.1	-----MEKKVSAIQPQKT	13
AFU13781.1	-----MLFERVFLMDKKVSAIQPQKT	21
EEM70897.1	-----MLFERVFVMDKKVSAIQPQKT	21
ADY22413.1	-----MDKKVSAIQPQKT	13
EEM82895.1	-----MEKKVSAIQPQKT	13
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EEM47193.1	-----	0
EEM76899.1	-----MLFERVFVMDKKVSAIQPQKT	21
EEM88909.1	-----MLFERVFVMDKKVSAIQPQKT	21
EEM38196.1	-----MEKKVSAIQPQKT	13
EEM21858.1	-----MFVMDKKVSAIQPQKT	16
ABK86139.1	-----MLFERVFLMDKKVSAIQPQKT	21
EJQ37805.1	-----MDKKVSAIQPQKT	13
CCF04242.1	-----MK-ETGPIQPQKT	12
CCF05972.1	-----MK-QLSAIQPQKT	12
ABS73124.1	-----MK-ETGPIQPQKT	12
ABS74786.1	-----MK-QLSAIQPQKT	12
EKE46398.1	-----MK-ETGPIQPQKT	12
EKE48022.1	-----MK-QLSAIQPQKT	12
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AFJ60789.1	-----MLERVLFMK-ETGPIQPQKT	19
AFJ62808.1	-----MK-QLSAIQPQKT	12
EEK66903.1	-----MG--YFILCFFERVFLMDKKVSAIQPQKT	27
EJQ52935.1	-----MDKKVSAIQPQKT	13
EJS69574.1	-----MEKKISAIQPQKT	13
EJV63294.1	-----MEKKVSAIQPQKT	13
EKF35778.1	-----MH-QTSIIPKPKT	12
EGP08506.1	-----MSSPNKLNPIPHPPK	15
BAL78328.1	-----MSSKNRLDPIQPPT	15
BAC48147.1	-----MSSKNRLDPIQPPT	15
BAL12135.1	-----MSSKNRLDPIQPPT	15

CCE00185.1	-----MPSSNRLSPIQPQPPA	15
EIG57609.1	-----MSSKNRLDPIQPQPT	15
EHR02046.1	-----MSSKNRLDPIQPQPT	15
EJN11211.1	-----MSSKNRLDPIQPQPT	15
CCF15606.1	-----	0
CCF12687.1	-----MK-EVGYIPQPKT	12
ABB05850.1	-----MKSSSLVPQPPL	12
EHP43606.1	RVS-----TPASTA-PAAP-----ATAAPAAHPARALEPIPRDPG	36
ABF10339.1	-----MSTATPAAALEPIPRDPG	18
CAJ95800.1	ELS-----SP-DQA-SDAP-----HQAPARSMHAPIPEPIPRDPG	38
AEI79937.1	ELS-----SP-DQA-SDAP-----HPSPARPMHAPNPEPIPRDPG	38
AFD27790.1	-----MTLPPIAPQA	10
ABC62112.1	-----MDAPTALAPIQPFG	15
EAQ27850.1	-----MATNATLTPIQPFG	15
EIT84377.1	-----MA-ETIAIPQPKT	12
CCG43686.1	-----ME-KTNHLPQPKS	12
ABX05160.1	-----MSISSPIRYIPQPPT	15
BAJ96920.1	-----MYEKIPQPPT	10
GAB96874.1	RS----HSPSPT--STT----QTTQTTQTTQAHTP----TEASKPTQAAPASTPVPQPEP	50
EFH80345.1	-----MQIEEKTLSIPQPQK	16
EFH88481.1	-----MLRSQLDTI----	9
EAW32450.1	-----MSQIPEPKG	9
EIZ82104.1	-----MAPTAPIQPFRP	12
AEV70722.1	-----MAELTPSLPPQLDDVPSAVG	20
EFC41452.1	NN----EAQCPF--ASA-----DSRRN----SKGSNGSNQPCKEEPIQPPEP	41
ACV78954.1	-----MTDKAIPHPKA	11
ACV78964.1	-----MTEPITLDQLPGPRG	15
ACV81379.1	-----MTAPISVDQLPGPHG	15
EIZ78677.1	-----MTDLIPQPRT	10
EJW15291.1	-----MSISIPQPKT	10
EJW16173.1	-----MSES-NSPHIPQPKT	14
EHQ58913.1	-----MTIAIPQPRT	10
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EHB66924.1	-----M-LTKGIPQPKT	11
AFH60445.1	-----MT-QTSQIPQPKT	12
AEI42011.1	-----MT-QTSQIPQPKT	12
ADO57681.1	-----MT-STNSIPQPKT	12
EGG32133.1	-----MT-QTKEVPQPKT	12

EGL17662.1	-----MAK-SEPLIPQPKT	13
ACX65034.1	-----MT-QTKEVPQPKT	12
ACT11327.1	-----MSGKTAVPQPPI	12
AEA28016.1	-----MTTTEIREASEIPGPPP	17
EFP68091.1	-----MRS-----ASELPANASPAAAEPQPQPKG	24
EGY61507.1	-----MRS-----ASELPANASPAAAEPQPQPKG	24
EIE85788.1	NS----KGELFDGIDKV-----R-----NQQIVYVDTKTKIQETIPGPMK	93
EIE92534.1	NS----NGELGGIDDL-----R-----QQQVVYVDIKELIRETVPGPTK	93
BAE46296.1	RTRP--RRASLVNLAVLGVVLVHTVLMASADKCPYPKSATRAGEITAVQPQVFESIPSPAW	65
BAH31604.1	-----MSVDTTPEATTDARIPHPAW	20
EEN84644.1	-----MSVDTTPEATTDARIPHPAW	20
EEN88978.1	RLCV--PSFILRRVGLGSETDARLSTMSSDKCPYPSETPTSEVAVKPVLEFESIPSPAW	105
ABG96413.1	-----TVLLDTGSVRGTLRTRHQFSNAGHIDTG-VDMSVE-SLHTTADATIPHPRW	52
BAH52971.1	-----MSVE-SLHTTADAIIPHPRW	19
EHI44575.1	-----TVLLDTGSVRRTLRTRHQFSNAGHIDTG-VDMSVE-SLHTTAEATIPHPRW	54
EID73168.1	-----MSVE-SLHTTSEATIPHPRW	19
EHK83749.1	-----	0
EJI96173.1	-----MSVE-SLHTTADATIPHPRW	19
ABI79384.1	-----RDSADR-----EGVRHTLAMTSVGSAR-SGESAPSGGAEGSAGVEPRMPRPSR	48
CAR47816.1	-----GGSAAE-----IAVRHTRAMTSVGSAS-SGDTAPNAPAEGKV-AEQRMRPSW	50
AEK26937.1	-----MHTRRMGSPTT-----TSITMTTGAQPIQPQPRW	28
ABE39056.1	-----MPSTNKLDPIPHPPK	15
ABD08340.1	-----MSSSNKLAPIPHPPK	15
CAM03474.1	-----MTQT-PLH-----HD	9
EJF54063.1	-----MLHSP-----TNQLFSLMKSPVSKPIPHPPPI	26
AFC23737.1	-----MKSPVSKPIPHPPPI	14
ADG98903.1	-----MTDPIAAEKPTRAGLPHPRF	20
EGI54680.1	-----MATIPQPKG	9
AEW97204.1	-----MSPT-PHSASG-----TTGAAAATPGAA-SPAP	26
CAJ88567.1	-----MAG-TTNGLAPDGLPKG-FR---SAELGWPELHRIPRPPY	35
BAC68285.1	-----MTTQPETDLRPIRSPRG	17
BAC75137.1	-----MAQSTRTVIPKG-FR---SAELGWPELHRIPHPPH	31
EDY51256.1	-----	0
EFG07822.1	-----STALRRSTR-----ATGRR--IG-T-----APGAGSV-PERT	31
EHN78335.1	-----MAQ-TAREPARDGLPKG-FR---SAELGWPELHRIPHPPY	35
CAB66201.1	-----MAQ-TAREPARDGLPKG-FR---SAELGWPELHRIPHPPY	35
EGG48117.1	-----MARTRTEAAA-RTAPGTPEGLPKG-FR---GAEAGWPALHRIPHPPR	42
EFL20831.1	-----MEGKLMTKT-S-----LRGIEPI-PQRP	21

EFL28515.1	-----MTET-PLLP-----AGTAEG-DSSD	18
AEY93311.1	-----MA-ATTETMETGLPKG-FR---SAEQGWPELRRIPRPPH	34
AEY93321.1	-----MPPT-A-----LRTEPA-GTLT	15
EFD71156.1	-----MAQ-TAREPARDGLPKG-FR---SAELGWPELHRIPHPPY	35
CBG67789.1	-----MTHA-T-----ERGTESI-PERS	16
CBG68112.1	-----MTATTAATAISG-FR---SAELGWPELHRIPHPPF	31
EFL10082.1	GAQARPHPPSLLDTGSA-----AGDRDPIGCG-F---SRRERTLDTTAIPHRPG	51
EFF88741.1	-----MTQA-P-----PTKPQAI-PERP	16
EDY58112.1	-----MAETTTATRPTG-FR---SAELGWPDLHRIPHPPR	31
EFL36674.1	-----MRTGRWIKGDRD-MTEAPIRAGMPKG-FR---SAELGWPELDRIPHPPH	44
EFL36680.1	VDHA---GSQYFRTAK---GSCRVMRPT-A-----QSPRPA-DSLP	65
EFE65335.1	-----MAETTTGGPPTG-FR---SAELGWPELHRIPHPPY	32
EGX54696.1	-----MAQTRTGDGLPKG-FR---SAEHGWPQLSRIPHPPY	32
ACZ89135.1	-----MTDHAGSARIPQPPM	15
ABD83817.1	-----MASNNKMSPIPQPPT	15
ADU39615.1	-----MAGKNSLYPIPHPAK	15
EJL72014.1	-----MAGKNSLHPIPHPAK	15

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sp|P14779.2|CPXB_PRIM2      F-GELKNLPLLN---TDKPVQALMKIADEL-GEIFKFEAPGR-----VTRYLSSQRLIKE 61
ADF40088.1                  F-GELKNLPLLN---TDKPVQALMKIADEL-GEIFKFEAPGR-----VTRYLSSQRLIKE 61
ADE70259.1                  F-GELKNLPLLN---TDKPIQTLMKIADEL-GEIFKFEAPGR-----VTRYLSSQRLIKE 61
AEN88827.1                  F-GELKNLPLLN---TDKPIQTLMKIADEL-GEIFKFEAPGR-----VTRYLSSQRLIKE 61
KFN05180.1                  F-GELKNLPLLN---TDKPVQALMKIADEL-GEIFKFEAPGR-----VTRYLSSQRLIKE 61
ACZ37122.1                  F-GELKNLPLLN---TDKPIQTLMKIADEL-GEIFKFEAPGR-----VTRYLSSQRLIKE 61
ADA57055.1                  F-GELKNLPLLN---TDKPIQTLMKIADEL-GEIFKFEAPGR-----VTRYLSSQRLIKE 61
ADA57058.1                  F-GELKNLPLLN---TDKPIQTLMKIADEL-GEIFKFEAPGR-----VTRYLSSQRLIKE 61
ADA57059.1                  F-GELKNLPLLN---TDKPVQALMKIADEL-GEIFKFEAPGR-----VTRYLSSQRLIKE 61
ADA57061.1                  F-GELKNLPLLN---TDKPIQTLMKIADEL-GEIFKFEAPGR-----VTRYLSSQRLIKE 61
ADA57062.1                  F-GELKNLPLLN---TDKPIQTLMKIADEL-GEIFKFEAPGR-----VTRYLSSQRLIKE 61
ADA57068.1                  F-GELKNLPLLN---TDKPIQTLMKIADEL-GEIFKFEAPGR-----VTRYLSSQRLIKE 61
AAT62301.1                  Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFQIQTLSD-----TIIIVSGHELVAE 63
AAM54108.1                  L-PLVGNLLDVLTSDLDTDVDFLDRCHREH-GGIVALTFAGQ----RQVFASSHELVAR 66
EFQ83738.1                  RLRFGVDVRSVD---PSRPLMSMLQHARTL-GEIFEFQVF-DQ----KFVAVAGARLGAE 66
EFL88452.1                  Q-PFIGNMLSID---ANQPLQGLMENTREL-GPIFRMDMM-GT----PMVIASGYDIVNE 63
BAF89518.1                  Y-PVVGNLPELH--NAEGLVAAVDALHAKH-GEFFAFQVG-GK----RAYFCSDADIISE 149
CBI43648.1                  Y-GPLKNLPHLE---KEKLSQSLWKIAEEY-GPIFRFEFPSS-----VGVFVSGRELAEE 62
AEB22839.1                  F-GPLGNLPLLD---KDKPTMSLIKLAKEQ-GPIFQLHTPAG-----TIIIVSGHELVKE 62
EDT22025.1                  Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRMQTLSD-----TIIIVSGHELVAE 63
AFH84458.1                  Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRMQTLSD-----TIIIVSGHELVAE 71
ADP31197.1                  F-GPLGNLPLID---KDRPTLSLSKLADDEY-GPIFQLNTPAG-----TTIIVSGHELVEE 62
ACP19384.1                  Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----TIIIVSGHELVAE 63
ADL27534.1                  Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----TIIIVSGHELVAE 63
ACO29732.1                  Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----TIIIVSGHELVAE 63
EDX65100.1                  Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----TIIIVSGHELVAE 63
EEK61456.1                  Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----TIIIVSGHELVAE 63
EEL16232.1                  Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRMQTLSD-----TIIIVSGHELVAE 71
EDZ53094.1                  Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----TIIIVSGHELVAE 63
EEL81346.1                  Y-GLLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----TIIIVSGHELVAE 77
EEL87105.1                  Y-GLLGNLPLID---KDKPTLSFIKIAEEY-GPIFRIQTLSD-----AIIVVSGHELVAE 77
EEL75761.1                  -----MVAE 4
ACK88541.1                  Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFQIQTLSD-----TIIIVSGHELVAE 63
EJQ05303.1                  Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFQIQTLSD-----TIIIVSGHELVAE 63
EEK50040.1                  Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----AIIVVSGHELVAE 63
AAS42149.1                  Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----TIIIVSGHELVAE 63
AAP10153.1                  Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----TIIIVSGHELVAE 63
EEK83466.1                  Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFQIQTLSD-----TIIIVSGHELVAE 71

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ACK63698.1	-----MVAE	4
EJS57156.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----	TIIVVS GHELVAE 63
EJS56605.1	Y-GLLGNLPLID---KDKPTLSFIKIAEEY-GPIFRIQTLSD-----	AIIVVS GHELVAE 63
EJS68951.1	F-GPLGNVPLLD---KDKPLLSFIKLAEEY-GPIFQLQTPGG-----	TAIIVS GHELVEE 62
EJQ10567.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----	TIIVVS GHELVAE 63
EJQ13433.1	Y-GLLGNLPLID---KDKPTLSFIKIAEEY-GPIFRIQTLSD-----	TIIVVS GHELVAE 63
EJQ20399.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----	TIIVVS GHELVAE 63
EJQ30236.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----	TIIVVS GHELVAE 63
EJQ51278.1	F-GPLGNVPLLD---KDKPLLSFIKLAEEY-GPIFQLQTPGG-----	TAIIVS GYELVEE 62
EEL10858.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----	TIIVVS GHELVAE 63
EEL05393.1	Y-GLLGNLPLID---KDKPTLSFIKIAEEY-GPIFRIQTLSD-----	TIIVVS GHELVAE 77
EEK94080.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----	TIIVVS GHELVAE 66
EEK99882.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFQIQTLSD-----	TIIVVS GHELVAE 66
EEK55784.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----	TIIVVS GHELVAE 71
ADK05784.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFQIQTLSD-----	TIIVVS GHELVAE 63
AAU17340.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFRMQTLSD-----	AIIVVS GHELVAE 63
EEL64394.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----	TIIVVS GHELVAE 63
AEW56259.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----	TIIVVS GHELVAE 63
AFQ11690.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFRMQTLSD-----	TIIVVS GHELVAE 63
EAL16831.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----	TIIVVS GHELVAE 63
ACK94296.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----	AIIVVS GHELVAE 63
EDZ58760.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFQIQTLSD-----	TIIVVS GHELVAE 63
EJV84218.1	Y-GLLGNLPLID---KDKPTLSFIKIAEEY-GPIFRIQTLSD-----	TIIVVS GHELVAE 63
EJQ69212.1	Y-GLLGNLPLID---KDKPTLSFIKIAEEY-GPIFRIQTLSD-----	TIIVVS GHELVAE 63
EJQ80339.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----	AIIVVS GHELVAE 63
EJV81602.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----	TIIVVS GHELVAE 63
EJQ95474.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFQIQTLSD-----	TIIVVS GHELVAE 63
EEK44229.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFQIQTLSD-----	TIIVVS GHELVAE 71
EEK88560.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----	TIIVVS GHELVAE 63
EJR07451.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----	AIIVVS GHELVAE 63
EJR16542.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFQIQTLSD-----	TIIVVS GHELVAE 63
BAL18840.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFQIQTLSD-----	TIIVVS GHELVAE 63
EDX69960.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRMQTLSD-----	TIIVVS GHELVAE 63
ACM13462.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFQIQTLSD-----	TIIVVS GHEL VVE 63
EEK75631.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----	TIIVVS GHELVAE 63
EEL25491.1	-----MVAE	4
EEL21990.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----	TIIVVS GHELVAE 71
EEL33825.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----	TIIVVS GHELVAE 71

EEL44933.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRMQTLSD-----TIIVVSHELVAE	71
EEL50167.1	F-GPLGNVPLLD---KDKPLLSFIKLAEEY-GPIFRLQTPGS-----TAIIVSGHELVAE	141
EJR22930.1	Y-GPLGNLPLIN---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----AIIVVSHELVAE	63
EJP91231.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----AIIVVSHELVAE	63
EJR37623.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----TIIVVSHELVAE	63
EJR50635.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFQIQTLSD-----TIIVVSHELVAE	63
EJR64551.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----TIIVVSHELVAE	63
EJR75620.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----TIIVVSHELVAE	63
EJR82049.1	Y-GPLGNLPLIN---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----AIIVVSHELVAE	63
EJR83659.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----TIIVVSHELVAE	63
EJR91135.1	F-GPLGNLPLIN---KNSPTLSMAKIFDEY-GPIFRFEAFGN-----SRIMICDPELVAD	62
EJR97241.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----TIIVVSHELVAE	63
EJS05852.1	Y-GLLGNLPLID---KDKPTLSFIKIAEEY-GPIFRIQTLSD-----TIIVVSHELVAE	63
EDX58768.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRMQTLSD-----TIIVVSHELVAE	63
AAU24352.1	Y-GPLGNLPLLD---KNRVSQSLWKIADEM-GPIFQFKFADA-----IGVSVSHELVAE	62
ABY44122.1	Y-GLLGNLPLID---KDKPTLSFIKIAEEY-GPIFRIQTLSD-----TIIVVSHELVAE	63
EDW23201.1	Y-GPFKNIPHIK---KGELSQTFWRLADEL-GPIFQFEFSKA-----TSIFVSNHELVAE	62
ABV62358.1	Y-GPFKNIPHIK---KGELSQTFWRLADEL-GPIFQFEFSKA-----TSIFVSSHELVAE	62
EIF12263.1	F-GPLGNLPLLD---KDKPTMSLIKLANEQ-GPIFQLHTPAG-----AIIVVSHELVAE	62
EIF14027.1	Y-GPLKLNPHLE---KEKLSQSLWKIAEEY-GPIFRFEFPSS-----VGVFVSGRELAAE	62
EHL75405.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----TIIVVSHELVAE	63
EJD67577.1	F-GPLGNLPLLD---KDKPTMSLIKLANEQ-GPIFQLHTPAG-----AIIVVSHELVAE	62
EJD68347.1	Y-GPLKLNPHLE---KEKLSQSLWKIAEEY-GPIFRFEFPSS-----VGVFVSGRELAAE	62
EFV73436.1	Y-GPLGNLPLLD---KNRVSQSLWKIADEM-GPIFQFKFADA-----IGVSVSHELVAE	76
CBY93692.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFQIQTLSD-----TIIVVSHELVAE	63
AFI27355.1	F-GPLGNLPLID---KDKPTLSLIKLAEEQ-GPIFQIHTPAG-----TTIVVSHELVAE	62
AFI29229.1	Y-GPLKLNPHLE---KEQLSQSLWRLADEL-GPIFRFDFFPGV-----SSVSVSGHNLVTE	62
EIL85422.1	Y-GPLKNIPIK---KGELSQSFWRRLADEL-GGIYQFEFSDI-----TGVFVSSHELVAE	62
ADV93500.1	Y-GPLKLNPHLE---KEQLSQSLWRIADEL-GPIFRFDFFPGV-----SSVSVSGHNLVAE	62
ADV95715.1	F-GPLGNLPLID---KDKPTLSLIKLAEEQ-GPIFQIHTPAG-----TTIVVSHELVAE	62
BAI84248.1	F-GPLGNLPLID---KDKPTLSLIKLAEEQ-GPIFQIHTPAG-----TTIVVSHELVAE	62
EFG90288.1	Y-GPLKLNPHLE---KEQLSQSLWRIADEL-GPIFRFDFFPGV-----SSVSVSGHNLVAE	62
EFG91781.1	Y-GPLGNLPLID---KDKPTLSLIKLAEEQ-GPIFQIHTPAG-----TTIVVSHELVAE	62
AEP85668.1	Y-GPLGNLPLID---KDKPTLSLIKLAEEQ-GPIFQIHTPAG-----TTIVVSHELVAE	62
AEP87558.1	Y-GPLKLNPHLE---KEQLSQSLWRIADEL-GPIFRFDFFPGV-----SSVSVSGHNLVAE	62
sp 008336.1 CYPB_BACSU	Y-GPLKLNPHLE---KEQLSQSLWRIADEL-GPIFRFDFFPGV-----SSVSVSGHNLVAE	62
sp 008394.1 CYPD_BACSU	F-GPLGNLPLID---KDKPTLSLIKLAEEQ-GPIFQIHTPAG-----TTIVVSHELVAE	62
AEP89812.1	F-GPLGNLPLID---KDKPTLSLIKLAEEQ-GPIFQIHTPAG-----TTIVVSHELVAE	62

AEP91702.1	Y-GPLKNLPHLE---KEQLSQSLWRIADEL-GPIFRFDFFPGV-----SSV FVSGHNLVAE	62
EHA31094.1	Y-GPLKNLPHLE---KEQLSQSLWRIADEL-GPIFRFDFFPGV-----SSV FVSGHNLVAE	64
ADH07708.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----TII VVSGHELVAE	63
EEM28177.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----TII VVSGHELVAE	63
AFQ14162.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----AII VVSGHELVAE	63
EEM95517.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----TII VVSGHELVAE	63
EEN02344.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----AII VVSGHELVAE	63
AFU13781.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----TII VVSGHELVAE	71
EEM70897.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFQIQTLSD-----TII VVSGHELVAE	71
ADY22413.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFQIQTLSD-----TII VVSGHELVAE	63
EEM82895.1	Y-GPLGNLPLIN---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----AII VVSGHELVAE	63
EEM52818.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----TII VVSGHELVAE	63
EEM59126.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----TII VVSGHELVAE	71
EEM47193.1	-----MVAE	4
EEM76899.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRMQTLSD-----TII VVSGHELVAE	71
EEM88909.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFQIQTLSD-----TII VVSGHELVAE	71
EEM38196.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----AII VVSGHELVAE	63
EEM21858.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFQIQTLSD-----TII VVSGHELVAE	66
ABK86139.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----TII VVSGHELVAE	71
EJQ37805.1	Y-GPLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----TII VVSGHELVAE	63
CCF04242.1	F-GPLGNLPLLD---KDKPTMSLIKLANEQ-GPIFQLHTPAG-----AII VVSGHELVAE	62
CCF05972.1	Y-GPLKNLPHLE---KEKLSQSLWKIAEEY-GPIFRFEFPSS-----VGV FVSGRELAEE	62
ABS73124.1	F-GPLGNLPLLD---KDKPTMSLIKLANEQ-GPIFQLHTPAG-----AII VVSGHELVAE	62
ABS74786.1	Y-GPLKNLPHLE---KEKLSQSLWKIAEEY-GPIFRFEFPSS-----VGV FVSGRELAEE	62
EKE46398.1	F-GPLGNLPLLD---KDKPTMSLIKLANEQ-GPIFQLHTPAG-----AII VVSGHELVAE	62
EKE48022.1	Y-GPLKNLPHLE---KEKLSQSLWKIAEEY-GPIFRFEFPSS-----VGV FVSGRELAEE	62
CCG48683.1	F-GPLGNLPLLD---KDKPTMSLIKLANEQ-GPIFQLHTPAG-----AII VVSGHELVAE	62
AFJ60789.1	F-GPLGNLPLLD---KDKPTMSLIKLANEQ-GPIFQLHTPAG-----AII VVSGHELVAE	69
AFJ62808.1	Y-GPLKNLPHLE---KEKLSQSLWKIAEEY-GPIFRFEFPSS-----VGV FVSGRELAEE	62
EEK66903.1	Y-GLLGNLPLID---KDKPTLSFIKIAEEY-GPIFQIQTLSD-----TII VVSGHELVAE	77
EJQ52935.1	Y-GLLGNLPLID---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----TII VVSGHELVAE	63
EJS69574.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----AII VVSGHELVAE	63
EJV63294.1	Y-GPLGNLPLID---KDKPTLSFIKLAEEY-GPIFRIQTLSD-----AII VVSGHELVAE	63
EKF35778.1	Y-GPLKNIPLK---KGELSQTFWRLADDL-GPIFQFEFTGQ-----TSIFVSSHELVAE	62
EGP08506.1	K-PVVGNMMLSLD---STAPVQDLVRKSREL-GPIFWLDMM-GQ-----PLVIVSGFDLVDE	65
BAL78328.1	K-PVVGNMMLSLD---SAAPVQHLTRLAKEL-GPIFWLDMM-GS-----PIVVVSGHDLVDE	65
BAC48147.1	K-PVVGNMMLSLD---SAAPVQHLTRLAKEL-GPIFWLDMM-GS-----PIVVVSGHDLVDE	65
BAL12135.1	K-PVVGNMMLSLD---SAAPVQHLTRLAKEL-GPIFWLDMM-GS-----PIVVVSGHDLVDE	65

CCE00185.1	R-PVVGNMLSLD---ANAPVQHLTRLAKEY-GPIFWLDMM-GS-----PIVIASGYDLVDE	65
EIG57609.1	K-PVVGNMLSLD---SAAPVQHLTRLAKEL-GPIFWLDMM-GS-----PIVVVSGHDLVDE	65
EHR02046.1	K-PVVGNMLSLD---SAAPVQHLTRLAKEL-GPIFWLDMM-GS-----PIVVVSGHDLVDE	65
EJN11211.1	K-PVVGNMLSLD---SAAPVQHLTRLAKEL-GPIFWLDMM-GS-----PIVVVSGHDLVDE	65
CCF15606.1	-----MVAE	4
CCF12687.1	Y-GPLGNYPLID---KDTPTLSLCKLAEFF-GPIYRLTSLGS-----SSLVISGHKLAAE	62
ABB05850.1	K-PVIGHLMEVL---GPSPLAKMMDLARTY-GPVYWFVEF-GQ-----GYVVVSGQTLVDE	62
EHP43606.1	W-PLVGNLLQVT---PGKIGQHLLARSRAF-DGIFELDFA-GR-----RVAFVSDAALVGE	86
ABF10339.1	W-PIFGNLFQIT---PGEVQGHLLARSRHH-DGIFELDFA-GK-----RVPFVSSVALASE	68
CAJ95800.1	W-PLVGNLLQIT---PGALGQHLLARSRHH-DGIFELNFA-GR-----RVPFVTSVALASE	88
AEI79937.1	W-PLVGNLLQIT---PGALGQHLLARSRHH-DGIFELNFA-GR-----RVPFVTSVALASE	88
AFD27790.1	L-PVLGHLLAID---AQSPVQSLTRLLRDH-GPIAELRLP-GRRKGGRLIVVGSYALADE	64
ABC62112.1	K-PIVGNNAFTVD---SSRLIQSLMELAEY-GPIFQLEVM-GT-----PLVVFVSGADMVAE	65
EAQ27850.1	K-PLIGNALTVD---ASQQIQSLMELAEY-GPIFQLDMM-GT-----PIVVISGADLVAE	65
EIT84377.1	Y-GPLGNLPLID---KEHPTLSLWKMAEEQ-GPIFRMKSPAS-----QSIIIVSGHELARE	62
CCG43686.1	Y-GPLGNLPLIN---KEKPIQSFMKLADEF-GPLYQFQFPGR-----TSRFVSSAQFAAE	62
ABX05160.1	R-PIVGNVDPDIG---METPVQNLMKLAQHY-GPIFRVVSFP-NR-----SVLVVSSAELVAE	65
BAJ96920.1	R-PLVGNAADID---PSARMENWLRLSKIY-GPIFHLSLP-QR-----NLIILSSQELVNE	60
GAB96874.1	R-PVIGTLYAMD---SHAPIQSSMALASEY-GEIFRHRIM-GRP---PLYMVSSQRLVDE	101
EFH80345.1	K-PLVGNLYSLD---HALPTLSMMDLAREL-GPIYQLEIP-GR-----RTVIVSGFELADE	66
EFH88481.1	---PMGDMKEVH---PESAVRDLIKQAQRH-GPIFQLPLPDGT-----RRIVLSSFALVDE	58
EAW32450.1	KLPGIGHTHLID---AAEPVQSL LALSKNM-GEIYQLQLP-GG-----KLLVVSSQRLVDE	60
EIZ82104.1	L-PIVGNLPEID---PNAPVQSLMRLARAH-GPIYRLSLG-GR-----SLTVVSAQALVNE	62
AEV70722.1	ALPTWADVGRP---YALP---IDILGERH-GPLFYSDHN-GF-----RKLYACSAELVDE	68
EFC41452.1	H-FLVGNIFTVD---KKNPFPSFIELAKKF-DGIFKMNIL-GK-----QLVVVYSQELVNE	91
ACV78954.1	L-PIIGNALVSI---NPATAFTDLQRLADEL-GPIYALDMP-GYH---DQVVLTPDLFGE	63
ACV78964.1	L-PLLGNLFDID---THSPVDGFIAMAKEY-GPIYRLTLP-AG-----SRVMVSGADLVDQ	65
ACV81379.1	V-PILGNLLDLN---NPHPIDTLMWARQY-GPIYKLTVP-GT-----TRIVVSGADLMPD	65
EIZ78677.1	L-PIIGNLNLID---ADAPVQSLIRLADIH-GPIFRISGV-GQ-----SIIILSSQALVDD	60
EJW15291.1	Y-GPLGNVPQLN---PNTPILSFMNLAEQY-GEIYRMKLPFG-----TLHVVSgyELAKE	60
EJW16173.1	F-GLLGNLPQLN---LEAPVQSMVQLAEY-GPIFRIDLPGR-----SEIFISGHELVDK	64
EHQ58913.1	Y-GPLGNLPQLD---TEMPIQSFMKLAEY-GEFFRLKLPFG-----HLHIVSGYELVKE	60
EHQ59900.1	F-GPLGNLPLLD---LEAPLQSLVKLAYEY-GPIFRMDMPGR-----SEIFISGYELVED	62
EHB66924.1	Y-GPLGNLPLLD---SSAPVQSLVKIASEL-GPIFQFQYPGGR-----RELYVSGHEYVRD	62
AFH60445.1	F-GPLGNLPLNLN---TKEPVQSI VKIADEF-GPIFQDLPRG-----KSVYISSHELVD	62
AEI42011.1	F-GPLGNLPLNLN---TKEPVQSI VKIADEF-GPIFQDLPRG-----KSVYISSHELVD	62
ADO57681.1	Y-GPLGNLPLID---THAPVQSLVKLANEH-GPIFRMDLPEG-----TNIYISGHKLVD	62
EGG32133.1	Y-GPLGNLPLLD---SAAPVQSLVKVASEL-GPIFQFQYPGGR-----KELYVSGHEYVKD	63

EGL17662.1	Y-GPLGNLPLID---KESPLQSMMLADEL-GPIFKLEMPGR-----TQLLISSHELVD 63
ACX65034.1	Y-GPLGNLPLLD---SAAPVQSLVKVASEL-GPIFQFYPGGR-----KELYVSGHEYVKD 63
ACT11327.1	K-PVIGNLADVD---PRNSIDSLMKLAKTY-GPFFKMRI F-SD-----EFYVASSQELVNE 62
AEA28016.1	K-PVIGNALDIP---GDRTIQALMDLTRTY-GPIMRLKTP-VG-----DRYIVSGLEMVDD 67
EFP68091.1	L-PWLGNNLQLP---KDRLAQTLLETSRQFPQGLYQLDFA-GR-----RVPFVYSADLVAE 75
EGY61507.1	L-PWLGNNLQLP---KDRLAQTLLETSRQFPQGLYQLDFA-GR-----RVPFVYSADLVAE 75
EIE85788.1	L-PFVGNLYDMV----PNLIEGWIRQFEKY-GPVVEISLL-GK-----ILVGTNSPAVAEV 142
EIE92534.1	L-PFVGSLYEML----PNIAEGWMRQFDRF-GPLVEISLL-GK-----IIVGTNDPNIAEI 142
BAE46296.1	RLPLLGDLLTVD---SEKPIQKEMALASKL-GPIFEWKIV-NN-----RVTVVSGVDLVAE 116
BAH31604.1	RLPVLGDVLGIN---IRTPLQNSV SIGREL-GPIFERNVL-GN-----RFVFASGADMVAE 71
EEN84644.1	RLPVLGDVLGIN---IRTPLQNSV SIGREL-GPIFERNVL-GN-----RFVFASGADMVAE 71
EEN88978.1	RLPVLGDLLSVD---SVKPVQKEMVMASRL-GPIFERKIL-NH-----RLTVVSGVELVAE 156
ABG96413.1	RLPVVGDVFGIS---IRTPLQNSMEIGRKL-GPIFERNVL-GN-----RFVFASGADMVAE 103
BAH52971.1	RLPVFGDVFGIS---IRTPVQNSMEIGRQL-GPIFERNIL-GN-----KFVFASGADMVAE 70
EHI44575.1	RFPVVGDVFGIS---IRTPVQNSMEIGSRL-GPIFERNVL-GN-----RFVFASGADMVAE 105
EID73168.1	RLPVVGDVFGIS---VRTPVQNSMEIGRKL-GPIFERNVL-GN-----RFVFASGADMVAE 70
EHK83749.1	----MGDLLSID---VAKPVQREMOMAQEL-GGIFERKIL-QH-----RLIVVSGADLVRE 47
EJI96173.1	RLPVVGDVFGIS---IRTPLQNSMEIGRKL-GPIFERNVL-GN-----RFVFASGADMVAE 70
ABI79384.1	RLPLLGDVLRLD---PKRPVQREMRFVEEL-GDVFEISII-GR-----RVVVVGGGDAAAA 99
CAR47816.1	RLPLLGDVLRLD---PQRPVQREAFVQEL-GDVFEISIL-GR-----KVIVVGGGDAAAA 101
AEK26937.1	RLPLVGDLLSID---VAKPVQREMOMAQEL-GGIFERKIL-QH-----RLIVVSGADLVRE 79
ABE39056.1	K-PVGNMLSLD---TTAPVQHVLRLAKEL-GPIFWLDMM-GA-----PLVIVSGYDLVDE 65
ABD08340.1	Q-PVGNMLSID---TKAPVQHVLRLAEEL-GPIFWLDMM-GA-----PIVIVSGYDLVDE 65
CAM03474.1	DVPVADVSGTGL---TATPTQQAMELARRH-GPVFRRRTR-EF-----QSLLVSDVDLVAE 60
EJF54063.1	Y-PIVKSVLSLD---IKRPVQSMMALAEKY-GGIYRLEVP-ND-----SLVIVSGLEYVQE 76
AFC23737.1	Y-PIVKSVLSLD---IKRPVQSMMALAEKY-GGIYRLEVP-ND-----SLVIVSGLEYVQE 64
ADG98903.1	RLPLLGDLLRLD---LAKPTQSLVPLSHEA-GPVFEQVFF-GF-----PLRVVAGAREIEE 71
EGI54680.1	Y-PLIGNIAELD---PKAPVQSLMRLAREH-GPLFRIEMF-GR-----GLVIVGSQALTAE 59
AEW97204.1	PVPVADISDTGF---GTTPIQQAMALAREH-GPVFRRRFG-TF-----ESLLVGSVDAVTE 77
CAJ88567.1	RLPLLGDVVGAS---RSTPMQDSLRYARRL-GPIFRRRAF-GN-----EFVFWGAGLAAD 86
BAC68285.1	V-PLFGHTPQIP---STNPVEYFGKLSKQFPEGGLYGMEIA-GI-----EQVFVWDPDLVAE 68
BAC75137.1	RLPVVGDVLGVN---VRTPVQDSLRIGRRL-GPVFRRKAF-GK-----EIVFVGGADLAAE 82
EDY51256.1	-MPLFGHALSVP--AGG-FTEHTLREARAL-GPLFNLRF- DT-----DCWMVSGPELVAE 50
EFG07822.1	RLPLFGHALSVP--AGG-FTEHTLREARAL-GPLFNLRF- DT-----DCWMVSGPELVAE 82
EHN78335.1	RLPLLGDVVGAS---RRTPMQDSLRYARRL-GPIFRRRVF-GK-----EFVFWGASLAAD 86
CAB66201.1	RLPLLGDVVGAS---RRTPMQDSLRYARRL-GPIFRRRAF-GK-----EFVFWGAALAAAD 86
EGG48117.1	RLPLAGDVLGAD---VRRPLQDAMRHGRLL-GPIYRRKVF-RR-----EFVFWWGGRYAAD 93
EFL20831.1	ALPLVGHAFSVP--SGADGLLHVMKEAKEL-GPLFRLRIF-GN-----DINFVSGLDLVTE 73

EFL28515.1	GVPLVDISA-QT---NNTPIQQAMELTRAH-GPVLRRRLH-GT-----DMLFVSDPDLVAE	68
AEY93311.1	RVPLLGDVLGVD---RHRPLQDSMRLAREL-GPIFRRRAF-GK-----EFVFWGARLVAD	85
AEY93321.1	GVPVVDITASGP---GRTPIQQTMEMLREH-GPVLVRRRLH-GR-----DVMFVADANLVAD	66
EFD71156.1	RLPLLGDVVGAS---RRTPMQDSLRYARRL-GPIFRRRAF-GK-----EFVFWGAALAAD	86
CBG67789.1	ALPLVGHAFDIP--GGADGLLHLMKEAREL-GPLFKLRVF-GN-----EINIASGLDLVTE	68
CBG68112.1	RIPLLGDVLGTN---VRTPVQESTRLGQRL-GPIFRRKAF-GK-----EIVFVGGAEELAAE	82
EFL10082.1	RLPVIGDLLGAS---FRTPLQGTMRAGEKL-GPIFTRKFF-GL-----EIVFVTGIDLVT	102
EFF88741.1	GLPLVGHALTLP--GGADFLHHLMKVKEKEL-GPIYQLRTF-GK-----ELVVVGGGLDLVTE	68
EDY58112.1	RLPLLGDVLGVD---RATPLQDSLRFARRL-GPIFRRRAF-NR-----EFVFTWGAELVAD	82
EFL36674.1	RIPLLGDVVGVN---RRTPLQDSLRYARRL-GPVFRRKAF-GK-----EFVFWGARHTAD	95
EFL36680.1	GVPVADITATGP---GGAPIQQAMDLMREH-GPVFVRRLY-GR-----DTLFVGDLDLVAE	116
EFE65335.1	RLPLVGDVLGAS---RSTPVQDSLKYARRL-GPIFRRNAF-GK-----EFVFTWGAGLVTD	83
EGX54696.1	RVPLLGDVVGAG---RRTPLQDSLRFARKL-GPIFRRRAF-GK-----EFVFWGAGLAAD	83
ACZ89135.1	R-PIVGNAPRID---SGAPVQSMMRLAADL-GPVFRMSVP-GR-----EMLILSSRELVAE	65
ABD83817.1	R-PVVGNMLSLD---SAAPVQDLTRLAKEL-GPIFWLDMM-GA-----PIVIVSGYTLVDE	65
ADU39615.1	K-PFVGNLLSIG---SDSPVLDMWKIAQDL-GGIYWLDMP-GM-----PVIVVSSPALVDE	65
EJL72014.1	K-PFVGNLLSIG---SDSPVLDMWKIAQDL-GGIYWLDMP-GM-----PVIVVSSPELVDE	65

sp|P14779.2|CPXB_PRIM2

ADF40088.1	ACDE-SRFDKNLSQ-ALK----FVR-DFAGDGLFTSWTHEKNWKKAHNILLPSFSQQAMK	114
ADE70259.1	ACDE-SRFDKNLSQ-ALK----FVR-DFTGDGLFTSWTHEKNWKKAHNILLPSFSQQAMK	114
AEN88827.1	ACDE-SRFDKNLSQ-ALK----FVR-DFAGDGLFTSWTHEKNWKKAHNILLPSFSQQAMK	114
KFN05180.1	ACDE-SRFDKNLSQ-ALK----FVR-DFAGDGLFTSWTHEKNWKKAHNILLPSFSQQAMK	114
ACZ37122.1	ACDE-SRFDKNLSQ-ALK----FVR-DFAGDGLFTSWTHEKNWKKAHNILLPSFSQQAMK	114
ADA57055.1	ACDE-SRFDKNLSQ-ALK----FVR-DFAGDGLFTSWTHEKNWKKAHNILLPSFSQQAMK	114
ADA57058.1	ACDE-SRFDKNLSQ-ALK----FVR-DFAGDGLFTSWTHEKNWKKAHNILLPSFSQQAMK	114
ADA57059.1	ACDE-SRFDKNLSQ-ALK----FVR-DFAGDGLFTSWTHEKNWKKAHNILLPSFSQQAMK	114
ADA57061.1	ACDE-SRFDKNLSQ-ALK----FVR-DFAGDGLFTSWTHEKNWKKAHNILLPSFSQQAMK	114
ADA57062.1	ACDE-SRFDKNLSQ-ALK----FVR-DFAGDGLFTSWTHEKNWKKAHNILLPSFSQQAMK	114
ADA57068.1	ACDE-SRFDKNLSQ-ALK----FVR-DFAGDGLFTSWTHEKNWKKAHNILLPSFSQQAMK	114
AAT62301.1	VCDE-TRFDKSIIEG-ALA----KVR-AFAGDGLFTSETDEPNWKKAHNILLMPTFSQRAMK	116
AAM54108.1	MCSD-PSWGKAV-HPALE----QVR-DFAGDGLFTARGDEPNWGKAHRLLLMPAFGPTAMR	119
EFQ83738.1	LCDE-SRFGKDL-PPALT----SLR-EFAGDGLFTAFTTEERNWGLAHDLLRPAFTRPAMQ	119
EFL88452.1	LCDE-ARFDKAV-RGSLR----RIR-AVGGDALFTANTSDDNWQKAHRILLPTFAGSAMK	116
BAF89518.1	MCAA-PDVFAKL-VEGRGGLGNLAE-KSVGSALFTASDNDPLWHQAHRILAPAFGATALK	206
CBI43648.1	VCDE-KRFDKNLSK-ALL----KVR-EFGGDGLFTSWTHEKNWQKAHRILLPSFSQKAMK	115
AEB22839.1	VCDE-ERFDKSIIEG-ALE----KVR-AFSGDGLFTSWTHEPNWRKAHNILLMPTFSKRAMK	115
EDT22025.1	VCDE-TRFDKSIIEG-ALA----KVR-AFAGDGLFTSETQEPNWQKAHNILLMPTFSQRAMK	116
AFH84458.1	VCDE-TRFDKSIIEG-ALA----KVR-AFAGDGLFTSETQEPNWQKAHNILLMPTFSQRAMK	124
ADP31197.1	ICDE-SRFDKSIIEG-ALE----KVR-AFSGDGLFTSWTHEPNWRKAHNILLMPTFSQRAMK	115
ACP19384.1	VCDE-TRFDKSIIEG-ALA----KVR-AFAGDGLFTSETHEPNWKKAHNILLMPTFSQRAMK	116
ADL27534.1	VCDE-TRFDKSIIEG-ALA----KVR-AFAGDGLFTSETHEPNWKKAHNILLMPTFSQRAMK	116
ACO29732.1	VCDE-TRFDKSIIEG-ALA----KVR-AFAGDGLFTSETQEPNWQKAHNILLMPTFSQRAMK	116
EDX65100.1	VCDE-TRFDKSIIEG-ALA----KVR-AFAGDGLFTSETQEPNWQKAHNILLMPTFSQRAMK	116
EEK61456.1	VCDE-TRFDKSIIEG-ALA----KVR-AFAGDGLFTSETHEPNWKKAHNILLMPTFSQRAMK	116
EEL16232.1	VCDE-TRFDKSIIEG-ALA----KVR-AFAGDGLFTSETQEPNWQKAHNILLMPTFSQRAMK	124
EDZ53094.1	VCDE-TRFDKSIIEG-ALA----KVR-AFAGDGLFTSETHEPNWKKAHNILLMPTFSQRAMK	116
EEL81346.1	VCDE-TRFDKSIIEG-ALA----KVR-AFAGDGLFTSETHEPNWKKAHNILLMPTFSQRAMK	130
EEL87105.1	VCDE-TRFDKSIDG-ALA----KVR-AFAGDGLFTSETDEPNWKKAHNILLMPTFSQRAMK	130
EEL75761.1	VCDE-TRFDKSIIEG-ALA----KVR-AFAGDGLFTSETHEPNWKKAHNILLMPTFSQRAMK	57
ACK88541.1	VCDE-TRFDKSIIEG-ALA----KVR-AFAGDGLFTSETQEPNWQKAHNILLMPTFSQRAMK	116
EJQ05303.1	VCDE-TRFDKSIIEG-ALA----KVR-AFAGDGLFTSETDEPNWKKAHNILLMPTFSQRAMK	116
EEK50040.1	VCDE-TRFDKSIDG-ALA----KVR-AFAGDGLFTSETHEPNWKKAHNILLMPTFSQRAMK	116
AAS42149.1	VCDE-TRFDKSIIEG-ALA----KVR-AFAGDGLFTSETQEPNWQKAHNILLMPTFSQRAMK	116
AAP10153.1	VCDE-TRFDKSIIEG-ALA----KVR-AFAGDGLFTSETHEPNWKKAHNILLMPTFSQRAMK	116
EEK83466.1	VCDE-TRFDKSIIEG-ALA----KVR-AFAGDGLFTSETHEPNWKKAHNILLMPTFSQRAMK	124

ACK63698.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	57
EJS57156.1	VCDE-TRFDKSIDG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJS56605.1	VCDE-TRFDKSIDG-ALA-----KVR-VFAGDGLFTSETDEPNWKKAHNILMPTFSQRAMK	116
EJS68951.1	VCDQ-SRFDKSVEG-PLA-----KVR-PFAGDGLFTSGTHEPNWRKAHNILTPTFSQRAMK	115
EJQ10567.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJQ13433.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJQ20399.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJQ30236.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJQ51278.1	VCDQ-SRFDKSVEG-PLA-----KVR-PFAGDGLFTSGTHEPNWRKAHNILTPTFSQRAMK	115
EEL10858.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EEL05393.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	130
EEK94080.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	119
EEK99882.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETDEPNWKKAHNILMPTFSQRAMK	119
EEK55784.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETQEPNWQKAHNILMPTFSQRAMK	124
ADK05784.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETDEPNWKKAHNILMPTFSQRAMK	116
AAU17340.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETDEPNWKKAHNILMPTFSQRAMK	116
EEL64394.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
AEW56259.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETQEPNWQKAHNILMPTFSQRAMK	116
AFQ11690.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETQEPNWKKAHNILMPTFSQRAMK	116
EAL16831.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
ACK94296.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EDZ58760.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETDEPNWKKAHNILMPTFSQRAMK	116
EJV84218.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJQ69212.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJQ80339.1	VCDE-TRFDKSIDG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJV81602.1	VCDE-TRFDKSIDG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJQ95474.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETDEPNWKKAHNILMPTFSQRAMK	116
EEK44229.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	124
EEK88560.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJR07451.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJR16542.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETDEPNWKKAHNILMPTFSQRAMK	116
BAL18840.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETDEPNWKKAHNILMPTFSQRAMK	116
EDX69960.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETQEPNWQKAHNILMPTFSQRAMK	116
ACM13462.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETDEPNWKKAHNILMPTFSQRAMK	116
EEK75631.1	VCDE-TRFDKSIDG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EEL25491.1	VCDE-TRFDKSIEG-ALA-----KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	57
EEL21990.1	VCDE-TRFDKSIDG-ALA-----KVR-AFAGDGLFTSETDEPNWKKAHNILMPTFSQRAMK	124
EEL33825.1	VCDE-TRFDKSIDG-ALA-----KVR-AFAGDGLFTSETDEPNWKKAHNILMPTFSQRAMK	124

EEL44933.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETQEPNWQKAHNILMPTFSQRAMK	124
EEL50167.1	VCDQ-SRFDKSVEG-PLA----	KVR-PFAGDGLFTSGTHEPNWSKAHNILMPTFSQRAMK	194
EJR22930.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJP91231.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJR37623.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJR50635.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETDEPNWKKAHNILMPTFSQRAMK	116
EJR64551.1	VCDE-TRFDKSIDG-ALA----	KVR-AFAGDGLFTSETDEPNWKKAHNILMPTFSQRAMK	116
EJR75620.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJR82049.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJR83659.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJR91135.1	ICDE-SRFDKSIGH--LQ----	NVR-TFSKDGLFTAQTEEPNWQKAHLLLLPSFSQQAMK	114
EJR97241.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJS05852.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EDX58768.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETQEPNWQKAHNILMPTFSQRAMK	116
AAU24352.1	VSEE-SRFDKNMGK-GLL----	KVR-EFSGDGLFTSWTEEPNWRKAHNILLPSFSQKAMK	115
ABY44122.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EDW23201.1	ICDE-SRFDKYIGT-SLN----	KVR-AFAGDGLFTSWTEEPNWRKAHHILMPAFSQQAMK	115
ABV62358.1	VFDE-SRFDKFIGS-SLN----	KVR-TFSGDGLFTSWTEEPNWRKAHHILMPAFSQQAMK	115
EIF12263.1	VCDE-ERFDKSIEG-ALE----	KVR-AFSGDGLFTSWTHEPNWRKAHNILMPTFSQRAMK	115
EIF14027.1	VCDE-KRFDKNLSK-ALL----	KVR-EFGGDGLFTSWTHEKNWQKAHRILLPSFSQKAMK	115
EHL75405.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJD67577.1	VCDE-ERFDKSIEG-ALE----	KVR-AFSGDGLFTSWTHEPNWRKAHNILMPTFSQRAMK	115
EJD68347.1	VCDE-KRFDKNLSK-ALL----	KVR-EFGGDGLFTSWTHEKNWQKAHRILLPSFSQKAMK	115
EFV73436.1	VSEE-SRFDKNMGK-GLL----	KVR-EFSGDGLFTSWTEEPNWRKAHNILLPSFSQKAMK	129
CBY93692.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
AFI27355.1	VCDE-GRFDKSIEG-ALE----	KVR-AFSGDGLFTSWTHEPNWRKAHNILMPTFSQRAMK	115
AFI29229.1	VCDE-SRFDKNL GK-GLL----	KVR-EFGGDGLFTSWTHEPNWQKAHRILLPSFSQKAMK	115
EIL85422.1	VCDE-SRFDKFIGI-SLD----	KAR-AFAGDGLFTSWTEEPNWRKAHQILMPAFSQQAMK	115
ADV93500.1	VCDE-SRFDKNL GK-GLQ----	KVR-EFGGDGLFTSWTHEPNWQKAHRILLPSFSQKAMK	115
ADV95715.1	VCDE-ERFDKSIEG-ALE----	KVR-AFSGDGLFTSWTHEPNWRKAHNILMPTFSQRAMK	115
BAI84248.1	VCDE-ERFDKSIEG-ALE----	KVR-AFSGDGLFTSWTHEPNWRKAHNILMPTFSQQAMK	115
EFG90288.1	VCDE-SRFDKNL GK-GLL----	KVR-EFGGDGLFTSWTNEPNWQKAHRILLPSFSQKAMK	115
EFG91781.1	VCDE-ERFDKSIEG-ALE----	KVR-AFSGDGLFTSWTHEPNWRKAHNILMPTFSQRAMK	115
AEP85668.1	VCDE-ERFDKSIEG-ALE----	KVR-AFSGDGLFTSWTHEPNWRKAHNILMPTFSQRAMK	115
AEP87558.1	VCDE-SRFDKNL GK-GLL----	KVR-EFGGDGLFTSWTHEPNWQKAHRILLPSFSQKAMK	115
sp 008336.1 CYPB_BACSU	VCDE-KRFDKNL GK-GLQ----	KVR-EFGGDGLFTSWTHEPNWQKAHRILLPSFSQKAMK	115
sp 008394.1 CYPD_BACSU	VCDE-ERFDKSIEG-ALE----	KVR-AFSGDGLFTSWTHEPNWRKAHNILMPTFSQRAMK	115
AEP89812.1	VCDE-ERFDKSIEG-ALE----	KVR-AFSGDGLFTSWTHEPNWRKAHNILMPTFSQRAMK	115

AEP91702.1	VCDE-SRFDKNLGK-GLQ----	KVR-EFGGDGLFTSWTHEPNWQKAHRILLPSFSQKAMK	115
EHA31094.1	VCDE-SRFDKNLGK-GLQ----	KVR-EFGGDGLFTSWTHEPNWQKAHRILLPSFSQKAMK	117
ADH07708.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EEM28177.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
AFQ14162.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EEM95517.1	ICDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EEN02344.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
AFU13781.1	VCDE-TRFDKSIDG-ALA----	KVR-AFAGDGLFTSETDEPNWKKAHNILMPTFSQRAMK	124
EEM70897.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETQEPNWQKAHNILMPTFSQRAMK	124
ADY22413.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EEM82895.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EEM52818.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EEM59126.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETQEPNWQKAHNILMPTFSQRAMK	124
EEM47193.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	57
EEM76899.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETQEPNWQKAHNILMPTFSQRAMK	124
EEM88909.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETDEPNWKKAHNILMPTFSQRAMK	124
EEM38196.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EEM21858.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	119
ABK86139.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETQEPNWQKAHNILMPTFSQRAMK	124
EJQ37805.1	VCDE-TRFDKSIDG-ALA----	KVR-AFAGDGLFTSETDEPNWKKAHNILMPTFSQRAMK	116
CCF04242.1	VCDE-ERFDKSIEG-ALE----	KVR-AFAGDGLFTSWTHEPNWRKAHNILMPTFSQRAMK	115
CCF05972.1	VCDE-KRFDKNLSK-ALL----	KVR-EFGGDGLFTSWTHEKNWQKAHRILLPSFSQKAMK	115
ABS73124.1	VCDE-ERFDKSIEG-ALE----	KVR-AFSGDGLFTSWTHEPNWRKAHHILMPTFSQRAMK	115
ABS74786.1	VCDE-KRFDKNLSK-ALL----	KVR-EFGGDGLFTSWTHEKNWQKAHRILLPSFSQKAMK	115
EKE46398.1	VCDE-ERFDKSIEG-ALE----	KVR-AFAGDGLFTSWTHEPNWRKAHNILMPTFSQRAMK	115
EKE48022.1	VCDE-KRFDKNLSK-ALL----	KVR-EFGGDGLFTSWTHEKNWQKAHRILLPSFSQKAMK	115
CCG48683.1	VCDE-ERFDKSIEG-ALE----	KVR-AFSGDGLFTSWTHEPNWRKAHNILMPTFSQRAMK	115
AFJ60789.1	VCDE-ERFDKSIEG-ALE----	KVR-AFSGDGLFTSWTHEPNWRKAHNILMPTFSQRAMK	122
AFJ62808.1	VCDE-KRFDKNLSK-ALL----	KVR-EFGGDGLFTSWTHEKNWQKAHRILLPSFSQKAMK	115
EEK66903.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	130
EJQ52935.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETHEPNWKKAHNILMPTFSQRAMK	116
EJS69574.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETQEPNWKKAHNILMPTFSQRAMK	116
EJV63294.1	VCDE-TRFDKSIEG-ALA----	KVR-AFAGDGLFTSETQEPNWKKAHNILMPTFSQRAMK	116
EKF35778.1	VCDE-SRFDKYIGI-SLD----	KAR-AFAGDGLFTSWTEEPNWRKAHQILMPAFSQQAMK	115
EGP08506.1	LSDE-KRFDKAV-RGALR----	RVR-AIGGDGLFTADTTEPNWSKAHNILLQPFGRAMQ	118
BAL78328.1	LSDE-KRFDKTV-RGALR----	RVR-AVGGDGLFTADTREPUNWSKAHNILLQPFGRAMQ	118
BAC48147.1	LSDE-KRFDKTV-RGALR----	RVR-AVGGDGLFTADTREPUNWSKAHNILLQPFGRAMQ	118
BAL12135.1	LSDE-KRFDKTV-RGALR----	RVR-AVGGDGLFTADTREPUNWSKAHNILLQPFGRAMQ	118

CCE00185.1	LSDE-KRFDKVV-RGALR----	RVR-AIGGDGLFTADTREPNWTKAHNILLQPFGNRAMQ	118
EIG57609.1	LSDE-KRFDKTV-RGALR----	RVR-AVGGDGLFTADTKEPNWSKAHNILLQPFGNRAMQ	118
EHR02046.1	LSDE-KRFDKTV-RGALR----	RVR-AVGGDGLFTADTREPNWSKAHNILLQPFGNRAMQ	118
EJN11211.1	LSDE-KRFDKTV-RGALR----	RVR-AVGGDGLFTADTREPNWSKAHNILLQPFGNRAMQ	118
CCF15606.1	ACDE-SRFDKNVWP-PLQ----	KVR-TFAGDGLFTSSTDEPNWQKAHNILLPSFSQRAMQ	57
CCF12687.1	VCDE-SRFFKNITG-DLE----	NVR-AFSGDGLFTSRIEEPNWQKAHNILLPSFSQQAMK	115
ABB05850.1	VCDE-TRFQKCV-HQSLL----	ELR-PAIGDGLFTAFGDEPNWAKAHRVLMQAFGPLSIW	115
EHP43606.1	LSDG-QRFRKIV-GPPLS----	YLR-DLAGDGLFTAHAAEENWGRAHRILMPAFSQRAMK	139
ABF10339.1	LCDA-TRFRKII-GPPLS----	YLR-DMAGDGLFTAHSDEPNWGCAHRILMPAFSQRAMK	121
CAJ95800.1	LCDA-AQFRKYI-GPPVS----	YLR-GMAGDGLFTARSDEANWGKAHRILMPAFSQRAMK	141
AEI79937.1	LCDA-ARFRKYI-GPPLS----	YLR-GMAGDGLFTARSDEANWGKAHRILMPAFSQRAMK	141
AFD27790.1	LSDQ-ERFDKQV-HDDLE----	EIR-AFAGDGLFTAETAEPNWRRAHNILMPAFGLAIR	117
ABC62112.1	ICDE-SRFDKTV-RGPLK----	RLR-LIAGDGLFTGDTDDPNWAKAHHILLPSFSQKAMG	118
EAQ27850.1	VCDE-KRFDKSV-RGPLK----	RLR-LIGGDGLFTGDTDAPNWSKAHNILLPSFSQKAMG	118
EIT84377.1	VCDE-TRFAKSIEG-ALE----	KVR-AFAGDGLFTSWGDEPNWQKAHNILMPTFSQRAMK	115
CCG43686.1	ICDE-SRFDKKGVP-ALQ----	KVR-AFGGDGLFTSETEEINWKKAHNILLPSFSQQAMK	115
ABX05160.1	ISDQ-QRFDKLL-HGPLI----	QIR-DFAGDGLFTAYTEEANWSKAHRLLLMPAFGPASMR	118
BAJ96920.1	ACDE-KRFNKRIV-GGALN----	EVR-SFTGDGLFTAQNSEKNYKKGHRILASAFSPVAMH	113
GAB96874.1	LCDE-SRFDKRV-HQPLE----	NIR-AFAGDGLFTVHTPEENWGKAHRILMPAFSPFALK	154
EFH80345.1	LSDE-TRFDKRV-WRPLQ----	NVR-AFAGDGLFTAYTQEANWHKAHNILLPNFSMRAMQ	119
EFH88481.1	VCND-QFFDKRV-SVNVR----	NLR-SAIGSGLFSADTSDPNWRKAHTILMPSFSLQAMR	111
EAW32450.1	LCDE-SRFDKVV-SGPLS----	NIR-DIALDGLFTAKTTEPNWQKAHNILMPAFMSGAMS	113
EIZ82104.1	LCDE-GRFEKKL-HRPLE----	MLR-DLGGDGLFTARNDEPNWGKAHRLLLMPAFGPLGIR	115
AEV70722.1	LCDE-SRFAKNL-TPTLA----	RVR-PLAGDGLFTAYYGEPNWQKAHDVLLPGFSYAGLR	121
EFC41452.1	LCDE-SRFEKAL-PPGLK----	HVK-EFGGDGLFTAENNEPNWAIHRIILMPAFGPKSIQ	144
ACV78954.1	ACDD-SRFDKS-----PAQ----	RLR-AVLGDGLFTAFTDSRAWQRGHRIIAPAFTGAAIS	113
ACV78964.1	MCDD-QKFDKKI-GAGLK----	ALQKSVAGSGLFTSDTADPMWHRAHNILMAPFSQQAMR	119
ACV81379.1	ICDD-ERFDKQL-GPGLV----	AAR-GTGTPLFLSETSDPLWRRAHNILMAPFSQSSMR	118
EIZ78677.1	ACDE-ARFSKKV-HRPLE----	MLR-DLGGDGLFTAYGDEPNWAKAHRLLMPAFGPIGVR	113
EJW15291.1	FSDT-ARFGKIVDKTILN----	NVR-AYAGDGLFTSETNDPNWKKAHNILLPSFSRTAMR	114
EJW16173.1	ACDE-SRFDKNVWA-PLR----	SVR-AFTGDGLFTSETAEPNWQKAHHILLPSFSQSAMR	117
EHQ58913.1	LTDP-SRFDKIVDKTVLE----	KVR-AILGDGLFTSETTEPNWRKAHNILLPSFSRTAMR	114
EHQ59900.1	ACDE-SRFDKNLWA-PLQ----	KVR-AFAGDGLFTSATEEPNWSKAHNILLPSFSQRAMQ	115
EHB66924.1	ACDE-KRFDKRIWA-PLQ----	NVR-AFAGDGLFTSATHEPNWKKAHNILLSSFSQRAMQ	115
AFH60445.1	ACDE-SRFDKYVWA-PLQ----	KVR-AFAGDGLFTAETDEPNWQKAHAILLPSFSQRAMQ	115
AEI42011.1	ACDE-SRFDKYVWA-PLQ----	KVR-AFAGDGLFTAETDEPNWQKAHAILLPSFSQRAMQ	115
ADO57681.1	ACDE-SRFDKQVWA-PLQ----	KVR-AFAGDGLFTSWTEEPNWRKAHQILLPSFSQRAMK	115
EGG32133.1	ACDE-KRFDKRIWA-PLQ----	NVR-PFAGDGLFTSATQEPNWKKAHNILLSSFSQRAMQ	116

EGL17662.1	ACDE-SRFDKKIGA-ALS-----NVR-AFGGDGLFTAHTDEPNWQKAHHILLPTFSQRAMK	116
ACX65034.1	ACDE-KRFDKRIWA-PLQ-----NVR-PFAGDGLFTSATQEPNWKKAHNILLSSFSQRAMQ	116
ACT11327.1	LSDE-SFFEKKL-SAELL-----ELR-YLGGDGLFTAHTHEPNWGKAHRILMPALGPLGVR	115
AEA28016.1	LCDD-SRFDKLV-GTAQK-----ELRKTRPSDGLFTAHTDDPMWSRAHNILLPNFSMQAMQ	121
EFP68091.1	LCDE-TRFRKLI-GPPLS-----FLR-AGAGDGLFTAHQDEPNWGKAHRILLPAFSQRAMK	128
EGY61507.1	LCDE-TRFRKLI-GPPLS-----FLR-AGAGDGLFTAHQDEPNWGKAHRILLPAFSQRAMK	128
EIE85788.1	FARESEYFTKKITKSGLG-----EVK-EFAGQGLFTTDTDEMDWQLAHKLLMPAFSPRAIK	197
EIE92534.1	FAKESEYFTKKITKSGLG-----EVK-EFAGQGLFTTDTDEMDWQLAHKLLMPAFSPRAIK	197
BAE46296.1	VNNE-ALWAKSV-GLPIL-----KLR-KVAEDGLFTA FNSEP NWRKAHNILSEGFSRSALR	169
BAH31604.1	LSDE-SRFAKHL-APGVK-----ALR-GIGGDGLFTA YNHEPNWGKAHNLLAPAFSQTAMR	124
EEN84644.1	LSDE-SRFAKHL-APGVK-----ALR-GIGGDGLFTA YNHEPNWGKAHNLLAPAFSQTAMR	124
EEN88978.1	VNNE-ALWAKSV-GLPIR-----KLR-AVAEDGLFTA FNSEP NWRKAHNILNAGFSQAALR	209
ABG96413.1	LSDE-SRFAKHL-APGVA-----SLR-EVGGDGLFTA YNHEPNWSKAHNLLAPAFTKSAMR	156
BAH52971.1	LSDE-TRFAKHL-APGVA-----SLR-EVGGDGLFTA YNHEPNWSKAHNLLAPAFTKSAMR	123
EHI44575.1	LSDE-SRFAKHL-APGVA-----SLR-EVGGDGLFTA YNHEPNWSKAHNLLAPAFTKSAMR	158
EID73168.1	LSDE-SRFAKHL-APGVA-----SLR-EVGGDGLFTA YNHEPNWSKAHNLLAPAFTKSAMR	123
EHK83749.1	VNDE-EKWAKFL-GKPLR-----KLR-VIAGDGLFTA FNSEP NWSKAHNILGPGFSQAAMR	100
EJI96173.1	LSDE-SRFAKHL-APGVA-----SLR-EVGGDGLFTA YNHEPNWSKAHNLLAPAFTKSAMR	123
ABI79384.1	VFDE-TRFAKAV-VPPVS-----TLR-ELAGDGLFTA FNSEP AWAQAHNVLMPAFSQASMR	152
CAR47816.1	VFDE-TRFAKAV-VPPVS-----NLR-ELAGDGLFTA FNSEP AWAQAHNVLMPAFSQASMR	154
AEK26937.1	VNDE-EKWAKFL-GKPLR-----KLR-VIAGDGLFTA FNSEP NWSKAHNILGPGFSQAAMR	132
ABE39056.1	ISDE-KRFDKAV-RGALR-----RAR-AVGGDGLFTA DTKEPNWSKAHNILLTPFGGRAMQ	118
ABD08340.1	ISDE-KRFDKAV-RGALR-----RVR-TVGGDGLFTA DTSEPNWSKAHNILLTPFGGRAMQ	118
CAM03474.1	LSDE-QRFAKAV-GPALE-----NVR-EFAADGLFTA YNDEFNWAKAHDILMPAFALGSMR	113
EJF54063.1	FCNE-DRFDKKV-FSALE-----KVR-DLTGDGLFTA HTTEPNWGKAHRILTPAFGPHAMR	129
AFC23737.1	FCDE-DRFDKKV-FSALE-----KVR-DLTGDGLFTA HTTEPNWGKAHRILTPAFGPHAMQ	117
ADG98903.1	VNNE-EAWEKHV-GPALH-----KLR-PMAGDGLFTA YNREP NWRKAHNVLMPAFSRSAMV	124
EGI54680.1	LCDE-ARFKKAL-HRPLQ-----EAR-YVGGDGLFTA HDEPNWGKAHRLLMPAFGPLGLR	112
AEW97204.1	LCDD-ERFVKAV-GPVL T-----NVR-QIAGDGLFTA YNDEPNWAKAHDILLPAFALSSMH	130
CAJ88567.1	LADE-ERFAKHV-GLGVA-----NLR-PVAGDGLFTA YNHEPNWQLAHDV LAPGFSREAMA	139
BAC68285.1	VCDE-TRFFKQIDKTPLA-----HVR-DYAGAGLFTA HQHEE EWMAHRVLLPVFSQRAMK	122
BAC75137.1	LADE-SRFAKHV-GLGVA-----NLR-PVAGDGLFTA YNHEPNWQLGHDV LAPGFSREAMA	135
EDY51256.1	LCDE-TRFRKSV-QP-IA-----AVR-EFAGDGLFTA FGD EPNWRKAHNILMPAFSYNALR	102
EFG07822.1	LCDE-TRFRKSV-QP-IA-----AVR-EFAGDGLFTA FGD EPNWRKAHNILMPAFSYNALR	134
EHN78335.1	LADE-TRFAKHV-GLGVA-----NLR-PVAGDGLFTA YNHEPNWQLAHDV LAPGFSREAMA	139
CAB66201.1	LADE-ARFAKHV-GLGVA-----NLR-PVAGDGLFTA YNHEPNWQLAHDV LAPGFSREAMA	139
EGG48117.1	LADE-SRFAKHV-GLGVA-----NLR-PVAGDGLFTA YNHEPNWQLAHDV LAPGFSREAMS	146
EFL20831.1	LADE-TRFRKNV-HPDLV-----VLR-AIGGDGLFTA FNDEPNWRKAHDILMPAFSLGAMR	126

EFL28515.1	LCDD-QRFAKYV-NQSLE----	NVR-EFTHDGLFTAYNDEPNWAKAHDILMPAFALGSMR	121
AEY93311.1	LADE-SRFAKHV-GLGVA----	NLR-PVAGDGLFTAYNHEPNWQLAHDVLPAGFSREAME	138
AEY93321.1	LADE-ERFAKHV-GPALR----	NVR-EFAADGLFTAYNDEPNWAKAHDILMPAFALGSMR	119
EFD71156.1	LADE-ARFAKHV-GLGVA----	NLR-PVAGDGLFTAYNHEPNWQLAHDVLPAGFSREAMA	139
CBG67789.1	LSDE-SRFRKNV-HADLV----	LVR-EITGDGLFTAFNDEPNWRKAHDVLMPAFSLGAMR	121
CBG68112.1	MADE-ARFAKHV-GVGVA----	NLR-PVAGDGLFTAYNHEPNWQLAHDVLPAGFGREAMA	135
EFL10082.1	LNDE-TKFGKHV-GLGVE----	RLR-AVAGDGLFTAHTREPWNRLAHDILQPAFSAESMR	155
EFF88741.1	LSDE-TRFRKAI-GKDLS----	AVR-PIGGDGLFTAYGDEPNWRKAHDVLMPSFSLGAMR	121
EDY58112.1	LADE-SRFAKHV-GLGVA----	NLR-PVAGDGLFTAYNHEPNWQLAHDVLPAGFSREAMA	135
EFL36674.1	LADE-SRFAKHV-GLGIA----	NLR-PVAGDGLFTAYNHEPNWQLAHDVLPAGFSREAMA	148
EFL36680.1	LADE-QRFAKHI-GPGLE----	NVR-EFAADGLFTAYNDEPNWAKAHDILMPAFALGSMR	169
EFE65335.1	LADE-TRFAKHV-GLGVA----	NLR-PLAGDGLFTAYNHEPNWQLAHDVLPAGFRREAMA	136
EGX54696.1	IADDE-SRFAKHV-GLGVA----	NLR-PVAGDGLFTAYNHEPNWQLAHDVLPAGFSREAMA	136
ACZ89135.1	ACDE-SRFEKHV-HGPLE----	HIR-DFAGDGLFTAYGDEPNWARAHRILMPAFGPAAMR	118
ABD83817.1	LSVE-TRLDKVV-RGALR----	RVR-AIGGDGLFTADTAEPNWSKARNILLQPFGNRAMQ	118
ADU39615.1	LCEE-ARFDKST-RGALR----	RLR-AA-SHGLFTSDTHEETWSKPHNILLANFSQRAMQ	117
EJL72014.1	LCEE-ARFDKST-RGALR----	RLR-AA-SHGLFTSDTHEETWSKPHNILLANFSQRAMQ	117

sp P14779.2 CPXB_PRIM2	GYHAMMVDIAVQLVQKWERLN-ADEHIEVPEDMTRLTLDITGLCGFNRYRNSFYR--DQP	171
ADF40088.1	GYHAMMVDIAVQLVQKWERLN-ADEHIEVPEDMTRLTLDITGLCGFNRYRNSFYR--DQP	171
ADE70259.1	GYHAMMVDIAVQLIQKWERLN-TDEHIEVPEDMTRLTLDITGLCGFNRYRNSFYR--DQP	171
AEN88827.1	GYHAMMVDIAVQLIQKWERLN-ADEHIEVPEDMTRLTLDITGLCGFNRYRNSFYR--DQP	171
KFN05180.1	GYHAMMVDIAVQLVQKWERLN-ADEHIEVPEDMTRLTLDITGLCGFNRYRNSFYR--DQP	171
ACZ37122.1	GYHAMMVDIAVQLIQKWERLN-TDEHIEVPEDMTRLTLDITGLCGFNRYRNSFYR--DQP	171
ADA57055.1	GYHAMMVDIAVQLIQKWERLN-TDEHIEVPEDMTRLTLDITGLCGFNRYRNSFYR--DQP	171
ADA57058.1	GYHAMMVDIAVQLIQKWERLN-TDEHIEVPEDMTRLTLDITGLCGFNRYRNSFYR--DQP	171
ADA57059.1	GYHAMMVDIAVQLVQKWERLN-ADEHIEVPEDMTRLTLDITGLCGFNRYRNSFYR--DQP	171
ADA57061.1	GYHAMMVDIAVQLIQKWERLN-TDEHIEVPEDMTRLTLDITGLCGFNRYRNSFYR--DQP	171
ADA57062.1	GYHAMMVDIAVQLIQKWERLN-TDEHIEVPEDMTRLTLDITGLCGFNRYRNSFYR--DQP	171
ADA57068.1	GYHAMMVDIAVQLIQKWERLN-TDEHIEVPEDMTRLTLDITGLCGFNRYRNSFYR--DQP	171
AAT62301.1	DYHAMMVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
AAM54108.1	DHFPAMLDIAEQMLVRRRFG-PDHRIDVADDMTRLTLDITGLCAFGARFNSFYR--DRA	176
EFQ83738.1	SYHPIMVETLDELFAWDHQ---EGPVDVSRDMTKLTMETLSRAAFSKDFGSFTS--TEV	174
EFL88452.1	GYMPMQDVATQLCTKWERMN-ADEEIDVVDHMTAVALDITGICGFDYRNSFYR--RDY	173
BAF89518.1	NYGRIVEVADDLLDHLDRLA-PGESFLATDLMTRMTFEAISYAANRRYGAIDS--PAL	263
CBI43648.1	GYHSMMLDIAMQLVQKWSRLN-PNEEIDVAEDMTRLTLDITGLCGFHRYRNSFYR--DTQ	172
AEB22839.1	DYHSMMTDIAVQLIQKWARLN-PDEAVDVPADMTRLTLDITGLCGFNRYRNSFYR--ETP	172
EDT22025.1	DYHAMMVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
AFH84458.1	DYHAMMVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	181
ADP31197.1	EYHSMMVDIAVQLIQKWARLN-PNEAVDVPDGMTRLTLDITGLCGFNRYRNSFYR--ETP	172
ACP19384.1	DYHAMMVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
ADL27534.1	DYHAMMVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
ACO29732.1	DYHAMMVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
EDX65100.1	DYHAMMVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
EEK61456.1	DYHAMMVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
EEL16232.1	DYHAMMVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	181
EDZ53094.1	DYHAMMVDLAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
EEL81346.1	DYHAMMVDLAVQLVQKWARLN-PNESVDVPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	187
EEL87105.1	DYHGMVVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETS	187
EEL75761.1	DYHAMMVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	114
ACK88541.1	DYHAMMVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
EJQ05303.1	DYHAMMVDIAVQLVQKWARLN-PNENVDPDGMTRLTLDITGLCGFNRYRNSFYR--ETS	173
EEK50040.1	DYHAMMVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
AAS42149.1	DYHAMMVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
AAP10153.1	DYHAMMVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
EEK83466.1	DYHAMMVDIAVQLVQKWARLN-PNENVDPDGMTRLTLDITGLCGFNRYRNSFYR--ETS	181

ACK63698.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	114
EJS57156.1	DYHAMMVDLAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EJS56605.1	DYHGMVVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETS	173
EJS68951.1	DYHAMMVDIQVQLVQKWARLN-PNEEVDVPEDMTRLTLDITGLCGFNFRNSFYR--ETP	172
EJQ10567.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EJQ13433.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EJQ20399.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EJQ30236.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EJQ51278.1	DYHAMMVDIQVQLVQKWARLN-PNEEVDVPEDMTRLTLDITGLCGFNFRNSFYR--ETP	172
EEL10858.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EEL05393.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	187
EEK94080.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	176
EEK99882.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETS	176
EEK55784.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	181
ADK05784.1	DYHAMMVDIQVQLVQKWARLN-PKENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETS	173
AAU17340.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EEL64394.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
AEW56259.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
AFQ11690.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EAL16831.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETS	173
ACK94296.1	DYHAMMVDLAVQLVQKWARLN-PNEDVDVPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EDZ58760.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETS	173
EJV84218.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EJQ69212.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EJQ80339.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EJV81602.1	DYHAMMVDLAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EJQ95474.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETS	173
EEK44229.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETS	181
EEK88560.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EJR07451.1	DYHAMMVDLAVQLVQKWARLN-PNEDVDVPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EJR16542.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETS	173
BAL18840.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETS	173
EDX69960.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
ACM13462.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETS	173
EEK75631.1	DYHAMMVDVAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EEL25491.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	114
EEL21990.1	DYHGMVVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETS	181
EEL33825.1	DYHGMVVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETS	181

EEL44933.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	181
EEL50167.1	DYHTMMVDIAVQLVQKWARLN-PNEVDVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	251
EJR22930.1	DYHAMMVDLAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EJP91231.1	DYHAMMVDLAVQLVQKWARLN-PNEDVDVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EJR37623.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EJR50635.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETS	173
EJR64551.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETS	173
EJR75620.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EJR82049.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EJR83659.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EJR91135.1	GYHSMVVDIAMQLVQKWARLN-PDENIDVCDMTRLTLDITGLCGFNFRNSFYR--ETP	171
EJR97241.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EJS05852.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EDX58768.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
AAU24352.1	GYHPMMQDIQVQLVQKWARLN-QDESIDVPDDMTRLTLDITGLCGFNFRNSFYR--EGQ	172
ABY44122.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EDW23201.1	GYHEMMLDIATQLVQKQRTG-RDEEIEVAEDMTKLTLDITGLCGFDFRNSFYK--ENQ	172
ABV62358.1	GYHEMMLDIATQLVQKQRTG-RDEEIEVAEDMTKLTLDITGLCGFDFRNSFYK--ENQ	172
EIF12263.1	DYHSMMTDIAVQLIQKWARLN-PDEAVDVPADMTRLTLDITGLCGFNFRNSFYR--ETP	172
EIF14027.1	GYHSMMLDIAMQLVQKWSRLN-PNEEIDVAEDMTRLTLDITGLCGFHFRNSFYR--DTQ	172
EHL75405.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	173
EJD67577.1	DYHSMMTDIAVQLIQKWARLN-PDEAVDVPADMTRLTLDITGLCGFNFRNSFYR--ETP	172
EJD68347.1	GYHSMMLDIAMQLVQKWSRLN-PNEEIDVAEDMTRLTLDITGLCGFHFRNSFYR--DTQ	172
EFV73436.1	GYHPMMQDIQVQLVQKWSRLN-QDESIDVPDDMTRLTLDITGLCGFNFRNSFYR--EGQ	186
CBY93692.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNFRNSFYR--ETS	173
AFI27355.1	DYHEKMVDIAVQLIQKWARLN-PNEAVDVPEDMTRLTLDITGLCGFNFRNSFYR--ETP	172
AFI29229.1	GYHSMMLDIATQLIQKWSRLN-PNEEIDVADDMTRLTLDITGLCGFNFRNSFYR--DSQ	172
EIL85422.1	GYHEMMLDIATQLVQKQRTG-RDEEIEVAEDMTKLTLDITGLCGFDFRNSFYK--ENQ	172
ADV93500.1	GYHSMMLDIATQLIQKWSRLN-PNEEIDVADDMTRLTLDITGLCGFNFRNSFYR--DSQ	172
ADV95715.1	DYHEKMVDIAVQLIQKWARLN-PNEAVDVPEDMTRLTLDITGLCGFNFRNSFYR--ETP	172
BAI84248.1	DYHEKMVDIAVQLIQKWARLN-PNEVDVDPEDMTRLTLDITGLCGFNFRNSFYR--ETP	172
EFG90288.1	GYHSMMLDIATQLIQKWSRLN-PNEEIDVADDMTRLTLDITGLCGFNFRNSFYR--DSQ	172
EFG91781.1	DYHEKMVDIAVQLIQKWARLN-PNEAVDVPEDMTRLTLDITGLCGFNFRNSFYR--ETP	172
AEP85668.1	DYHEKMVDIAVQLIQKWARLN-PNEAVDVPEDMTRLTLDITGLCGFDYFRNSFYR--ETP	172
AEP87558.1	GYHSMMLDIATQLIQKWSRLN-PNEEIDVADDMTRLTLDITGLCGFNFRNSFYR--DSQ	172
sp 008336.1 CYPB_BACSU	GYHSMMLDIATQLIQKWSRLN-PNEEIDVADDMTRLTLDITGLCGFNFRNSFYR--DSQ	172
sp 008394.1 CYPD_BACSU	DYHEKMVDIAVQLIQKWARLN-PNEAVDVPEDMTRLTLDITGLCGFNFRNSFYR--ETP	172
AEP89812.1	DYHEKMVDIAVQLIQKWARLN-PNEAVDVPEDMTRLTLDITGLCGFNFRNSFYR--ETP	172

AEP91702.1	GYHSMMLDIATQLIQKWSRLN-PNEEIDVADDMTRLTLDITGLCGFNRYRNSFYR--DSQ	172
EHA31094.1	GYHSMMLDIATQLIQKWSRLN-PNEEIDVADDMTRLTLDITGLCGFNRYRNSFYR--DSQ	174
ADH07708.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
EEM28177.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
AFQ14162.1	DYHAMMVDLAVQLVQKWARLN-PNEDVDVPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
EEM95517.1	DYHAMMVDIQVQLVQKWARLN-PNENVDVTDGMTRLTLDITGLCGFNRYRNSFYR--ETP	173
EEN02344.1	DYHAMMVDLAVQLVQKWARLN-PNEDVDVPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
AFU13781.1	DYHGMVVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETS	181
EEM70897.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	181
ADY22413.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETS	173
EEM82895.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
EEM52818.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
EEM59126.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	181
EEM47193.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	114
EEM76899.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	181
EEM88909.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETS	181
EEM38196.1	DYHAMMVELAVQLVQKWARLN-PNEDVDVPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
EEM21858.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETS	176
ABK86139.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	181
EJQ37805.1	DYHGMVVDIAVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETS	173
CCF04242.1	DYHSMMTDIAVQLIQKWARLN-PDEAVDVPADMTRLTLDITGLCGFNRYRNSFYR--ETP	172
CCF05972.1	GYHSMMLDIAMQLVQKWSRLN-PNEEIDVAEDMTRLTLDITGLCGFHRYRNSFYR--DTQ	172
ABS73124.1	DYHSMMTDIAVQLIQKWARLN-PDEAVDVPADMTRLTLDITGLCGFNRYRNSFYR--ETP	172
ABS74786.1	GYHSMMLDIAMQLVQKWSRLN-PNEEIDVAEDMTRLTLDITGLCGFHRYRNSFYR--DTQ	172
EKE46398.1	DYHSMMTDIAVQLIQKWARLN-PDEAVDVPADMTRLTLDITGLCGFNRYRNSFYR--ETP	172
EKE48022.1	GYHSMMLDIAMQLVQKWSRLN-PNEEIDVAEDMTRLTLDITGLCGFHRYRNSFYR--DTQ	172
CCG48683.1	DYHSMMTDIAVQLIQKWARLN-PDEAVDVPADMTRLTLDITGLCGFNRYRNSFYR--ETP	172
AFJ60789.1	DYHSMMTDIAVQLIQKWARLN-PDEAVDVPADMTRLTLDITGLCGFNRYRNSFYR--ETP	179
AFJ62808.1	GYHSMMLDIAMQLVQKWSRLN-PNEEIDVAEDMTRLTLDITGLCGFHRYRNSFYR--DTQ	172
EEK66903.1	DYHAMMVDLAVQLVQKWARLN-PNESVDVPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	187
EJQ52935.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ETP	173
EJS69574.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ESS	173
EJV63294.1	DYHAMMVDIQVQLVQKWARLN-PNENVDPEDMTRLTLDITGLCGFNRYRNSFYR--ESS	173
EKF35778.1	GYHEMMLDIASQLVQKQRTG-RDEEIEVAEDMTKLTLDITGLCGFDFRNSFYK--ENQ	172
EGP08506.1	SYHPSMVDIAEQLVKKWERLN-ADDEIDVVHDMTALTLDTIGLCGFDYRNSFYR--EDY	175
BAL78328.1	SYHPSMVDIAEQLVKNWERLN-ADDEIDVVHDMTALTLDTIGLCGFDYRNSFYR--RDY	175
BAC48147.1	SYHPSMVDIAEQLVQKWERLN-ADDEIDVVHDMTALTLDTIGLCGFDYRNSFYR--RDY	175
BAL12135.1	SYHPSMVDIAEQLVKNWERLN-ADDEIDVVHDMTALTLDTIGLCGFEYRNSFYR--RDY	175

CCE00185.1	SYHASMVDIAEQLVKKWERLN-ADEEIDVVHDMTALTLDTIGLCGFDYRFNSFYR--RDY	175
EIG57609.1	SYHPSMVDIAEQLVGKWERLN-ADDEIDVVHDMTALTLDTIGLCGFDYRFNSFYR--RDY	175
EHR02046.1	SYHPSMVDIAEQLVGKWERLN-ADDEIDVVHDMTALTLDTIGLCGFDYRFNSFYR--RDY	175
EJN11211.1	SYHPSMVDIAEQLVQKWERLN-ADDEIDVVHDMTALTLDTIGLCGFEYRFNSFYR--RDY	175
CCF15606.1	GYHSMMVDIAVQLIQKWARLN-PDESIDVPEDMTRLTLDTIGLCGFNYRFNSFYR--EQP	114
CCF12687.1	GYHSMMVDIALQLIQKWARLN-PNESIDVPGDMTRLTLDTIGLCGFNYRFNSFYR--ETH	172
ABB05850.1	SMFDKMVDIADQMFLHWERFG-PETPVDVSDHMTRLTLDTIALCAFDCRFNSFYR--EDQ	172
EHP43606.1	GYFDVMLRVANRLVDKWDQRG-ADTDIPIADDMTRLTLDTIALSGFGYDFDSFAR--EQL	196
ABF10339.1	AYFDVMLRVANRLVDKWDQRG-PDADIAVADDMTRLTLDTIALAGFGYDFASFAS--DEL	178
CAJ95800.1	GYFDVMLRVANRLVDKWDQQG-PDADIAVADDMTRLTLDTIALSGFGYDFESFAS--TEL	198
AEI79937.1	GYFDVMLRVANRLVDKWDQRG-PDADIAVADDMTRLTLDTIALSGFGYDFESFAS--ANL	198
AFD27790.1	GMFGQMVDVCEQMLLRWERFG-PAAEFDVADQMTRLTLDTIALCAFDRFNSFYR--ERM	174
ABC62112.1	SYLPMMTDIASQLMLKWERLN-SDDVIDVPMDMVRLTLDTIGVCGFGYRFNSFYR--EDF	175
EAQ27850.1	SYLPMMTDIATQLVMKWERMN-SDDVIDVPMDMVRLTLDTIGVCGFGYRFNSFYR--EDF	175
EIT84377.1	GYHPMMVDIAQQLLQKWARLN-PNEHIDVPEDMTRLTLDTIGLCGFNYRFNSFYR--ERS	172
CCG43686.1	GYHNKMVDLASQLIQKWARLN-PNEEVEVPEDMTRLTLDTIGLCGFNYRFNSFYR--ERS	172
ABX05160.1	NYFDDMLDIADQLFTKWERQG-PETDFDVADNMTRLTLDTIALCGFGYRFNSFYQ--REM	175
BAJ96920.1	GMFEGMMDIAEQLVLRWKRFG-EDSIINVSNEYTRVTLDTIGLCAFNYRFNSFYQ--NEL	170
GAB96874.1	GMYDGMADIAEQLMLKWERLG-PQADIDVVHDFTRLTLDTIALCSFSYRFNSFYR--ESM	211
EFH80345.1	GYIPMMQDIAEQLLGKWERMN-ANEEIDVSDMTRLTLDTIGLCGFDYRFNSFYR--EDL	176
EFH88481.1	NYEPMVDAAEQLMKWEHLN-PEDLINVPDDMTRVTLLETIGLCGFSYHFHAITR--EQM	168
EAW32450.1	NYFPMMLEIAEQMMTRWGQLN-AHDEIDVPADMVRLTLDTIGLCGFDYRFNSFSR--DEP	170
EIZ82104.1	AMFDRMEDIADQMLLRWERFG-PEATIDVADSMTRLTLDTIALCAFDRFNSFYQ--NEM	172
AEV70722.1	NYHGAMLDISSQLIARWDARVG-HALVDASTDLQKLAMDTVALAGFGARFHSFDH--DGL	178
EFC41452.1	DMYPQMYDIAEQLCTKWERLG-EHSVIDIVDNMTRLTLDTIALCAFNYRFNSFYH--NEM	201
ACV78954.1	RLYPSIVDPIQQLAERLVRME-PGSDVDVPTLTSAMTLDVVGLCLFSYRFGNVYT--NTP	170
ACV78964.1	EYMPRMLDIAGQLMGKWSRLN-PDEEVNVPVDMTSLTLDTIALCGFDYRFNSYR--DTQ	176
ACV81379.1	GYLPRMVDIAGQLMDKWSRLN-PDDEVNVPADM TALTLDTIALCGFGYRFNSLYR--DTP	175
EIZ78677.1	AMFDRMEEIADQMLLRWERFG-PDAVIDVADNMTRLTLDTIALCAFDRFNSFYQ--NEM	170
EJW15291.1	GYFDKMLDLAMQLIQKWSRLN-PDDQIEVPEDMTRLAMDITIGLCGFNYRFNSFYR--DQP	171
EJW16173.1	GYHEMMVDIAVQLIQKWSRLN-PDESIDVPEDMTRLTLDTIGLCGFNYRFNSFYR--DQP	174
EHQ58913.1	GYFDKMLEIAIQLVQKWSRLN-PDESVDVPEDMTRLALDITIGLCGFNYRFNSFYR--EQS	171
EHQ59900.1	GYHTMMVDIAQQLVQKWARLN-PDESVDVPEDMTRLTLDTIGLCGFNYRFNSFYR--EQP	172
EHB66924.1	GYHTKMLDIAMQLIQKWARLN-PDETVDVPADMTRLTLDTIGLCGFNYRFNSFYR--EDN	172
AFH60445.1	GYHAMMVDLAVQLVQKWARLN-PDESVEVGEDMTRLTLDTIGLCGFNYRFNSFYR--DQP	172
AEI42011.1	GYHAMMVDLAVQLVQKWARLN-PDESVEVGEDMTRLTLDTIGLCGFNYRFNSFYR--DQP	172
ADO57681.1	GYHNMLDLAVQLVQKWSRLN-PDESVEVPEDMTRLTLDTIGLCGFNYRFNSFYR--DQP	172
EGG32133.1	GYHTKMVDIAMQLIQKWARLN-PDETVDVPADMTRLTLDTIGLCGFNYRFNSFYR--EDN	173

EGL17662.1 GYHNMMVDIAVQLIQKWSRLN-ADEIIDVPEDMTRLTLDTIGLCGFNYRFNSFYR--EQP 173
ACX65034.1 GYHTKMVDIAMQLIQKWARLN-PDETVDVPADMTRLTLDTIGLCGFNYRFNSFYR--EDN 173
ACT11327.1 SMFDKMLDISEQMFLRWERFG-PDVIDDVADNMTRLTLDTIALCGFDYRFNSFYR--DDL 172
AEA28016.1 GYLPMMIDIALQLMQKWERLN-PGEQVDVTADMTRLTLDTIALCGFGYRFNSFYR--NTQ 178
EFP68091.1 GYFDVMLEVANALAEKWARQG-PDADIPVADDMTRLTLDTISLAGFGYRFDSFNT--PEL 185
EGY61507.1 GYFDVMLEVANALAEKWARQG-PDADIPVADDMTRLTLDTISLAGFGYRFDSFNT--PEL 185
EIE85788.1 AYQVEMAI IAQQTVKVFEQFK-PHEPVEI IEWTTNLTFFETIGRIGFGYFNLLVGRGQEQ 256
EIE92534.1 AYQGEMGIIAQQTMKIFEQYR-PDEPVEILDWTTNLTFFETIGRIGFGYEFNLLVDRDQEQ 256
BAE46296.1 NYHPSMLRALGGLTDSWDRVADAGETIDASSDANKLALDVIGLAGFGYDFASFIG---EE 226
BAH31604.1 SYHRTMLDVAGELVDHWDSDR-DSDSPIDVSADMTKLTLETIGRTGFSYSFDSFER--EEQ 181
EEN84644.1 SYHRTMLDVARELVDHWDSDR-ESDSPIDVSADMTKLTLETIGRTGFSYSFDSFER--EEQ 181
EEN88978.1 KYHPSMLRALDGLMASWDAAAAAGGKIDATADANKLALDVIGLAGFGYDFASFDG---DE 266
ABG96413.1 SYHRTMLDVAGELTEHWDER-VDGSPVDVSSDMTKLTLETIGRTGFSYSFDSFGR--ERP 213
BAH52971.1 SYHRTMLDVAGELTQHWQDR-VDGTPVDVSSDMTKLTLETIGRTGFSYSFDSFTR--ERP 180
EHI44575.1 SYHRTMLDVAGELTERWDER-VDGTPVDVSSDMTKLTLETIGRTGFSYSFDSFTR--ERP 215
EID73168.1 SYHRTMLDVAGELAEHWDER-VDGSPVDVSSDMTKLTLETIGRTGFSYSFDSFRR--ERP 180
EHK83749.1 GYHDSMLTVVDRLVDSWDSAAAADGEYVDVPKSMTSLTFDVI GRCGFSYDFDSFGR--TEP 158
EJI96173.1 SYHRTMLDVAGELTEHWDER-VDGSPVDVSSDMTKLTLETIGRTGFSYSFDSFGR--ERP 180
ABI79384.1 SYHDAMVDCVDQLCTYWTESA-ARGPVDVSSDMNRLTLEVI GRTGFGYSFDSFAP---GR 208
CAR47816.1 SYHDAMVECIDLQLCAYWADTA-SGEPVDISSDMNRLTLEVI GRTGFGYSFNSFAP---GR 210
AEK26937.1 GYHDSMLTVVDRLVDSWDSAAAADGEYVDVPKSMTSLTFDVI GRCGFSYDFDSFGR--TEP 190
ABE39056.1 SYHPSMVDIAEQLVKKWERLN-ADDEIDVVHDMTALTLDTIGLCGFNYRFNSFYR--RDY 175
ABD08340.1 SYHPSMVDIAEQLVKKWERLN-ADDEIDVVHDMTALTLDTIGLCGFNYRFNSFYR--RDY 175
CAM03474.1 TYHPVMLRVARRLLDSWDRAAAAASAPVDV PDDMTRMTLDTIGLAGFGDFGFSFGR--AEP 171
EJF54063.1 DMFDKMYDVAEQLCIKLERLG-PEEPFNVPANMTRLTLDTIALCAF DYRFNSFYK--NDM 186
AFC23737.1 DMFDKMYDVAEQLCVKLERLG-PDEPFNVPANMTRLTLDTIALCAF DYRFNSFYK--NEM 174
ADG98903.1 NYHASIRGAVEELVEVWAEDARSGAWVDVDSMNKLTLEVI SRAGFGHSFNLLSS--REE 182
EGI54680.1 SMFDRMYDIAEQMMVRWERFG-ESATIDVADNMTRLTLDTIALCAF DYRFNSFYQ--DQM 169
AEW97204.1 TYHPTMLRVAKRLIAAWDTALADGAPVDVADDMTRMTLDTIGLAGFGYDFGFSFR--GEP 188
CAJ88567.1 GYHVMLLDVAARLTDHWDRAGAAGRTVDVPGDMTKLTLETIARTGFGHDFGFSFER--SRP 197
BAC68285.1 GYFGQMLEIAQNLVKGWERKE-G-QPVNITDDYTRTLTLDTIALSGFGYRFDSFAK--EDL 178
BAC75137.1 GYHPMMLAVTERLIDHWDREQTAGRAVDVPGDMTKLTLETIARTGFGHDFGFSFER--ARP 193
EDY51256.1 AYHPTMVTVARRVLD AWRNAG--TPVDVPEDMTRLTLDTIGLCGF GHDFECFER--TTP 158
EFG07822.1 AYHPTMVTVARRVLD AWRNAG--TPVDVPEDMTRLTLDTIGLCGF GHDFECFER--TTP 190
EHN78335.1 GYHVMLLDVAARLTGHWDLAEASGRAVDVPGDMTKLTLETIARTGFGHDFGFSFER--ARP 197
CAB66201.1 GYHVMLLDVAARLTGHWDLAEASGRAVDVPGDMTKLTLETIARTGFGHDFGFSFER--SRL 197
EGG48117.1 GYHPMMLDVAERLLDRWDAEERAGRPVDV PADMTKLTLETIARTGFGHDFGFSFER--PRP 204
EFL20831.1 GYHATMLKVARELIGKWDRAAG-TEPVDVAADMTRLTFDTIGLCGF GYDFESFGR--DET 183

EFL28515.1	TYHPVMLQVARRVIDAWDARAASGEPVAVTDDMTRMTLDTIGLAGFGYDFGSFDR--DEP	179
AEY93311.1	GYHGMMLSVADRRLTDHWRHLAAGRTVDVPGDMTRLTLETIARTGFGHDFGSFER--DRP	196
AEY93321.1	TYHPVMLKVARRLIDAWDRAARAGRPVDVPPDDMTRMTLDTIGLAGFDYDFGSFER--AEP	177
EFD71156.1	GYHVMMLDVAARLTGHWDLAEASGRAVDVPGDMTKLTLETIARTGFGHDFGSFER--SRL	197
CBG67789.1	GYHATMLKVARELIGKWDGAAG-TEPVDVAEDMTRLTFDTIGLCGFGHDFESFGR--PEP	178
CBG68112.1	GYHPMMLDVAERLIEHWDREETAGSAVDVPGDMTKLTLETIARTGFGHDFGSFER--TRP	193
EFL10082.1	RYHATMLEVAGELTAAWDRA---TGPVDVAADMTRLTLETIGLAGFGYRFGSFER--AEP	210
EFF88741.1	SYHAPMLRVARSLIGKWDQADG--GPVDVAADMTRLTFDTIGMCGFGDFESFSR--DRA	177
EDY58112.1	AYHPMMLAVAGRLTDHWDREQTAGRSDVPGDMTKLTLETIARTGFGHDFGSFER--DRP	193
EFL36674.1	GYHPMMLDVARRLTEHWDRAAGAGRTVDVPGDMTKLTLETIARTGFGHDFGSFER--TRP	206
EFL36680.1	TYHPVMLRVAQRRLIASWDRDARAGQPVDVPGDMTRMTLDTIGLAGFGYDFGSFER--AEP	227
EFE65335.1	GYHPMMLDVAERLTDHWDRAAAAAGRTVDVPGDMTRLTLETIARTGFGHDFGSFER--SRP	194
EGX54696.1	GYHPMMLAVAERLTDHWDLAAAARGQSVDVPGDMTKLTLETIARTGFGHDFGSFER--SRP	194
ACZ89135.1	NYFDDMIDIADQMLTKWERLG-ADQDIDVADNMTRLTLDTIALSGFGYRFNSFYQ--REM	175
ABD83817.1	SYHPSMVDIAEQLVKKWERLN-ADDEIDVVHDMTALTLDTIGLCGFDYRFNSFYR--RDY	175
ADU39615.1	AYHPMMLDIAGQLVTKWERLN-FDEEVDVVRDMTALTLDTIGLCGFGYRFNSFYR--EGF	174
EJL72014.1	AYHPMMLDIAGQLVTKWERLN-FDEEVDVVRDMTALTLDTIGLCGFGYRFNSFYR--EGF	174

sp P14779.2 CPXB_PRIM2	HPFITSMVRLDEAMNKLQRAN--PDDPAYDENKRQFQEDIKVMNDLVDKIIADRKASGE	229
ADF40088.1	HPFITSMVRLDEAMNKLQRAN--PDDPAYDENKRQFQEDIKVMNDLVDKIIADRKASGE	229
ADE70259.1	HPFITSMVRLDEAMNKLQRAN--PDDPAYDENKRQFQEDIKVMNDLVDKIITDRKASGE	229
AEN88827.1	HPFITSMVRLDEAMNKLQRAN--PDDPAYDENKRQFQEDIKVMNDLVDKIIADRKASGE	229
KFN05180.1	HPFITSMVRLDEAMNKLQRAN--PDDPAYDENKRQFQEDIKVMNDLVDKIIADRKASGE	229
ACZ37122.1	HPFITSMVRLDEAMNKLQRAN--PDDPAYDENKRQFQEDIKVMNDLVDKIIADRKASGE	229
ADA57055.1	HPFITSMVRLDEAMNKLQRAN--PDDPAYDENKRQFQEDIKVMNDLVDKIIADRKASGE	229
ADA57058.1	HPFITSMVRLDEAMNKLQRAN--PDDPAYDENKRQFQEDIKVMNDLVDKIIADRKASGE	229
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ADA57061.1	HPFITSMVRLDEAMNKLQRAN--PDDPAYDENKRQFQEDIKVMNDLVDKIIADRKASGE	229
ADA57062.1	HPFITSMVRLDEAMNKLQRAN--PDDPAYDENKRQFQEDIKVMNDLVDKIIADRKASGE	229
ADA57068.1	HPFITSMVRLDEAMNKLQRAN--PDDPAYDENKRQFQEDIKVMNDLVDKIIADRKASGE	229
AAT62301.1	HPFITSMTRALDEAMHQLQRD--IEDKLMWRTKRQFQHDIQSMFSLVDNIIAERKSSSEN	231
AAM54108.1	HPFVDAMVRSLSVEAGERAERLP--GVQPFLVGRNQRYRDDIATMNRIADGIVAARAALPA	234
EFQ83738.1	HPFVPAMISALRTAQRLATLDTAPGGALIKRRLRRRNAPHQAYVDDLIDGVVAERRAGP-	233
EFL88452.1	HPFIDALNRTLETTCM-MQRGLP--FEETLLRKRHLHOMETDVFDMNNLVDDIIRERRSGRG	230
BAF89518.1	PAFVEAMNVVLTDMAEAPKRL--PEVIFYHEARKTRAAADKIMLEEVETIIAERRFAMAA	321
CBI43648.1	HPFITSMLRALQEAMRQSQRHS--LQDKLMIKTRHQFQODIEVMNELVDRIIAERRENPD	230
AEB22839.1	HPFINSMVRLDEAMHQMQRD--VQDKLMIKTRHQFHHDIQAMFSLVDSIIAERRSDGG	230
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EEL16232.1	HPFITSMTRALDEAMHQLQRD--IEDKLMWRTKRQFQHDIQSMFSLVDNIIAERKSSSEN	239
EDZ53094.1	HPFITSMTRALDEAMHQLQRD--IEDKLMWRTKRQFQHDIQSMFSLVDNIIAERKSSGD	231
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EEL75761.1	HPFITSMTRALDEAMHQLQRD--IEDKLMWRTKRQFQHDIQSMFSLVDNIIAERKSSGD	172
ACK88541.1	HPFITSMTRALDEAMHQLQRD--IEDKLMWRTKRQFQHDIQSMFSLVDNIIAERKSSEK	231
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sp 008394.1 CYPD_BACSU	HPFINSMVRALDEAMHQMORLD--VQDKLMVRTKRQFRYDIQTMFSLVDSIIAERRANGD	230
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ABS73124.1	HPFINSMVRALDEAMHQMORLD--VQDKLMIRTKRQFHHDIQAMFSLVDSIIAERRS-GG	229
ABS74786.1	HPFITSMLRALQEAMRQSQRHS--LQDKLMIKTRHQFQODIEEMNSLVDRMIAERRENPD	230
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EKF35778.1	HPFIESMLKGLNEAMDQSSRLP--IADKLMIKRRKEFEQNVDFMKQLVDDIIRERKT-QD	229
EGP08506.1	HPFVGALVRSLETIM-MTRGLP--LENLFMRARRATLSEDDVFMNKMVDEIIAERRKNTD	232
BAL78328.1	HPFVESLVRSLLETIM-MTRGLP--FEQLWMQKRRKTLGEDVAFMNMVDEIIAERRKSAE	232
BAC48147.1	HPFVESLVRSLLETIM-MTRGLP--FEQIWMQKRRKTLAEDVAFMNMVDEIIAERRKSAE	232
BAL12135.1	HPFVESLVRSLLETIM-MTRGLP--FEQLWMQKRRKTLAEDVAFMNMVDEIIAERRKSAE	232

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EJN11211.1	HPFVESLVRSLLETIM-MTRGLP--FEQVVMQKRRKTMGEDVAFMNKMOVDEIIAERRKNAD	232
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CCF12687.1	SPFINSMVRLQEAMHQSGRLK--IQNTLMVGTTRQFTQDIETMFSLVDKIIERKANGD	230
ABB05850.1	HPFVDAMVNTLSEAGKRELRPK--LVSKLMVKRSRQFDADIEVMRSLATKMIEDRRKNPH	230
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ABF10339.1	DPFVMAMVGALEAMQKLTRLP--IQDRFMGRAHRQAAEDIAYMRNLVDDVIRQRRVSPT	236
CAJ95800.1	HPFIEAMVGALEEAMSKLTRFA--LQDRFMHAAHQKFDDQDTRFMRDLVDDVIRRRRAGDA	256
AEI79937.1	HPFIEAMVGALEEAMSKLTRFA--LQDRFMHAAHQKFDDQDTRFMRDLVDDVIRRRRAGNA	256
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ABC62112.1	HPFIEALNRTLDTTQ-KMRGLP--GEKLLKRQOIEQLNEDAAYMNNLVDEIIRERRQTGE	232
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EFC41452.1	HPFVQSMFEALQEASSRTKRPS--ILNNVLVKTKKKHQRNIEYMHAVADEIVKDRKKNPS	259
ACV78954.1	TPFLQALDRALTLAEGAGKKD--LYAVMHPRATRDLRESAEVLI SFVDDFVKRRRSMPD	228
ACV78964.1	HPFVQAMVRVLTEAQRRAQPK--IAQRLRIKANRQTOEDQEFMKNLVQGLVEDRRRQGD	234
ACV81379.1	HPFVAAMVRNLLAQKEAKELP--LQRKLRVQARRQAREDFQINLVKGLIEDRRRQGD	233
EIZ78677.1	HPFVAAMASALAEAGMRAQRPD--IANTLRLSARRRYETDLALIKQVAETIIERRAQGQ	228
EJW15291.1	HPFVTSMVRALEESLNQAQRLG--IQDMLMVKTRRQFQDDIDVMFSLVDKIIAERKAHDH	229
EJW16173.1	HPFITSMVRALSEAMHQLORLN--IQDKLMVVTKRQFHHDIQFMYSLVDKIIAERKQOPE	232
EHQ58913.1	HPFVASMVRALSETMSQAQRLG--IQDMLMVKSRRQLQEDLEFMFSLVDKIIAERKAHGQ	229
EHQ59900.1	HPFIIISMVRALNEAMNQLORLG--LQDKMMILTKRQYKHDIQTMFSLVDKIIAERKAHGG	230
EHB66924.1	HPFIDSMVRALDEGMNQLHRLG--IQDMFMLKKKRQFQDDIQFMFSLVDELIRERQKHGG	230
AFH60445.1	HPFITSMVRALDEAMSQQLORLG--LQDKLMVISKRQYKHDIQTMFGLVDKIIAERKEHGS	230
AEI42011.1	HPFITSMVRALDEAMSQQLORLG--LQDKLMVISKRQYKHDIQTMFGLVDKIIAERKEHGP	230
ADO57681.1	HPFVTSMTRALDEAMGQLORLN--LQNKLMLSKKKQFKHDIETMFSLVDSIIQERKTVGN	230
EGG32133.1	HPFIDSMVRALDEGMNQLHRLG--IQDMFMIKKKRQFQEDIQFMFSLVDELIIQDRRKHGG	231

EGL17662.1	HPFITSMVRALHEAMNQTQRLG--LQDKLMVITKRQFNHDIQAMFALVDKLI AERRAOGT	231
ACX65034.1	HPFIDSMVRALDEGMNQLHRLG--IQDMFMIKKKRQFQEDIQFMFSLVDELIQDRRKHGG	231
ACT11327.1	LPFVKAIIVGSLKEAGLRVRRPG--IVNKLMI PSTRQYRTDKALMYSVVEQLIAARKMDPK	230
AEA28016.1	HPFVDAMMRTL TETQKRARLLP--PLIRLRRKAQRQLMADNKYMEREVQNILDERRRAGN	236
EFP68091.1	HPFLAAMVGVLSEAMGKLTRLP--LKDRFMREHHRRF EHDVAAMHQLVDEVIRARRQAKD	243
EGY61507.1	HPFLAAMVGVLSEAMGKLTRLP--LKDRFMREHHRRF EHDVAAMHQLVDEVIRARRQAKD	243
EIE85788.1	NPFIEAMGYCLSLALKRMQQAQ--FVKQLPIEANRRFDRSVRLMHEIVENVIRERKESPD	314
EIE92534.1	NAFIEAMGYCLKQAVQRIQQA--FVKQLPIEANRRFDRSVRLMHEVVENVIRERKASPD	314
BAE46296.1	HPFVGAMSRVLAHVNSTSNDIP-FLRKLKRGNGADLQNEKDIALLRVVDNVIAERQSKPG	285
BAH31604.1	HPFVKAMVGALSHSQR TTF LKSTALGRVLARRADQRDEVRKAYMAE VVDEVIRARRTSTE	241
EEN84644.1	HPFVKAMVGALSHSQR TTF LKSTALGRVLARRADQRDEVRKAYMAE VVDEVIRARRTSTE	241
EEN88978.1	HPFVGAMSRVLEHVNR TSN DIP-FLRKLKRGNGAELQY EKDI AFVVRTVDDVITERQAKQG	325
ABG96413.1	HPFVQAMVGALSHSQR TTFVKSSALGRLLMRRSDRRN IANLEHMAE VVDEVIRARRDSAE	273
BAH52971.1	HPFVQAMVGALSHSQR TTFVKSTALGRLLARRSDRRN VANLEHMAE VVDEVIRARRDSAE	240
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EID73168.1	HPFVQAMVGALSHSQR TTFVKSSALGRLLMRRSDRRN VANLEHMAE VVDEVIRARRDSAE	240
EHK83749.1	DPFIAAMSRALEYINRSSNDIP-ILRALFGRAAREQHERDIALMQQTVDRIVEER-MRSG	216
EJI96173.1	HPFVQAMVGALSHSQR TTFVKSSALGRLLMRRSDRRN IANLEHMAE VVDEVIRARRDSAE	240
ABI79384.1	HPFVEAMSRAMSYSVQTANDVP-VLREILGWKAMRQNP KDIALMKATVDEVIAARRSGAT	267
CAR47816.1	HPFVESMSRAMAYSVQTANDVP-VLREILGWKAMRQNP KDIALMKTTVDQVIAARRSGET	269
AEK26937.1	DPFIAAMSRALEYINRSSNDIP-ILRALFGRSAREQHERDIALMQETVDRIVEER-MRSG	248
ABE39056.1	HPFVESLVR SLETIM-MTRGLP--LENLWMKKRR ETLADDVVF MNAMVDEIIAERRKASE	232
ABD08340.1	HPFVESLVR SLETIM-MTRGLP--LENLWMKKRR DTLAEDVAF MNAMVDEIIAERRKAA-	231
CAM03474.1	HPFVGAMVRCLDWSMTRLSRV----PGTDH SERDEAFRADARYLASVVDEVINTRAAEGD	227
EJF54063.1	HPFVEAMLFILHEANQHMRRLP--IMNRLMYKTKERYNKDIQYMYTVAQKILDQRRKADK	244
AFC23737.1	HPFVEAMLFILHEANQHMRRLP--IMNRLMYKTKERYNKDIQYMYTVAQKILDQRRKADK	232
ADG98903.1	SPLIAAIVRELTYAQRRTDVLP-WFERMFLRKREHQHQADMTLAKRTVDDIVGERRRNPH	241
EGI54680.1	HPFVAAMVGALEESGRRSRLPP--GAGKLM L LRNR RF EADIKILRDVSNRLIEERHG DPR	227
AEW97204.1	HPFVAAMVRG L LHSQALLSRKA--DDGVDHSADEAFRADNAYLAQVVDEVIEARRASGE	246
CAJ88567.1	HPFVTAMVGTLT TYAQR LNTVPA-PLAPWLLRGASRRNTADIDHLNRTVDDLVRARRAAGG	256
BAC68285.1	HPFLNALLQALVESLRSQELP--VMTKMRKADDKKYRENIRLMRDLVENVIKERREGKG	236
BAC75137.1	HPFVTAMVGTLT TYAQR RNVP E-PLAPLLLRTATR RNAADLAYLNRTVDALVRARRTT--	250
EDY51256.1	HPFITAMVSALDHAQRKDTFIP--GLDFLRRGAEARQRIN IETMNR LADDIVRRRRRAASD	216
EFG07822.1	HPFITAMVSALDHAQRKDTFIP--GLDFLRRGAEARQRIN IETMNR LADDIVRRRRRAASD	248
EHN78335.1	HPFVTAMVGTLTGYAQR RNTPA-PLAPWLLRDASRRRNAAD IAYLNRTVDDLVRERRSTGG	256
CAB66201.1	HPFVTAMVGTLTGYAQR LNTVPA-PLAPWLLRDASRRRNAAD IAH LNRTVDDLVRERRANGG	256
EGG48117.1	HPFVTAMIGTLTHAQR RN AVPG-PLAPLLLRAAARRNEDDIALLNRTVDAVVAARREADG	263
EFL20831.1	HPFVTSLSRALGFAQSKGESIP--GTEVFKWRQAEQFRGDV TLMQDLVDDVIRQRRASGD	241

EFL28515.1	HPFVSAMVRCLEWSMRKVARR----	PDVDYSEQDEAFRADTAYLTSVVDEVIQARVAAGE	235
AEY93311.1	HPFVTAMVGTLAYAQRLNSVPG-	PLAPLLLRTAARRNAADIAHLNRTVDGLVAARRRSG-	254
AEY93321.1	HPFVESMVRCLEWSMTRLART----	PGTDHSAADAAFRKDADHLARVDDVIAARTGTDQ	233
EFD71156.1	HPFVTAMVGTGTYAQRLNTVPA-	PLAPWLLRDASRRNAADIAHLNRTVDDLVRERRANGG	256
CBG67789.1	HPFVTALSRALGFAQAKGESIP--	GLDLFKWKQAEQFRTDVAVMRDLVDDVIRERRASGD	236
CBG68112.1	HPFVAAMVGTLTYYAQQRNVVPD-	PLVPVLLRGAAQQNRADMAFLVETVDAVVRARRSPGG	252
EFL10082.1	HPFVTAMIRALRFAQLENVK--	VPFVRYALAGSAAQNRADIATMTDLVDEVIETRREG-	267
EFF88741.1	HPFVEAALRSLGHAQDVLEAIP--	GTEVFRRKQAEQFKRDNQAMRDLVDKIIQERRASGD	235
EDY58112.1	HPFVTAMVGTLTYYAQRLNSVPF-	PA---LVRRAAQRNADDIAYLNRMVDDLVRARRGA--	247
EFL36674.1	HPFVTAMIGTTLTYAQRLNTVPF-	PLAPLLLRSATTRNAQDIAHLNRTVDELVRARRTDG-	264
EFL36680.1	HPFVESMVRCLEWSMTRLARV----	PGKDYSADAAAFREDSAYLAQVVDEVIAARTGTDQ	283
EFE65335.1	HPFVTAMVGTLTYYAQRLNNVPA-	PLAPLLLRRANRRNTADIDRLNRIVDEVVRARRAHG-	252
EGX54696.1	HPFVTAMVGTLSHAQRLNTVPA-	AF---LPRRAARRNQADIDHLDRTVDELIRARTAGG-	249
ACZ89135.1	HPFIDAMVRALSEAGGRSRRVP--	LQNKLMFVSRROYEADAALMHDVCDELIARRRQADP	233
ABD83817.1	HPFVESLVRSLLETIM-MIRGLP--	LENFWMRRRRSDLATDVAFMNKMVDEIVAERRKSAE	232
ADU39615.1	HPFVDAMVRTLETVQ-NRRGLP--	LEELMLKKELAQQRKDIRYMHKMVEDIIEERRASGA	231
EJL72014.1	HPFVDAMVRTLETVQ-NRRGLP--	LEELMLKKELAQQRKDIRFMHKMVEDIIEERRASGA	231

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ADF40088.1 -----Q-SDDLTHMLNGKDPETGEPLDDENIRYQIITFLIAGHETTSGLLSFAL 278
ADE70259.1 -----Q-SDDLTHMLNGKDPETGEPLDDENIRYQIITFLIAGHETTSGLLSFAL 278
AEN88827.1 -----Q-SDDLTHMLNGKDPETGEPLDDENIRYQIITFLIAGHETTSGLLSFAL 278
KFN05180.1 -----Q-SDDLTHMLNGKDPETGEPLDDENIRYQIITFLIAGHETTSGLLSFAL 278
ACZ37122.1 -----Q-SDDLTHMLNGKDPETGEPLDDENIRYQIITFLIAGHETTSGLLSFAL 278
ADA57055.1 -----Q-SDDLTHMLNGKDPETGEPLDDENIRYQIITFLIAGHETTSGLLSFAL 278
ADA57058.1 -----Q-SDDLTHMLNGKDPETGEPLDDENIRYQIITFLIAGHETTSGLLSFAL 278
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ADA57061.1 -----Q-SDDLTHMLNGKDPETGEPLDDENIRYQIITFLIAGHETTSGLLSFAL 278
ADA57062.1 -----Q-SDDLTHMLNGKDPETGEPLDDENIRYQIITFLIAGHETTSGLLSFAL 278
ADA57068.1 -----Q-SDDLTHMLNGKDPETGEPLDDENIRYQIITFLIAGHETTSGLLSFAL 278
AAT62301.1 -----QEENDLLSRMLNVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI 281
AAM54108.1 G-----E-RPDDLRLMLTCADPVTGERLSARNVRYQLATFLIAGHETTSGLLSFAV 285
EFQ83738.1 -----ASDHDLGIMLQTPHPETGERLDDLNIRFQILTFLVAGHETTSGLLSFAL 283
EFL88452.1 -----DTSQKDLLNYMLAGVVKVTGESLSDENIRYQINTFLIAGHETTSGLMSFTL 281
BAF89518.1 G-----APVPTDLLQVMLTTPDRVGTGQKLPDDNIRGQLIVLLIAGHETTSGLMLAYAL 373
CBI43648.1 -----ENLSDLLALMLEAKDPVTGERLDDENIRYQIITFLIAGHETTSGLLSFAI 280
AEB22839.1 -----RDEKDLLARMLNVEDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI 280
EDT22025.1 -----QEENDLLSRMLNVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI 281
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ACP19384.1 -----QEENDLLSRMLNVKDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI 281
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EEL81346.1 -----QEENDLLSRMLNVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI 295
EEL87105.1 -----QEENDLLSRMLNVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI 295
EEL75761.1 -----QEENDLLSRMLNVKDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI 222
ACK88541.1 -----QEENDLLSRMLNVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI 281
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EEL05393.1 -----QEENDLLSRMLNVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI 295
EEK94080.1 -----QEENDLLSRMLNVKDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI 284
EEK99882.1 -----QEENDLLSRMLHVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI 284
EEK55784.1 -----QEENDLLSRMLNVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI 289
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BAL18840.1 -----QEENDLLSRMLHVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI 281
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EEL21990.1 -----QEENDLLARMLNVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI 289
EEL33825.1 -----QEENDLLARMLNVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI 289

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EEL50167.1	-----QEENDLLSRMLNVKDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI	359
EJR22930.1	-----QEENDLLSRMLNVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI	281
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CBY93692.1	-----QEENDLLSRMLHVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI	281
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ADV93500.1	-----DNIKDLLSMLLYAKDPVTGETLDDENIRYQIITFLIAGHETTSGLLSFAI	280
ADV95715.1	-----QDEKDLLARMLNVEDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAT	280
BAI84248.1	-----QDEKDLLARMLNVEDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAT	280
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sp 008394.1 CYPD_BACSU	-----QDEKDLLARMLNVEDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAT	280
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EEM76899.1	-----QEENDLLSRMLNVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI	289
EEM88909.1	-----QEENDLLSRMLNVKDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI	289
EEM38196.1	-----QEENDLLSRMLNVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI	281
EEM21858.1	-----QEENDLLSRMLNVKDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI	284
ABK86139.1	-----QEENDLLSRMLNVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI	289
EJQ37805.1	-----QEENDLLARMLNVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI	281
CCF04242.1	-----RDEKDLLARMLNVEDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI	279
CCF05972.1	-----ENLSDLLALMLEAKDPVTGERLDDENIRYQIITFLIAGHETTSGLLSFAI	280
ABS73124.1	-----RDEKDLLARMLNVEDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI	279
ABS74786.1	-----ENLSDLLALMLEAKDPVTGERLDDENIRYQIITFLIAGHETTSGLLSFAI	280
EKE46398.1	-----RDEKDLLARMLNVEDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI	279
EKE48022.1	-----ENLSDLLALMLEAKDPVTGERLDDENIRYQIITFLIAGHETTSGLLSFAI	280
CCG48683.1	-----RDEKDLLARMLNVEDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI	279
AFJ60789.1	-----RDEKDLLARMLNVEDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI	286
AFJ62808.1	-----ENLSDLLALMLEAKDPVTGERLDDENIRYQIITFLIAGHETTSGLLSFAI	280
EEK66903.1	-----QEENDLLSRMLNVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI	295
EJQ52935.1	-----QEENDLLSRMLNVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI	281
EJS69574.1	-----QEENDLLSRMLNVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI	281
EJV63294.1	-----QEENDLLSRMLNVQDPETGEKLDDENIRFQIITFLIAGHETTSGLLSFAI	281
EKF35778.1	-----QTGDDLLSMLNAKDPETGERLSDENIRYQIITFLIAGHETTSGLLSFAI	279
EGP08506.1	A-----AAGTKDMLNAMMTGVDKLTGQQLDDVNIIRYQINTFLIAGHETTSGLLSCAI	284
BAL78328.1	G-----IDDKKDMAAMMTGVDRATGEQLDDVNIIRYQINTFLIAGHETTSGLLSCTI	284
BAC48147.1	G-----IDDKKDMAAMMTGVDRSTGEQLDDVNIIRYQINTFLIAGHETTSGLLSYTL	284
BAL12135.1	G-----VDDKKDMAAMMTGVDRSTGEQLDDINIIRYQINTFLIAGHETTSGLLSYTL	284

CCE00185.1	S-----GAASADDDKMLNAMMSGVDRATGEQLDDVNIRYQINTFLIAGHETTSGLLSYTI	288
EIG57609.1	A-----TDDKKDMLAAMMTGVDRSTGEQLDDVNIRYQINTFLIAGHETTSGLLSCTL	284
EHR02046.1	A-----TDDKKDMLAAMMTGVDRSTGEQLDDVNIRYQINTFLIAGHETTSGLLSCTL	284
EJN11211.1	A-----IDDKKDMLAAMMTGVDRSTGEQLDDVNIRYQINTFLIAGHETTSGLLSCTI	284
CCF15606.1	-----HDANDLLSHMLKGKDPQTGEGLDDENIRYQIITFLIAGHETTSGLLSFAL	222
CCF12687.1	-----QGEIDLLTRMLNGKDPQTGERLDDKNIRYQIITFLIAGHETTSGLLSFAL	280
ABB05850.1	V-----NEESMDLLDRMLNGIDPVTGEKLDDENIVFQMITFLIAGHETTSGLLSFAT	282
EHP43606.1	K-----DASQPPPHDLLNLMLEARDPDTDQRLDDVNIRNQVITFLIAGHETTSGLLTFAL	309
ABF10339.1	-----SGMDLLNLMLEARDPETDRRLDDANIRNQVITFLIAGHETTSGLLTFAL	285
CAJ95800.1	A-----ERPGGTANDLLGLMLEARDPDTDQRLDDENIRNQVITFLIAGHETTSGLLTFAL	311
AEI79937.1	A-----QRRGGTANDLLGLMLEARDPDTDQRLDDENIRNQVITFLIAGHETTSGLLTFAL	311
AFD27790.1	A-----D-EKDDLLALMLRGRDPETGEGLSLENVRNQMVTFIAGHETTSGLLSFAV	280
ABC62112.1	S-----GQGDLLDFMLSGRDPVTGERLSDENIRYQINTFLIAGHETTSGLLSFTL	282
EAQ27850.1	D-----GPEDLLDFMLSGRDPVTGERLSDENIRYQINTFLIAGHETTSGLLSFTL	282
EIT84377.1	-----SDAKDLLSLMLNGKDPETGQKLLDENIRYQIITFLIAGHETTSGLLAFTL	280
CCG43686.1	-----QGEDDLLAHMLKGKDPETGEALDDENIRFQIITFLIAGHETTSGLLSFAI	280
ABX05160.1	N-----E-VPNDLLGLMLNAKDSITGEGLDDANIRNQLVTFIAGHETTSGLLSFAT	284
BAJ96920.1	G-----EKKDVLDIMLTAKDPVTGEGLSDENIRYQMVTFIAGHETTSGLLSFAT	278
GAB96874.1	P-----D-GQTDILDTMLSAQDPTTGERLSDENVRNQMVTFIAGHETTSGLLSFTL	320
EFH80345.1	-----NAQKKDLLSYMLSGVDKQSGEGLNDVNIRYQIITFLIAGHETTSGLLSFSL	285
EFH88481.1	E-----GQKYNDLLNAMLNGIDKQTGEKLDDVNIRNQIITFLIAGHETTSGLLSFAT	278
EAW32450.1	-----TTDAKDLLSLMLTGSDPATGEKLSDENIRYQIITFLIAGHETTSGLLSFAL	279
EIZ82104.1	A-----A-TRHDLLNLMLEGRDPETGERLSDENIRYQMVTFIAGHETTSGLLSFAL	281
AEV70722.1	-----ADIDDLLYVMVGR-DSDGQPVLDDQNIRNQIMTFLIAGQLTTSELMPNAL	273
EFC41452.1	D-----VNDLLNRMLLGKDPVTNQGLSDENIRYQMVTFIAGHETTSGLLSFTL	308
ACV78954.1	G-----N-APD DLLQHMLTAADPDTGERLSDIEVRQQTLLTLLIAGHETTSGLTALFAL	279
ACV78964.1	-----QADNTDLLGRMLTGRDK-NGEGLPDENIIAQCLTFLVAGHETTSGLLSFAI	284
ACV81379.1	-----AADNTDLLGRMLTGVDKSSGEGLPDDNIIAQCMTFLVAGHETTSGLLSFAI	284
EIZ78677.1	V-----G-ARGDLLDIMLSGRDPVTGEGLSDTNIRHQLVTFIAGHETTSGLLSFAL	279
EJW15291.1	-----EGANDLLAYMLKGKDPDTGESLDDANIRYQIITFLVAGHETTSGLLSFAL	279
EJW16173.1	-----EAGQDLLSHMLSGKDPATGESLDDENIRYQIITFLIAGHETTSGLLSFAI	282
EHQ58913.1	-----QEEDDLLAHMLKGQDPETGEALDDTNIRHQIITFLIAGHETTSGLLSFAL	279
EHQ59900.1	-----EDGKDLLAHMLTGKDPETGEPLDDENIRYQIITFLIAGHETTSGLLSFAM	280
EHB66924.1	-----DEG-DLLAHMLEGVDPDTGERLDQENIRYQMITFLIAGHETTSGLLSFAI	279
AFH60445.1	-----KEGEDLLAHMLNGRDPHTGEALDDENIRYQIITFLIAGHETTSGLLTFAL	280
AEI42011.1	-----KDGEDLLAHMLNGRDPHTGEALDDENIRYQIITFLIAGHETTSGLLTFAL	280
ADO57681.1	-----QGEEDLLARMLEKDPETGETLDDENIRYQIITFLIAGHETTSGLLSFAI	280
EGG32133.1	-----EEG-DLLAHMLEGVDPDTGESLDHENIRYQIITFLIAGHETTSGLLSFAI	280

EGL17662.1	-----EGIDLLSHMLNGKDPETGESLGDENIRYQIITFLIAGHETTSGLLSFAL	281
ACX65034.1	-----EEG-DLLAHMLEGVDPDTGESLDHENIRYQIITFLIAGHETTSGLLSFAI	280
ACT11327.1	A-----S-EKNDLLNRMLNGVDPQTGEKLSDENIAHQMLTFLVAGHETTSGMLSFTV	281
AEA28016.1	-----ADEHQDLLSCMLTGVDKKTGLKLPDENIVGQCLTFLVAGHETTSGLLSFTI	287
EFP68091.1	-----GGAGASDLLGLMLNARDPVSDPELDDTNIRFQVITFLIAGHETTSGLLTFAL	295
EGY61507.1	-----GGAGASDLLGLMLNARDPVSDPELDDTNIRFQVITFLIAGHETTSGLLTFAL	295
EIE85788.1	A-----TNKEKDLLGYMLNARDE-HNLGLSDDNIRDQVVTFLIAGHDTTANTLAWAL	365
EIE92534.1	A-----KNKEKDLLGFMLNACDE-HNLGLSDENIRDQVVTFLIAGHDTTANTLAWTL	365
BAE46296.1	-----EHQDDLLDMLHSADAETGEKLDPVNIRNQVVTFLVAGNETTAGTLAFAL	335
BAH31604.1	-----PGPEDLLELMLRAARENDPNRIDEINIRHQVVTFLVAGHETTSGALSFAI	291
EEN84644.1	-----PGPEDLLELMLRAARENDPNRIDEINIRHQVVTFLVAGHETTSGALSFAI	291
EEN88978.1	-----EHQDDLLDMLNNIIDDETGETLDPVNIRNQVLTFLVAGNETTAGTIAFAL	375
ABG96413.1	-----DGPEDLLELMLRAARENDPHRIDEINIRHQVVTFLVAGHETTSGALSFAI	323
BAH52971.1	-----AGPEDLLELMLRAARENDPNRIDEINIRHQVVTFLVAGHETTSGALSFAI	290
EHI44575.1	-----TGPEDLLELMLRAAREDDPHRIDEINIRHQVVTFLVAGHETTSGALSFAI	325
EID73168.1	-----AGPEDLLELMLRAAREDDPHRIDEINIRHQVVTFLVAGHETTSGALSFAI	290
EHK83749.1	-----EQHGDDLLDMMHTVDPDTGEQLDRESIRNQVLTFLVAGNETTAATLGFVAV	266
EJI96173.1	-----DGPEDLLELMLRAARENDPHRIDEINIRHQVVTFLVAGHETTSGALSFAI	290
ABI79384.1	-----PRQDDLLQRMNDPDPETGEMMSDQSIIRNQVLTFLIAGHETTAGLLSFAL	317
CAR47816.1	-----PRQDDLLQRMLENPDPQTGEMMSNQSIIRNQVLTFLIAGHETTAGLLSFAL	319
AEK26937.1	-----EQHGDDLLDMMHTVDPDTGEQLSPESIRNQVLTFLVAGNETTAATLGFVAV	298
ABE39056.1	S-----AADKKDMLGAMLAGVDRATGEPLDDVNIRYQINTFLIAGHETTSGLLSCAI	284
ABD08340.1	A-----VADKMDMLGAMMTGVDKVTGEPLDDVNIRYQINTFLIAGHETTSGLLSCAI	283
CAM03474.1	-----TSGEDLLGLMLGARHPADGTTLDAANIRNQIITFLIAGHETTSGTLSFAL	277
EJF54063.1	A-----E-QVDDLLGRMLEGVDPDTGEKLSQNI IYQMVTFLIAGHETTSMMMAFTF	295
AFC23737.1	A-----E-QVDDLLGRMLEGVDPDTGEKLSQNI IYQMVTFLIAGHETTSMMMAFTF	283
ADG98903.1	-----ESPTDILDMLLTAVDPETGEQLDDANIRNQILTFLIAGSETSANAVSFAL	291
EGI54680.1	L-----G-ERGDLLDRMLTARDPETGEMLSRDNIQYQMITFLVAGHETTSGLLSFAT	278
AEW97204.1	-----TGTDDLLGLMLGAPHPSDGTPLDAANIRNQVITFLIAGHETTSGALSFAI	296
CAJ88567.1	R-----GGTGDLLDRMLETAHPETGERLSPENVRRQVITFLVAGHETTSGALSFAI	307
BAC68285.1	-----TGEDDLLGLMLEATDPETGKGLDDDNVRDQVVTFLIAGHETTSGLLSFAT	286
BAC75137.1	-----SGEGDLLDRMLDTARPGTGERLAPENIRRQVITFLVAGHETTSGALSFAI	300
EDY51256.1	-----GGADSADDLLGLMLHAEDKDTGQPLDDMNIRYQMLTFLIAGHETTSGALSFAI	269
EFG07822.1	-----GGADSADDLLGLMLHAEDKDTGQPLDDMNIRYQMLTFLIAGHETTSGALSFAI	301
EHN78335.1	DGGR-----GGDGDLLDRMLETAHPRTGERLSPENVRRQVITFLVAGHETTSGALSFAI	310
CAB66201.1	TGGGTGSG--SGSGDLLDRMLETAHPRTGERLSPQNVRRQVITFLVAGHETTSGALSFAI	314
EGG48117.1	S-----GSTGDLLDRMLETAHPETGERLAPDNVRRQVITFLVAGHETTSGALSFAI	314
EFL20831.1	-----QSTDDLLGRMLHTRDAGTGEPLDDVNIRHQAITFLIAGHETTSGALSFAI	291

EFL28515.1	-----SGTDDLGLMLGATHPSDGTPLDHANIRDQVITFLIAGHETTSGALSFAL	285
AEY93311.1	-----GEGDLLDRMLATAHPRTGEKLSPENVRKQVITFLVAGHETTSGALSFAL	304
AEY93321.1	-----SGAEDLLGLMLSAPHPADGTTLDAANIRNQVITFLIAGHETTSGAMSFAL	283
EFD71156.1	TGGGTGSGSGSGRGDLLDRMLETAHPRTGERLSPQNVRRQVITFLVAGHETTSGALSFAL	316
CBG67789.1	-----TGTDDLGRMLHTRDQVTGEPLDDVNIRHQAITFLIAGHETTSGALSFAL	286
CBG68112.1	-----GRGAGDGDLLDRMLETAHPETGERLSAENVRRQVITFLVAGHETTSGALSFAL	305
EFL10082.1	-----GEVRDLLGLMLAEGHPETGEQLDPVNIRNQAITFVVAGHETTSGALSFAL	317
EFF88741.1	-----TSTDDLGRMLNTPDPVTGELLDEANMRNQVITFLIAGHETTSGALSFAL	285
EDY58112.1	-----SGDGDLLDRMLETAHPETGERLSPENVRRQVITFLVAGHETTSGALSFAL	297
EFL36674.1	-----GGQGDLLDRMLETAHPVTGERLAPQNVRRQVITFLVAGHETTSGALSFAL	314
EFL36680.1	-----SQADDLLGLMLTAEHPDDGSTLDTANIRNQVITFLIAGHETTSGAMSFAL	333
EFE65335.1	-----GGDGDLLDRMLDTAHPETGERLSPENVRRQVITFLVAGHETTSGALSFAL	302
EGX54696.1	-----PGDGDLLDRMLDTAHPVTGERLSARNVRRQVITFLVAGHETTSGALSFAL	299
ACZ89135.1	G-----E-APRDLGLMLGAADPRTGERLDDANISNQLVTFLIAGHETTSGLLSFAV	284
ABD83817.1	A-----SDGKKDMLNAMMSGVDRSTGEQLDDVNIRYQINTFLIAGHETTSGLLSYAI	284
ADU39615.1	D-----IATKPDLLSYMIAGVDKKSQEQLTDKMIRDECIEFLIAGHETTSGLLSFAI	283
EJL72014.1	D-----IATKPDLLSYMIAGVDKKSQEQLTDKMIRDECIEFLIAGHETTSGLLSFAI	283

sp P14779.2 CPXB_PRIM2	YFLVKNPHVLQKAAEEAARVLVDPV---PSYKQVKQLKYVGMVLNEALRLWPTAPAFSLY	335
ADF40088.1	YFLVKNPHVLQKAAEEAARVLVDPV---PSYKQVKQLKYVGMVLNEALRLWPTAPAFSLY	335
ADE70259.1	YFLVKNPHVLQKAAEEAARVLVDPV---PSYKQVKQLKYVGMVLNEALRLWPTAPAFSLY	335
AEN88827.1	YFLVKNPHVLQKAAEEAARVLVDPV---PSYKQVKQLKYVGMVLNEALRLWPTAPAFSLY	335
KFN05180.1	YFLVKNPHVLQKAAEEAARVLVDPV---PSYKQVKQLKYVGMVLNEALRLWPTAPAFSLY	335
ACZ37122.1	YFLVKNPHVLQKAAEEAARVLVDPV---PSYKQVKQLKYVGMVLNEALRLWPTAPAFSLY	335
ADA57055.1	YFLVKNPHVLQKAAEEATRVLVDPV---PSYKQVKQLKYVGMVLNEALRLWPTAPAFSLY	335
ADA57058.1	YFLVKNPHVLQKAAEEAARVLVDPV---PSYKQVKQLKYVGMVLNEALRLWPTAPAFSLY	335
ADA57059.1	YFLVKNPHVLQKAAEEAARVLVDPV---PSYKQVKQLKYVGMVLNEALRLWPTAPAFSLY	335
ADA57061.1	YFLVKNPHVLQKAAEEAARVLVDPV---PSYKQVKQLKYVGMVLNEALRLWPTAPAFSLY	335
ADA57062.1	YFLVKNPHVLQKAAEEATRVLVDPV---PSYKQVKQLKYVGMVLNEALRLWPTAPAFSLY	335
ADA57068.1	YFLVKNPHVLQKAAEEAARVLVDPV---PSYKQVKQLKYVGMVLNEALRLWPTAPAFSLY	335
AAT62301.1	YFLLKNPDKLKKAYEEVDRVLT DST---PTYQQVMKLKYIRMI LNESLRLWPTAPAFSLY	338
AAM54108.1	HRLLAHPEVLRKAKDAVDGVLGDRV---PAFEDLARLDYLGQVLR ETLRLHPTAPAFALA	342
EFQ83738.1	YYLARHPEILARAQAETDEILGPDPAVPEFEQVAKFRYLRRVLDEALRLWPTAPAFGRG	343
EFL88452.1	YYLLQHPDILDRCYEEVDRVLGRDISPPDLSKVNQLTYINQVLSEALRLWPTAPALGLA	341
BAF89518.1	YHLWKYPETMEKLI AEVDEV LGRDFS YKPTYEDVGR LAYTQRVLKEALRLC PVPMPFRY	433
CBI43648.1	YCLLNKNDKLLKAIQEAERVLTGET---PEYKQIQQLTYIRMV LNETLRLYPTAPAFSLY	337
AEB22839.1	YFLLKHPRVLEKAYEEADRVL TDPV---PSYKQVLELTYIRMI LQESLRLWPTAPAFSLY	337
EDT22025.1	YFLLKNPDKLKKAYEEVDRVLT DST---PTYQQVMKLKYIRMI LNESLRLWPTAPAFSLY	338
AFH84458.1	YFLLKNPDKLKKAYEEVDRVLT DST---PTYQQVMKLKYIRMI LNESLRLWPTAPAFSLY	346
ADP31197.1	YFLLKNPDKMKKAYEEVDQVLTGPT---PTYKQVLQLSYIRMI LNESLRLWPTAPAFSLY	337
ACP19384.1	YFLLKNPDKLKKAYEEVDRVLT DPT---PTYEQVMKLKYIRMI LNESLRLWPTAPAFSLY	338
ADL27534.1	YFLLKNPDKLKKAYEEVDRVLT DPT---PTYQQVMKLKYIRMI LNESLRLWPTAPAFSLY	338
ACO29732.1	YFLLKNPDKLKKAYEEVDRVLT DPT---PTYQQVMKLKYIRMI LNESLRLWPTAPAFSLY	338
EDX65100.1	YFLLKNPDKLKKAYEEVDRVLT DPT---PTYQQVMKLKYIRMI LNESLRLWPTAPAFSLY	338
EEK61456.1	YFLLKNPDKLKKAYEEVDRVLT DPT---PTYQQVMKLKYIRMI LNESLRLWPTAPAFSLY	338
EEL16232.1	YFLLKNPDKLKKAYEEVDRVLT DPT---PTYQQVMKLKYIRMI LNESLRLWPTAPAFSLY	346
EDZ53094.1	YFLLKNPDKLKKAYEEVDRVLT DPT---PTYQQVMKLKYIRMI LNESLRLWPTAPAFSLY	338
EEL81346.1	YFLLKNPDKLKKAYEEVDRVLT DPT---PTYQQVMKLKYIRMI LNESLRLWPTAPAFSLY	352
EEL87105.1	YFLLKNPDKLKKAYEEVDRVLT DPT---PTYQQVMKLKYIRMI LNESLRLWPTAPAFSLY	352
EEL75761.1	YFLLKNPDKLKKAYEEVDRVLT DPT---PTYEQVMKLKYIRMI LNESLRLWPTAPAFSLY	279
ACK88541.1	YFLLKNPDKLKKAYEEVDRVLT DPT---PTYQQVMKLKYIRMI LNESLRLWPTAPAFSLY	338
EJQ05303.1	YFLLKNPDKLEKAYEEVDRVLT DPT---PTYQQVMKLKYIRMI LNESLRLWPTAPAFSLY	338
EEK50040.1	YFLLKNPDKLKKAYEEVDRVLT DAT---PTYQQVMKLKYIRMI LNESLRLWPTAPAFSLY	338
AAS42149.1	YFLLKNPDKLKKAYEEVDRVLT DPT---PTYQQVMKLKYIRMI LNESLRLWPTAPAFSLY	338
AAP10153.1	YFLLKNPDKLKKAYEEVDRVLT DPT---PTYQQVMKLKYMRMI LNESLRLWPTAPAFSLY	338
EEK83466.1	YFLLKNPDKLKKAYEEVDRVLT DPT---PTYQQVMKLKYIRMI LNESLRLWPTAPAFSLY	346

ACK63698.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYEQVMKLYIRMI LNESLRLWPTAPAFSLY	279
EJS57156.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJS56605.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJS68951.1	YLLKNPDKLRKAYEEVDRVLTGPT---PTYQQVLQLKYIRMI LNESLRLWPTAPAFSLY	337
EJQ10567.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJQ13433.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJQ20399.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJQ30236.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJQ51278.1	YLLKNPDKLRKAYEEVDRVLTGPT---PTYQQVLQLKYIRMI LNESLRLWPTAPAFSLY	337
EEL10858.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYMRMI LNESLRLWPTAPAFSLY	338
EEL05393.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	352
EEK94080.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	341
EEK99882.1	YFLLKNPDKLEKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	341
EEK55784.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	346
ADK05784.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
AAU17340.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EEL64394.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
AEW56259.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
AFQ11690.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EAL16831.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
ACK94296.1	YFLLKNPDKLKKAYEEVDRI LDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EDZ58760.1	YFLLKNPDKLEKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJV84218.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJQ69212.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
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EJQ95474.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EEK44229.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	346
EEK88560.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYEQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJR07451.1	YFLLKNPDKLKKAYEEVDRI LDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJR16542.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
BAL18840.1	YFLLKNPDKLEKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EDX69960.1	YFLLKNPDKLKKAYEEVDRVLTDPDST---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
ACM13462.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EEK75631.1	YFLLKNPDKLKKAYEEVDRVLADST---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EEL25491.1	YFLLKNPDKLKKAYEEVDRVLTDPDST---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	279
EEL21990.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	346
EEL33825.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	346

EEL44933.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	346
EEL50167.1	YLLKNLDKLRKAYEEVDQVLTGPT---PTYQQVLQLKYIRMI LNESLRLWPTAPAFSLY	416
EJR22930.1	YFLLKNPDKLKKAYKEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJP91231.1	YFLLKNPDKLKKAYEEVDRIILTDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJR37623.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJR50635.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJR64551.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJR75620.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYEQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJR82049.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJR83659.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJR91135.1	YLLKQPEVLKAYEEVDHVI TGSV---PTYQQVLQLKYIRMI LNESLRLWPTAPV FALY	336
EJR97241.1	YFLLKNPDKLKKAYEEVDRVLTNPDPT---PTYEQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJS05852.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EDX58768.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
AAU24352.1	YLLKHPDKLKKAYEEADRVLTDPV---PSYQVQQLKYIRMI LNESIRLWPTAPAFSLY	337
ABY44122.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EDW23201.1	YFLLKNPEKLLKAVQEADDVLQGGGL---PTFKQVQKLN YTRMVLNESLRLWPTAPT FSLY	336
ABV62358.1	YFLLKNPEKLLKAVQEADDVLQGGGL---PTFKQVQKLT YTRMVLNEALRLWPTAPT FSLY	336
EIF12263.1	YFLLKHPVLEKAYEEADRVLTDPV---PSYQVLELSYIRMI LQESLRLWPTAPAFSLY	336
EIF14027.1	YCLLNKDKLKKAVQEAERVLTGET---PEYKQIQQLTYIRMV LNETLRLYPTAPAFSLY	337
EHL75405.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EJD67577.1	YFLLKHPVLEKAYEEADRVLTDPV---PSYQVLDLTYIRMI LQESLRLWPTAPAFSLY	336
EJD68347.1	YCLLNKDKLKKAVQEAERVLTGET---PEYKQIQQLTYIRMV LNETLRLYPTAPAFSLY	337
EFV73436.1	YLLKHPDKLKKAYEEADRVLTDPV---PSYQVQQLKYIRMI LNESIRLWPTAPAFSLY	351
CBY93692.1	YFLLKNPDKLKKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
AFI27355.1	YFLLKHPDKLKKAYEEVERVLTDA---PTYQVLELKYIRMI LNESLRLWPTAPAFSLY	337
AFI29229.1	YCLLTHPEKLLKQEEADRVLTDDT---PEYKQIQQLKYIRMV LNETLRLYPTAPAFSLY	337
EIL85422.1	YFLLKNPEKLLKAVHEADEVLQDGL---PTFKQVQQLSYTRM VLHEALRLWPTAPS FSVY	336
ADV93500.1	YCLLTHPEKLLKQEEADRVLTDDT---PEYKQIQQLKYTRM VLNETLRLYPTAPAFSLY	337
ADV95715.1	YFLLKHPDKLKKAYEEVDRVLTDA---PTYQVLELTYIRMI LNESLRLWPTAPAFSLY	337
BAI84248.1	YFLLKHPDKLKKAYEEVDRVLTDA---PTYQVLELTYIRMI LNESLRLWPTAPAFSLY	337
EFG90288.1	YCLLTHPEKLLKQEEADRVLTDDT---PEYRQIQQLKYIRMV LNETLRLYPTAPAFSLY	337
EFG91781.1	YFLLKHPDKLKKAYEEVDRVLTGAA---PTYQVLELKYIRMI LNESLRLWPTAPAFSLY	337
AEP85668.1	YFLLKHPDKLEKAYEEVDRVLTGAA---PTYQVLELKYIRMI LNESLRLWPTAPAFSLY	337
AEP87558.1	YCLLTHPEKLLKQEEADRVLTDDT---PEYRQIQQLKYIRMI LNETLRLYPTAPAFSLY	337
sp 008336.1 CYPB_BACSU	YCLLTHPEKLLKQEEADRVLTDDT---PEYKQIQQLKYIRMV LNETLRLYPTAPAFSLY	337
sp 008394.1 CYPD_BACSU	YFLLKHPDKLKKAYEEVDRVLTDA---PTYQVLELTYIRMI LNESLRLWPTAPAFSLY	337
AEP89812.1	YFLLKHPDKLKKAYEEVDRVLTDA---PTYQVLELKYIRMI LNESLRLWPTAPAFSLY	337

AEP91702.1	YCLLTHPEKLLKKAQEEADRVLTDDT---PEYKQIQQLKYIRMVNNETLRLYPTAPAFSLY	337
EHA31094.1	YCLLTHPEKLLKKAQEEADRVLTDDT---PEYKQIQQLKYTRMVNNETLRLYPTAPAFSLY	339
ADH07708.1	YFLLKNPDKLLKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
EEM28177.1	YFLLKNPDKLLKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
AFQ14162.1	YFLLKNPDKLLKAYEEVDRI L TDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
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EEN02344.1	YFLLKNPDKLLKAYEEVDRI L TDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
AFU13781.1	YFLLKNPDKLLKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	346
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EEM59126.1	YFLLKNPDKLLKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	346
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EEM76899.1	YFLLKNPDKLLKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	346
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EEM38196.1	YFLLKNPDKLLKAYEEVDRI L TDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
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EJQ37805.1	YFLLKNPDKLLKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
CCF04242.1	YFLLKHPRVLEKAYEEADRVLTDPV---PSYQVLELSYIRMI LQESLRLWPTAPAFSLY	336
CCF05972.1	YCLLKNKDKLLKAVQEAERVLTGET---PEYKQIQQLTYIRMVNNETLRLYPTAPAFSLY	337
ABS73124.1	YFLLKHPRVLEKAYEEADRVLTDPV---PSYQVLDLTYIRMI LQESLRLWPTAPAFSLY	336
ABS74786.1	YCLLKNKDKLLKAVQEAERVLTGET---PEYKQIQQLTYIRMVNNETLRLYPTAPAFSLY	337
EKE46398.1	YFLLKHPRVLEKAYEEADRVLTDPV---PSYQVLELSYIRMI LQESLRLWPTAPAFSLY	336
EKE48022.1	YCLLKNKDKLLKAVQEAERVLTGET---PEYKQIQQLTYIRMVNNETLRLYPTAPAFSLY	337
CCG48683.1	YFLLKHPRVLEKAYEEADRVLTDPV---PSYQVLDLTYIRMI LQESLRLWPTAPAFSLY	336
AFJ60789.1	YFLLKHPRVLEKAYEEADRVLTDPV---PSYQVLDLTYIRMI LQESLRLWPTAPAFSLY	343
AFJ62808.1	YCLLKNKDKLLKAVQEAERVLTGET---PEYKQIQQLTYIRMVNNETLRLYPTAPAFSLY	337
EEK66903.1	YFLLKNPDKLLKAYEEVDQVLTDPDPT---PTYQQVMELKYIRMI LNESLRLWPTAPAFSLY	352
EJQ52935.1	YFLLKNPDKLLKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
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EJV63294.1	YFLLKNPDKLLKAYEEVDRVLTDPDPT---PTYQQVMKLYIRMI LNESLRLWPTAPAFSLY	338
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EGP08506.1	YAMKHPVLRKAYEEVDRVLGADINAKPTFQOVTQLHYISQILKESLRMWPPAPAYGVS	344
BAL78328.1	YALLKHPDILKKAYDEVDRVFGPDVNAKPTYQQVTQLTYITQILKEALRLWPPAPAYGIS	344
BAC48147.1	YALLKHPDILKKAYDEVDRVFGPDVNAKPTYQQVTQLTYITQILKEALRLWPPAPAYGIS	344
BAL12135.1	YALLKHPDILKKAYDEVDRVFGPDVNAKPTYQQVTQLTYITQILKEALRLWPPAPAYGIS	344

CCE00185.1	YALLKHPEILKKAYDEVDRVFGPDVDAKPTYQQVQTQLTYITQILKESLRLWPPAPAYGIA	348
EIG57609.1	YALLKHDPILKKAYDEVDRVFGPDANAKPTYQQVQTQLTYITQILKEALRLWPPAPAYGIS	344
EHR02046.1	YALLKHDPILKKAYDEVDRVLGPNVDVRPTYQQVQTQLTYITQILKEALRLWPPAPAYGIS	344
EJN11211.1	YALLKHDPILKKAYDEVDRVDFGPDVNAKPTYQQVQTQLTYITQILKEALRLWPPAPAYGIS	344
CCF15606.1	YFLLKNPDKLQKAYEEVDRVLTGST---PTYTEVRNLAYISMILNESLRLWPTAPAFSLY	279
CCF12687.1	YFLLKNPKVREKAYQEVDRVLTGVS---PSYQQVLQQLTYVRMILQESLRLWPTAPGFELT	337
ABB05850.1	YFLLKNPDILQKARMDVDEVVVGSET---PRIEHLARLRYVEQILMETLRIWPTAPGFAVK	339
EHP43606.1	YELLRHPGVLAQAYADEVDAVLPGD--APPVYADLAKLQVIDRVLKETLRLWPTAPAFAVA	367
ABF10339.1	YELLRNPGVLAQAYADEVDTVLPGD--ALPVYADLARMPVLDLRLKETLRLWPTAPAFAVA	343
CAJ95800.1	YELLRNPGVMAQAYADEVDAVLPGD--AAPVYADLARLPVLDLRLKETLRLWPTAPAFAVA	369
AEI79937.1	YELLRNPGVMAQAYADEVDAVLPGD--AAPVYADLARLPVLDLRLKETLRLWPTAPAFAVA	369
AFD27790.1	HFLLRDPEVLRREAREEVDRVLGDRA---VRVTDLPKLTYLQVLDQVLRQVLRQVLRQVLRQV	337
ABC62112.1	YYLLKNRDVLRAYAEVDEVVLRNIDQTPTLSQIGRLPYIRAILSEALRLWPTAPAMGLA	342
EAQ27850.1	YYLLKNRDVLRTRAYAEVDEVVLRNIDQPPSLKQIGQLPYIRAILFEALRLWPTAPAFGLA	342
EIT84377.1	YFLLQHPDVLQKAQQEADAILSD-T---PTYEEVTQLKYIRMILHETLRLWPSAPAFGLY	336
CCG43686.1	HYLMKNPDKLKKAQEEVDEVIGEDI---PSYQVKKLKYVRMILNEALRLWPTAPAFSVY	337
ABX05160.1	YFLLQQPEILQRAQAIVDQVLGDRL---PRYEDLAKLGYLDQILRETLRLWPTAPVFGVY	341
BAJ96920.1	YELLKNPSTLQKAREEVDKVLGTDR---ITIDHIPKLVYLNQILKETLRLYPSAPAFTRA	335
GAB96874.1	YELLKNPDVLEAARAKVDEVVLDGDRF---PTYADLSELGYLDQILRESLRLWPTAPAFGLH	377
EFH80345.1	YFLLKHPEVLAKAYDEVDRVLGPDTSAKPTFQQINKLQYVSQILKESLRLWPTAPLFSVY	345
EFH88481.1	YFLLHHPDVLNRAYEEVDRVLGRDTRKTPTYEQIHQLVYIKQILKETLRLCPTAPMFNRY	338
EAW32450.1	QYLIKHPAVLKRAYAEVDEVVLDGSDITTPPTLAQLGRLPYIRQVLEALRLYPTAPAFTRA	339
EIZ82104.1	YLLLRNPDVLRARDQVDAVLGDGL---PRVEDLPRMRYVEQILQETLRLWPTAPAFAVA	338
AEV70722.1	YNLMHHPAVLARVEAEVDGVFGADSDYLPGYDDIGKLSYLRQVIDETLRLSPPVVGFDRL	333
EFC41452.1	YELLKHPEVLKKAQKEVDTVIGNEN---IQIKHIPQLVYLDQILKETLRLWPTAPGFGLG	365
ACV78954.1	HHLAAQPQVQDWAREQVDEVVLDGSDRSVLPMEQVQGLDRIHQIVDETLLRHPTAPVLLRH	339
ACV78964.1	YYLIKHPFAERARADEVVLDGDDA--EPSYDQVRRQVVAQVLDLRLMPTAPIFTRA	342
ACV81379.1	NYLMKSPQYIDQARVQIDEVLGDTA--EPTYEQVHQVQVLRQILDESRLWPTAPMFTRA	342
EIZ78677.1	YFLMRNPEVMARARETVDTVLGGER---PKVEDLAKLRYIEQILQEALRLWPTAPAFAVS	336
EJW15291.1	YFLLNDRDKLQKGYEEVDRVLKDPV---PTYTQVKNLRYIRMILDESRLWPTAPAFNLL	336
EJW16173.1	YYLLKHPAQLQKAYEEVDRVLTDPV---PTYAQVRLPYIRMILNESLRLWPTAPAFSLF	339
EHQ58913.1	YYLLNNEPKLQKGYDEVDRVLTDPV---PTYAQVKNLKYVRMILDEALRLWPTAPGFSLQ	336
EHQ59900.1	YYLLKNPEKLQKAYEEVDRVLTPEV---PTYTRVRELKYIRMILNEALRLWPTAPAFSLY	337
EHB66924.1	YFLMKNPDKLQKAVSEVDRVLKDPV---PSYNQVRELKYVRMVLNESLRLWPTAPAFSLY	336
AFH60445.1	YFLLKNPEKLAKAYEEVDRVLTSPV---PTYSQVRELKYIRMILNESLRLWPTAPAFALT	337
AEI42011.1	YFLLKNPEKLAKAYEEVDRVLTSPV---PTYSQVRELKYIRMILNESLRLWPTAPAFALT	337
ADO57681.1	YYLLKNPRTLTKAYEEVDRVLTDSL---PSYTQVRELKYIRMILNEALRLWPTAPAFSLF	337
EGG32133.1	YYLMKNPEALFKAVSEVDRVLKDPV---PTYNQVRELKYVRMVLNESLRLWPTAPAFSLY	337

EGL17662.1	YFLLKNPDKLRKAYEEVDRVLTDPV---PTYGQVRELTYIRMI LNEALRLWPTAPAFVLY	338
ACX65034.1	YYLMKNPEALFKAVSEVDRVLKDPV---PTYNQVRELKYVRMVLNESLRLWPTAPAFSLY	337
ACT11327.1	YFLLKNPNVLNKARAI VDEVLGDEI---PRIEHLAQLRYLEQI LMESLRMWPTAGGHVVS	338
AEA28016.1	AYLIKHPDVVAKAQAEVDRVLGTDPGVMPSFQQVQGLTYVTQI LNEILRLWPTAPGFTRY	347
EFP68091.1	YMLLRHPAVLAQAYA EVDRLVPGD--TVPQYAHLAQLDVI ERVLKETLRLWPTAPSGVA	353
EGY61507.1	YMLLRHPAVLAQAYA EVDRLVPGD--TVPQYAHLAQLDVI ERVLKETLRLWPTAPSGVA	353
EIE85788.1	YELAKHPEVQAKVLQE IADNHIT-HEKAPTPEQISNLKYM HQVFKEVLRKYPPVRNLSKY	424
EIE92534.1	YELSRHPDIQAKVLQE IADNHIR-HDELPNTEQINN LKYM HQVLKEVLRKYPPVRVLSKY	424
BAE46296.1	YFLSRHPDVADTARA EVDVTDAG-E-TP-AFEDVARMRY LRRVDETLRLWPSAPGYFRK	392
BAH31604.1	YYLSRNPDLAKAQAE VDKVWEGE---EPAFEKIAKLRY VRRVLDES LRLWPTAPAYGRA	348
EEN84644.1	YYLSRNPDLAKAQAE VDKVWEGE---EPAFEKIAKLRY VRRVLDES LRLWPTAPAYGRA	348
EEN88978.1	YFLSRHPEIADAARA EVDITGG-E-IP-AFEDVAPMRY LRRVDETLRLWPSAPGYFRK	432
ABG96413.1	YYLSRHPDLAKAQAE VDAVWGDE---EPAFEQIAKLRY VRRVLDES LRLWPTAPAYGRE	380
BAH52971.1	YYLSRHPDLAKAQAE VDAVWGDD---EPAFEQIAKLRY VRRVLDES LRLWPTAPAYGRE	347
EHI44575.1	YYLSRHPDLAKAQAE VDAVWGDE---EPAFEQIAKLRY VRRVLDES LRLWPTAPAYGRE	382
EID73168.1	YYLSRHPDLAKAQAE VDAVWGDE---EPAFEQIAKLRY VRRVLDES LRLWPTAPAYGRE	347
EHK83749.1	HFLSRHPEVVAKARA EITEVVGA-DGRI-GYEQVAKLRY VRRVDETLRLWPAAPGYFRK	324
EJI96173.1	YYLSRHPDLAKAQAE VDAVWGDE---EPAFEQIAKLRY VRRVLDES LRLWPTAPAYGRE	347
ABI79384.1	HYLSLNPEIVERAREE IEQVLGT-DGAPVRFEQVAKLRY VRRIIDETLRLWPSGPAFFRK	376
CAR47816.1	HYLSLNPEIVERAREE IDEVFGT-GGVPVRFEQVAKLRY VRRIVDETLRLWPSGPAFFRK	378
AEK26937.1	HFLSRHPEVVAKARA EIAEVVGA-DGRI-GYEQVAKLRY VRRVDETLRLWPAAPGYFRK	356
ABE39056.1	YALLKHPDVLQKAYDE VDRVLGSDTAVRPSYQQVNQLSYITQ I LKETLRMWPPAPAYGVA	344
ABD08340.1	YALLKHPDVLQKAYDE VDRVLGADTSVEPSYQQVNQLGYITQ I LKETLRMWPPAPAYGVA	343
CAM03474.1	HYLAKNPTVLRVLQ READELWGDS PDPEPSFEDIGRLTYTRQ VLNETLRLWPSAPAFGRQ	337
EJF54063.1	YEMLKQPHILARVQA EVDVGLGQEK---LQFHHL SKLKYMDMVIKECLRLWPIASGFNLR	352
AFC23737.1	YEMLKQPHILARVQA EVDVGLGQEK---LQFHHL SKLKYMDMVLKECLRLWPIASGFNLR	340
ADG98903.1	HHLAEQPELARQAQA EVEARWPGRDFPDIGYEDVAKLRY LRRVTDETLRLWPVAPGYFRR	351
EGI54680.1	WLLLTHPEALAKAQAH VDDVLGGNV---PTVDDIGRLTY IEQVLQETLRLWPTAPAFGVH	335
AEW97204.1	YYLAKNPAVLRRAQA EVDALWGDDPDPEPDYTDVGR LTYVRQVLNEALRLWPTAAAFGRQ	356
CAJ88567.1	HYLAQHPGIAARARA EVDRVWGD--EAPGYEQVAKLRY VRRVLDES LRLWPTAPAFARE	365
BAC68285.1	YSLMRNPHILAQA YA EVDRLLPD--TVPDYDTIMQMDVI PRILEETLRLWAPIPMIGKS	344
BAC75137.1	HYLSRHPDVAARARA EVDRVWGGT--ARPGYDQVAKLRY VRRVLDES LRLWPTAPAFARE	358
EDY51256.1	YYLLKNPSVLAARA AETDALWGTD PDPDPPTYEDIGRLHYLRQ VLNESLRLWPTAPAFAVE	329
EFG07822.1	YYLLKNPSVLAARA AETDALWGTD PDPDPPTYEDIGRLHYLRQ VLNESLRLWPTAPAFAVE	361
EHN78335.1	HYLAQHPDVAARARA EVDRVWGD--EAPGYEQVAKLRH VRRVLDES LRLWPTAPAFARE	368
CAB66201.1	HYLAQHPDVAARARA EVDRVWGD--EAPGYEQVAKLRY VRRVLDES LRLWPTAPGFARE	372
EGG48117.1	YHLSRHPEIAARARA EVDVWGED--PRPGYDRVARLRLV RRI LDES LRLWPTAPAFARE	372
EFL20831.1	YYLTKHPEVLARAQA EVDALWGDTDAPEPDYGDIGK LTYIRQVLNEGLRLWPTAPVYAVE	351

EFL28515.1	HYLAKNPGELRRVQREADALFGADADPEPTFEQVGLLRYTRQVLNEALRLWPTAAAFSRQ	345
AEY93311.1	HHLARHPEIAARARAQVWVWGDTPRPGYDQVARLRYVRRVLDESRLWPTAPAFARE	362
AEY93321.1	YYLAKHPAVLRLVQREADALWGDTADPEPSYEDIGRLTHTRQVLNEALRLWPTAAAFSRH	343
EFD71156.1	HYLAQHDPVAARARAQVDRVWGDTEAPGYEQVAKLRYVRRVLDESRLWPTAPGFARE	374
CBG67789.1	YYLTKHPEVLARAQAEVDALWGDTDTPDPDYGDIGKLTYIRQVLNEGLRLWPTAPAYAVE	346
CBG68112.1	HYLARYPDLAARARAQVDRVWGDARPGYEQVAKLRYVRRVLDEALRLWPTAPAFSRE	363
EFL10082.1	YYLTRHPELLAKARAQVDAVWGDR--EPAFGDVAKLRYVRRVLDEAMRLWPTAPGYSRE	374
EFF88741.1	YYLTKNPEVLARAQAEVDALWGDTDTPDPEYGDVGKLTYIRQVLNESLRLWPTAPAFVTE	345
EDY58112.1	HYLSRHPEVAARARDEVDVWGDATGAPYEQVAKLRYVRRVLDESRLWPTAPAFARE	355
EFL36674.1	HYLSRHPDVAARARAQVDRVWADAEPAYEQVARLRYVRRVLDESRLWPTAPAFARE	372
EFL36680.1	YYLAKHPTALQLVQREVDDELWGDTADVEPTYDEVGRLTYTRQVLNEALRLWPTAAVFSRE	393
EFE65335.1	HYLSRHPDVAARARDEVDVWGDATAAPGYEQVARLRYVRRVLDESRLWPTAPAFARE	360
EGX54696.1	HYLSRHPEVAARARAQVDRVWGDATAAPGYDQVARLRYVRRVLDEALRLWPTAPAFARE	357
ACZ89135.1	HLLLDNPDLLRHARDEVDVWGDALPRFEHLSRLGHIDRILRETLRLYPTAPAFVH	341
ABD83817.1	YALLKHPDVLKKAYAEVDVWGDADIEARPSYQQVTQLTYITQILKEALRLWPPAPAYGIA	344
ADU39615.1	YFLLNNPEAMAKAQAEVDSVFGGDTSQKPTYAQVNRLQYVMQVLKESLRMFPTAPAI SMR	343
EJL72014.1	YFLLNNPEAMAKAQAEVDNVFGPDTSQKPTYAQVNRLQYVMQVLKESLRLYPTAPAI SMR	343

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sp P14779.2 CPXB_PRIM2	AKEDTVL-GGE-----YPLEK-GDELMVLI PQLHRDKTIWGDDVEEFRPE-RFE--NPSA	385
ADF40088.1	AKEDTVL-GGE-----YPLEK-GDELMVLI PQLHRDKTIWGDDVEEFRPE-RFE--NPSA	385
ADE70259.1	AKEDTVL-GGE-----YPLEK-GDELMVLI PQLHRDKTIWGDDVEEFRPE-RFE--NPSA	385
AEN88827.1	AKEDTVL-GGE-----YPLEK-GDELMVLI PQLHRDKTIWGDDVEEFRPE-RFE--NPSA	385
KFN05180.1	AKEDTVL-GGE-----YPLEK-GDELMVLI PQLHRDKTIWGDDVEEFRPE-RFE--NPSA	385
ACZ37122.1	AKEDTVL-GGE-----YPLEK-GDELMVLI PQLHRDKTIWGDDVEEFRPE-RFE--NPSA	385
ADA57055.1	AKEDTVL-GGE-----YPLEK-GDELMVLI PQLHRDKTIWGDDVEEFRPE-RFE--NPSA	385
ADA57058.1	AKEDTVL-GGE-----YPLEK-GDELMVLI PQLHRDKTIWGDDVEEFRPE-RFE--NPSA	385
ADA57059.1	AKEDTVL-GGE-----YPLEK-GDELMVLI PQLHRDKTIWGDDVEEFRPE-RFE--NPSA	385
ADA57061.1	AKEDTVL-GGE-----YPLEK-GDELMVLI PQLHRDKTIWGDDVEEFRPE-RFE--NPSA	385
ADA57062.1	AKEDTVL-GGE-----YPLEK-GDELMVLI PQLHRDKTIWGDDVEEFRPE-RFE--NPSA	385
ADA57068.1	AKEDTVL-GGE-----YPLEK-GDELMVLI PQLHRDKTIWGDDVEEFRPE-RFE--NPSA	385
AAT62301.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDDVEEFQPE-RFE--ELDK	389
AAM54108.1	PDEPAEL-GGH-----AIGA-GEVPLVMLPTLHRDPAVWR-DPDVFDPE-RFAPERMDE	392
EFQ83738.1	PREEVTL-SSG-----HTMRP-GDWAIIVMLPAMHRDPEVWGEDAEFFDPD-RFLPERSRA	395
EFL88452.1	PYEDEIV-GGQ-----YKIKK-GTFTTVLSLMLHRDES VWGDDPEAFNPE-HFTKEAIAA	393
BAF89518.1	VTRDATV-GNG----RYDLKA-GERIFVLSLSAMQKNPRFWGADALVFRPE-RFGPEEEKH	486
CBI43648.1	AKEDTVL-GGK-----YPIAK-GQPVTILTLPQLHRDKSAWGEDAELFRPE-RFS--DPAA	387
AEB22839.1	AKEDTVI-GGK-----YPIIT-KDRISVLI PQLHRDKDAWGDNAEEFYPE-RFE--HPDQ	387
EDT22025.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
AFH84458.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	397
ADP31197.1	AKEDTVI-GGK-----YPIITP-KDRISVLI PQLHRDKDAWGENAEEFHPE-RFE--NPDQ	387
ACP19384.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
ADL27534.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
ACO29732.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDR	389
EDX65100.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
EEK61456.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
EEL16232.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDR	397
EDZ53094.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
EEL81346.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGENVEEFQPE-RFE--DLDK	403
EEL87105.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	403
EEL75761.1	AKEDTVI-GGK-----YPIKKGKDRISVLI PQLHRDKDAWGDKVVEEFQPE-RFE--EHDK	330
ACK88541.1	AKEDTVI-GGK-----YPIKKGKDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--DLDK	389
EJQ05303.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
EEK50040.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
AAS42149.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--DLDK	389
AAP10153.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
EEK83466.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDN	397

ACK63698.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	330
EJS57156.1	AKENTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
EJS56605.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
EJS68951.1	SKEDTVI-GGK-----YPVKKREDRIMVLI PQLHRDKDAWGDNAEEFHPE-RFE--DPDK	388
EJQ10567.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
EJQ13433.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
EJQ20399.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
EJQ30236.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
EJQ51278.1	AKEDTVI-GGK-----YPVKKKENRIMVLI PQLHRDKDAWGDNAEEFHPE-RFE--DPDK	388
EEL10858.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
EEL05393.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	403
EEK94080.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	392
EEK99882.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	392
EEK55784.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDR	397
ADK05784.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
AAU17340.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
EEL64394.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
AEW56259.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
AFQ11690.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--DLDK	389
EAL16831.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
ACK94296.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
EDZ58760.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
EJV84218.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
EJQ69212.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
EJQ80339.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--EPDK	389
EJV81602.1	AKENTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
EJQ95474.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
EEK44229.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	397
EEK88560.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
EJR07451.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
EJR16542.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
BAL18840.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
EDX69960.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
ACM13462.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
EEK75631.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	389
EEL25491.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--ELDK	330
EEL21990.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--EPDK	397
EEL33825.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDNVVEEFQPE-RFE--EPDK	397

EEL44933.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDR	397
EEL50167.1	AKEDTVI-GGK-----YPVKKREDRITVLI PQLHRDKDAWGDNAEEFHPE-RFE--DPDK	467
EJR22930.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKVAWGDNVEEFQPE-RFE--ELDK	389
EJP91231.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
EJR37623.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
EJR50635.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
EJR64551.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--EPDK	389
EJR75620.1	AKEDTVI-GGK-----YPIKKGKDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--EHDK	389
EJR82049.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
EJR83659.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
EJR91135.1	AKKDTTI-GGK-----YKIKK-GEAVTVII PKLHRDKKVWGQDAEQFRPE-RFE--DSSK	386
EJR97241.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
EJS05852.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
EDX58768.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
AAU24352.1	AKEETVI-GGK-----YLIPK-GQSVTVLIPKLHRDQSVWGEDAEAFRPE-RFE--QMDS	387
ABY44122.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
EDW23201.1	AKEDTVI-GGK-----YSIEK-NQSVSVLLPKLHRDQAVWGEDAEFEKPE-RFL--HPEK	386
ABV62358.1	AKEDTII-GGK-----YSIKK-NQSVSVLLPKLHRDQAVWGGDAEEFKPE-RFL--HPEK	386
EIF12263.1	AKEDTVI-GGK-----YPITP-KDRISVLI PQLHRDKDAWGDNAEEFYPE-RFE--HPDQ	386
EIF14027.1	AKEDTVL-GGK-----YPIAK-GQPVTILTPQLHRDKSAWGEDAESFRPE-RFS--DPAA	387
EHL75405.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
EJD67577.1	AKEDTVI-GGK-----YPITP-KDRISVLI PQLHRDKDAWGDNAEEFYPE-RFE--HPDQ	386
EJD68347.1	AKEDTVL-GGK-----YPIAK-GQPVTILTPQLHRDKSAWGEDAESFRPE-RFS--DPAA	387
EFV73436.1	AKEETVI-GGK-----YLIPK-GQSVTVLIPKLHRDQSVWGEDAEAFRPE-RFE--QMDS	401
CBY93692.1	AKEDTVI-GGK-----YPIKKGEDRISVLI PQLHRDKDAWGDNVEEFQPE-RFE--ELDK	389
AFI27355.1	PKEDTVI-GGK-----FPITT-KDRISVLI PQLHRDRDAWGKDAEEFRPE-RFE--HQDQ	387
AFI29229.1	AKEDTVL-GGE-----YPI SK-GQPVTILIPKLHRDQNAWGADAEDFRPE-RFE--DPSS	387
EIL85422.1	AKEDTVI-GGE-----FPIEK-NQSVTVLLPKLHRDQAVWGEDAEFEKPE-RFL--HPEK	386
ADV93500.1	AKEDTVL-GGE-----YPI SK-GQPVTVLI PKLHRDQNAWGPDAEDFRPE-RFE--DPSS	387
ADV95715.1	PKEDTVI-GGK-----FPITT-NDRISVLI PQLHRDRDAWGKDAEEFRPE-RFE--HQDQ	387
BAI84248.1	PKEDTVI-GGK-----FPITT-KDRISVLI PQLHRDRDAWGKDAEEFRPE-RFE--HQDQ	387
EFG90288.1	AKEDTVL-GGE-----YPI SK-GQPVTVLI PKLHRDQNAWGEDAEEDFRPE-RFE--DPSR	387
EFG91781.1	PKEDTVI-GGK-----YMITT-QDRISVLI PQLHRDQDAWGEDAEEDFRPE-RFE--HQDQ	387
AEP85668.1	PKEDTVI-SGK-----YPITT-KDRISVLI PQLHRDQDAWGEDAEEDFRPE-RFE--HQDQ	387
AEP87558.1	AKEDTVL-GGE-----YPI SK-GQPVTVLI PKLHRDQNAWGEDAEAFRPE-RFE--DPSR	387
sp 008336.1 CYPB_BACSU	AKEDTVL-GGE-----YPI SK-GQPVTVLI PKLHRDQNAWGPDAEDFRPE-RFE--DPSS	387
sp 008394.1 CYPD_BACSU	PKEDTVI-GGK-----FPITT-NDRISVLI PQLHRDRDAWGKDAEEFRPE-RFE--HQDQ	387
AEP89812.1	PKEDTVI-GGK-----FPITT-KDRISVLI PQLHRDRDAWGKDAEEFRPE-RFE--HQDQ	387

AEP91702.1	AKEDTVL-GGK-----YPIISK-GQPVTVLIPKLHRDQNAWGPDAEDFRPE-RFE--DPSS	387
EHA31094.1	AKEDTVL-GGK-----YPIISK-GQPVTVLIPKLHRDQNAWGPDAEDFRPE-RFE--DPSS	389
ADH07708.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--ELDK	389
EEM28177.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--ELDK	389
AFQ14162.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--ELDK	389
EEM95517.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWRDNVEEFQPE-RFE--DPDK	389
EEN02344.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--ELDK	389
AFU13781.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--EPDK	397
EEM70897.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--ELDR	397
ADY22413.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--ELDK	389
EEM82895.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--ELDK	389
EEM52818.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--ELDK	389
EEM59126.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--ELDK	397
EEM47193.1	AKEDTVI-GGK-----YPIKKGKDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--EHDK	330
EEM76899.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--ELDR	397
EEM88909.1	AKEDTVI-GGK-----YPIKNGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--ELDK	397
EEM38196.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--ELDK	389
EEM21858.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--ELDK	392
ABK86139.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--ELDK	397
EJQ37805.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--EPDK	389
CCF04242.1	AKEDTVI-GGK-----YPITP-KDRISVLIPQLHREKDAWGDNAEEFYPE-RFE--HPDQ	386
CCF05972.1	AKEDTVL-GGK-----YPIAK-GQPVTILTPQLHRDKSAWGEDAELFRPE-RFS--DPAA	387
ABS73124.1	AKEDTVI-GGK-----YPITP-KDRISVLIPQLHRDKDAWGDNAEEFYPE-RFE--HPDR	386
ABS74786.1	AKEDTVL-GGK-----YPIAK-GQPVTILTPQLHRDKSAWGEDAELFRPE-RFS--DPAA	387
EKE46398.1	AKEDTVI-GGK-----YPITP-KDRISVLIPQLHRDKDAWGDNAEEFYPE-RFE--HPDL	386
EKE48022.1	AKEDTVL-GGK-----YPIAK-GQPVTILTPQLHRDKSAWGEDAELFRPE-RFS--DPAA	387
CCG48683.1	AKEDTVI-GGK-----YPITP-KDRISVLIPQLHRDKDAWGDNAEEFYPE-RFE--HPDQ	386
AFJ60789.1	AKEDTVI-GGK-----YPITP-KDRISVLIPQLHRDKDAWGDNAEEFYPE-RFE--HPDQ	393
AFJ62808.1	AKEDTVL-GGK-----YPIAK-GQPVTILTPQLHRDKSAWGEDAESFRPE-RFS--DPAA	387
EEK66903.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--ELDK	403
EJQ52935.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--ELDK	389
EJS69574.1	AKEDTVI-GGK-----YSIKKGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--ELDK	389
EJV63294.1	AKEDTVI-GGK-----YPIKKGEDRISVLIPQLHRDKDAWGDVNEEFQPE-RFE--ELDK	389
EKF35778.1	AKEDTVI-GGK-----YPIAK-NQSVSVLLPKLHRDQAVWGEDAEEFKPE-RFM--HPET	386
EGP08506.1	PLKDETI-GGK-----YKLLK-GTFVTVLVMALHRDPSVWGPNDVDFDPE-NFSREAEAK	396
BAL78328.1	PLKDEVIGGGK-----YRLRK-GTFITILVTALHRDPSVWGPNDAFDPE-NFSREAEAK	397
BAC48147.1	PLADETIGGGK-----YKLRK-GTFITILVTALHRDPSVWGPNDAFDPE-NFSREAEAK	397
BAL12135.1	PLNDETIGGGN-----YRLRK-GTFITILVTALHRDPSVWGPNDAFNPE-NFSREAEAK	397

CCE00185.1 PLQDETI-GGK-----YKLKK-NTFVTILVTALHRDPKVGPNPDAFDPE-NFSPEAEAK 400
EIG57609.1 PLNDETIGGGK-----YKLRK-GTFTTILVTALHRDPSVWGNPDAFDPE-NFSREAEAK 397
EHR02046.1 PLNDETIGGGM-----YKLRK-GTFTTILVTALHRDPSVWGNPDAFDPE-NFSREAEAK 397
EJN11211.1 PLADETIGSGK-----YKLRK-GTFITILVTALHRDPSVWGNPDAFDPE-NFSREAEAK 397
CCF15606.1 AKEDTLL-DGK-----YPLKK-GESINVLIPTLHRDTSVWGDNVVEEFRPE-RFE--DPSQ 329
CCF12687.1 ARADTII-GGK-----YAIKK-GEVVALLLPQLHRDKDAWGDDADEFCE-RFE--DPDK 387
ABB05850.1 PLADTTF-GGK-----YAVSP-DDIIMILTPMLHRDVS VWGEDVEAFRPE-RFAPENAEQ 391
EHP43606.1 PFEDTVI-GGR-----YLIRK-DRRVS VLTALHRDPKVW-ADPETFDID-RFLPENEAE 418
ABF10339.1 PFDDVVL-GGR-----YRLRK-DRRIS VLTALHRDPKVW-ANPERFDID-RFLPENEAK 394
CAJ95800.1 PFEDTLL-GGR-----YLIRK-DRRLS VLTALHRDPKVW-ADPERFDID-RFLPEQEAK 420
AEI79937.1 PFEDTLL-GGR-----YLIRK-DRRLS VLTALHRDPKVW-ADPERFDID-RFLPEQEAK 420
AFD27790.1 PRARTII-GGR-----YEVYT-DDTLLVLLPALHRDLAVWGPDVDRFDPE-RFAPGALEA 389
ABC62112.1 PFEDEVL-GGK-----YAIK-GTFTTVLIPSLHRDKLVWGENPEAFNPD-NFSPKAEAA 394
EAQ27850.1 PFEDEVL-GGK-----YLIPK-GTFTTVLIPSLHRDKSVWGENPEVFDPE-NFTAEEAAA 394
EIT84377.1 AKEDTVV-GGK-----YEIKK-GERVVLLPRLHRDKAEAWGEDADRFRPE-RFL--DYKS 386
CCG43686.1 AKENTTL-AGQ-----YEVEK-GETFTLLLPQLHRDTSIWGEDAEAFKPE-RFE--DPSQ 387
ABX05160.1 AKHDTNI--GG-----FPIKQ-GEKFIALLP LHRDPKVWL-NPNQFDPD-RFAPEVREQ 391
BAJ96920.1 SEEDTVL-GGK-----YQIKK-SDDVVVFIAGLHRDPTVWGNVVEEFDPD-RFSPEKMG 387
GAB96874.1 SLEPTTI-GGRDGGPSYAI EP-QDTVLVLT PSLHRDPAVWA-DPERFDPQ-RFSFERAQQ 433
EFH80345.1 PYEETVV-GDK-----YRMDK-DSEWAILIPMLHRDKSVWGEDADEFNPD-HFSHEAEAS 397
EFH88481.1 PYEERPL-AGK-----YQLQP-SDTITVLT PMLHRDRSIWGDDAEIFNPDHFFNPEAEKQ 391
EAW32450.1 PLEDTTL-AGV-----YPLKA-GQPILILIGGLHRDEKAWGDNPD LFDPD-RFAPDVAAL 391
EIZ82104.1 PKAPTVI-GGR-----YPVTP-ADTLLILAPILHRDPAVWD-DPEAFRPE-RFAPEAAER 389
AEV70722.1 ALD TVI-GGK-----YPVRA-GEAVTVLTGALHRQP-GWGDNV EFDPD-RFDAARSAA 384
EFC41452.1 CKTDQVI-GGK-----YRIHP-SDFIIVS NSNLHRDKK V WGEDCEQFNPD-RMSPENFSS 417
ACV78954.1 PRRATTI-GGG-----YHLDA-GATILIP LPKVHIDPAIWGPDAEVFRPR-RWE--SVGQ 389
ACV78964.1 PFEDTLL-GGK-----YAIPA-GTAMSVVIPSLHRDRSVWGDSADEFDPD-HFSAERKAA 394
ACV81379.1 ARTD TVI-GGK-----YLAPK-DVGISVLLPMLHRDPSVWGPDAEDFNPH-HFDPERFAA 394
EIZ78677.1 PHEPTTL-AGR-----YRVTP-EDTLMVLI PNLHRDPQVWD-DPDAFRPE-RFAPGNAEQ 387
EJW15291.1 VKQDTLL-VDR-----YVMKQ-GDRLLLLLPQLHRDPAAWGSDAHEFRPE-RFE--DPSR 386
EJW16173.1 AKEDTLL-AGK-----YPLAK-GESVNVLPRLHRDSAVWGEDAEQFRPE-RFE--DPSQ 389
EHQ58913.1 AKRDTV L-AGK-----YAVNQ-GDRMVVLI PQLHRDVS AWGEDAKVFRPE-RFE--DPSR 386
EHQ59900.1 AKEDTLL-AGK-----YPLKK-GDSVNVLI PKLHRDTSVWGDNVDEFCE-RFE--DPSR 387
EHB66924.1 AKEDTTI-GGT-----YSVKQ-GDSVTVLI PGLHRDRSVWGDDVEAFRPE-RFE--DPSK 386
AFH60445.1 AKEDTML-GGR-----YPMQK-GDSVSVLI PKLHRDPSVWGDDVESFIPE-RFE--DPSS 387
AEI42011.1 AKEDTML-GGR-----YPMKK-GDSVSVLI PKLHRDPSVWGDDVESFIPE-RFE--DPSS 387
ADO57681.1 AKEDTLL-DGT-----YPLKK-GDSVNVLI PKLHRDTEAWGEDVEEFRPE-RFE--DPSA 387
EGG32133.1 AKEDTAI-GGT-----YPIKK-GDSVTVLI PGLHRDRSVWGDDAETFRPE-RFE--DPSQ 387

EGL17662.1	AKEDTLL-ADK-----YPLQK-GDSLTVLIPKLHRDKTVWGDDVESFIPE-RFE--DPGK	388
ACX65034.1	AKEDTAI-GGT-----YPMKK-GDSVTVLIPALHRDSRVWGDDAETFRPE-RFE--DPSR	387
ACT11327.1	PTQDTIL-AGK-----YPLTP-KDSIVILQPQLHRDVKAWGDDANLFKPE-RFGPDNAEN	390
AEA28016.1	PYEDVVL-GG-----YRIAK-GSSLTALTPMLHRLPEVWGPDAEEFNPD-HFRAEFRAT	398
EFP68091.1	PYEDTRI-GGR-----YAIRK-DQRVVTVLLALHRDPAVW-DRPEVFDID-RFLPENEAK	404
EGY61507.1	PYEDTRI-GGR-----YAIRK-DQRVVTVLLALHRDPAVW-DRPEVFDID-RFLPENEAK	404
EIE85788.1	CKKDCIL-PGG-----YKIKK-GTPCTVQVYAMHHNKDVY-PDPERFDPD-RWIPEEEQK	475
EIE92534.1	CKNDCIL-PGG-----YKIKG-NTPCSIQVYAMHHNKDVY-PDPERFDPD-RWTPEEEQK	475
BAE46296.1	VRTDTTL-GGR-----YDMPK-GSWVFLVLLPQLHRDP-VWGEDPESFDPD-RFKPENVKK	443
BAH31604.1	ALEDTTL-VGK-----YPMKK-GDWMLVLIPLSLHRDP-VWGNPEAFDPD-RFLPANIKA	399
EEN84644.1	ALEDTTL-VGK-----YPMKK-GDWMLVLIPLSLHRDP-VWGNPEAFDPD-RFLPANIKA	399
EEN88978.1	VRTDTTL-GGR-----YAMPK-GSWVFLVLLPQLHRDP-VWGEDPDSFDPD-RFKPENVKK	483
ABG96413.1	ATVDTTL-VGK-----YPMKV-GDWVFLVLIPLALHRDP-VWGDDPEAFDPD-HFLPERIRS	431
BAH52971.1	ATVDTTL-VGK-----YPMKV-GDWVFLVLIPLALHRDP-VWGENPEEFDPD-HFLPERNRS	398
EHI44575.1	ATVDTTL-VGK-----YPMKV-GDWVFLVLIPLALHRDP-VWGDDPEAFDPD-HFLPERIRS	433
EID73168.1	ATVDTTL-VGK-----YPMKV-GDWVFLVLIPLALHRDP-VWGDDPEAFDPD-HFLPERIRS	398
EHK83749.1	VRGETTL-GGR-----TLPK-GSWVFLVLLPQLHRDP-LWGDDPERFDPD-RFEPAAVRK	374
EJI96173.1	ATVDTTL-VGK-----YPMKV-GDWVFLVLIPLALHRDP-VWGDDPEVFDPD-HFLPERIRS	398
ABI79384.1	ARQATTTL-DG-----YPIRK-GETILVLLALHRDPALWGEDPERFDPD-RFLPAAVRA	427
CAR47816.1	ARQETTL-AG-----YPIRK-SETILVLLALHRDPQLWGDDVERFDPD-RFLPPAVRA	429
AEK26937.1	VRGETTL-GGR-----TLPK-GSWVFLVLLPQLHRDP-LWGDDPERFDPD-RFEPAAVRK	406
ABE39056.1	PIKDEVI-GGK-----YHLKR-GTFVTVLVLALHRDPAIWGNPDADFPE-NFSREAESK	396
ABD08340.1	PIQDETI-GGQ-----YHLKR-GTFVTVLVLALHRDPSIWGNPDADFPE-NFSREAESK	395
CAM03474.1	ARHDTVLL-GGR-----IPMRA-GEAAVLIPLMLHRSP-VRGDNPELFDPA-RFAPEAEAA	388
EJF54063.1	SFKKEQV-G-E-----YLIKP-TDSIFIFLPSLHRAP-IWGDDPKQFNPE-NFSPENEAK	402
AFC23737.1	SFKKEQV-G-E-----YLIKP-TDSIFIFLPSLHRAP-IWGDDPKLFNPE-NFSPENEAK	390
ADG98903.1	ARKDTTV-GGH-----AFKQ-KDWVFLVLLIGAHDRPASWGADADRFPD-RFSPENIRS	402
EGI54680.1	PREATTI-GGR-----YAVTP-DDTLLILTLPVLRDPTVWD-EPEAFRPE-RFAPEVAAK	386
AEW97204.1	AVTDTVLL-DGR-----VPMRA-GDTALVLTLPVLRDPTVWD-EPEAFRPE-RFSPEREAA	407
CAJ88567.1	ARTDTVLL-GGS-----YPMRR-GAWALVLAGMLHRDPQVWGPDAEEFDPD-RFDAKAVRS	417
BAC68285.1	PLEDTVLL-GGC-----YGLKK-GARVNIPLGLHHPKAW-ERPEEFDIN-RWLPENRVN	395
BAC75137.1	ARRDTVLL-GGV-----HPMRE-GAWALVLTAMLHRDPGVWGAERFDPD-RFDAQAVRS	410
EDY51256.1	PLEDTVLL-GGR-----YPVHK-GQPLTVLTPVLRDPTVWD-EPEAFRPE-RFDPQADS	380
EFG07822.1	PLEDTVLL-GGR-----YPVHK-GQPLTVLTPVLRDPTVWD-EPEAFRPE-RFDPQADS	412
EHN78335.1	AREDTVLL-GGA-----YPMRP-GAWALVLTGMLHRDPEVWGPDAERFDPD-RFDAKAVRA	420
CAB66201.1	AREDTVLL-GGT-----HPMRR-GAWALVLTGMLHRDPEVWGAERFDPD-RFDAKAVRS	424
EGG48117.1	AREDTVLL-AGE-----HPMRR-GAWTVLTPVLRDPEVWGPDAERFDPD-RFEAAAVRA	424
EFL20831.1	PLEDTVLL-GGK-----YAVRK-GESLLVLIPLQVLRDPTVWD-EPEAFRPE-RFRPEREEA	402

EFL28515.1	AREDTML-GGR-----VPMRA-GQPAIVLTPMLHRAA-VWGDNPELFDPS-RFDPEAEAAA	396
AEY93311.1	ARRDTVL-AGD-----HPMRR-GAWTLVLTPLMHRPEVWGEDAERFDPD-RFTPAAVRA	414
AEY93321.1	AREDTLL-GGR-----IPLRA-GQAVTVLAPMLHRQP-VWGDNPELFDPE-RFTPEAEAAA	394
EFD71156.1	AREDTVL-GGT-----HPMRR-GAWALVLTGMLHRDPEVWGADAERFDPD-RFDAKAVRS	426
CBG67789.1	PLEDTVI-GGR-----YAVRE-GETIQVLI PQLHRDP-AWGENVELFDPD-RFLPEREQE	397
CBG68112.1	AREDTVL-GGV-----HPMRR-GAWALVLTSMMLHRDPEVWGADAERFDPD-RFDAAAVRG	415
EFL10082.1	AREDLVL-GGK-----YPMRK-GDSVIVPLPMLHRDPAVWGPDPPEKFDPD-RFEPAAVRK	426
EFF88741.1	PLADTVI-GGR-----YPVRR-GQPVMVLNLALHRDP-AWGENVELFDPE-RFTREREEA	396
EDY58112.1	AVEDTVL-AGQ-----HPMRR-GAWTLVLTPLMQRDPEVWGADAERFDPD-RFDPKAVRS	407
EFL36674.1	AREDTVL-AGE-----HPMRR-GAWALVLTPLMHRDPEVWGADAERFDPD-RFDARAVRS	424
EFL36680.1	AREDTLL-GGR-----IPLRA-GQAALVLTPLMHRQP-VWGDNPELFDPS-RFTAEEAEAE	444
EFE65335.1	AVRDTVL-AGE-----HPMRR-GAWTLVLTPLMHRDPEVWGADAERFDPD-RFDARAVRS	412
EGX54696.1	AREDTVL-GGV-----HPMRR-GAWALVLTAMTHRDPRVWGPDAERFDPD-RFDPRAVRG	409
ACZ89135.1	AKHDTV L-AGR-----YPLKK-GDVL FVLT PSLHRDPSVWD-DPERFDPA-RFAPGAREN	392
ABD83817.1	PLKDETIAGGK-----YSLKK-NTFISILVTALHHDPAVWGPNDLFDPE-NFSPEAEAK	397
ADU39615.1	AKEDTTI-GGQ-----YTIKK-NNMVIMHALALHRDKAIWGENADQFNPD-NFSREAERE	395
EJL72014.1	AKEDTKI-GGL-----YTIKK-NNMVIMHALALHRDKGIWGEDADQFNPD-HFSREAERE	395

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sp P14779.2 CPXB_PRIM2	IPQHAFKPFNGQRACIGQQFALHEATLVLGMMLKHFDDED-HTNYELDIKETLTLKPEG	444
ADF40088.1	IPQHAFKPFNGQRACIGQQFALHEATLVLGMMLKHFDDED-HTNYELDIKETLTLKPEG	444
ADE70259.1	IPQHAFKPFNGQRACIGQQFALHEATLVLGMMLKHFDDED-HTNYELDIKETLTLKPEG	444
AEN88827.1	IPQHAFKPFNGQRACIGQQFALHEATLVLGMMLKHFDDED-HTNYELDIKETLTLKPEG	444
KFN05180.1	IPQHAFKPFNGQRACIGQQFALHEATLVLGMMLKHFDDED-HTNYELDIKETLTLKPEG	444
ACZ37122.1	IPQHAFKPFNGQRACIGQQFALHEATLVLGMMLKHFDDED-HTNYELDIKETLTLKPEG	444
ADA57055.1	IPQHAFKPFNGQRACIGQQFALHEATLVLGMMLKHFDDED-HTNYELDIKETLTLKPEG	444
ADA57058.1	IPQHAFKPFNGQRACIGQQFALHEATLVLGMMLKHFDDED-HTNYELDIKETLTLKPEG	444
ADA57059.1	IPQHAFKPFNGQRACIGQQFALHEATLVLGMMLKHFDDED-HTNYELDIKETLTLKPEG	444
ADA57061.1	IPQHAFKPFNGQRACIGQQFALHEATLVLGMMLKHFDDED-HTNYELDIKETLTLKPEG	444
ADA57062.1	IPQHAFKPFNGQRACIGQQFALHEATLVLGMMLKHFDDED-HTNYELDIKETLTLKPEG	444
ADA57068.1	IPQHAFKPFNGQRACIGQQFALHEATLVLGMMLKHFDDED-HTNYELDIKETLTLKPEG	444
AAT62301.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFEEFID-YEDYQLDVKQTLTLKPGD	448
AAM54108.1	IPACAWMPFGHGARACIGRPFALQEATLVLALVLRFDLALADPDHRLTIKQTLTLKPDS	452
EFQ83738.1	RPAHTYKPFGTGERACIGRFALHESILVLRLLHRYDLSDG-DPGYVLDVSRERTIMPEG	454
EFL88452.1	RPFNAYKPFNGQRACIGRFAMQEANLVIGMILQRFQLDD-HKNYQLKIKESLSIKPDG	452
BAF89518.1	HHPHAYHPFGMGARSCIGFQFALVEAKMVLARFIQRFTARPKDPHYVLCHKQALTVKPDH	546
CBI43648.1	IPADAYKPFNGQRACIGMQFALQEATMVLGLVLKHFELID-HTDYELTIKEALTIKPGD	446
AEB22839.1	VPHHAYKPFNGQRACIGMQFALHEATLVLGMMLLQHFEEFID-HTDYELDIKQTLTLKPNP	446
EDT22025.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFEEFID-YEEYQLDVKQTLTLKPGD	448
AFH84458.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFEEFID-YEEYQLDVKQTLTLKPGD	456
ADP31197.1	VPHHAYKPFNGQRACIGMQFALHEATLVLGMMLLQYFKLID-HTNYELDIKQTLTLKPGD	446
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ADL27534.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
ACO29732.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFEEFID-YEDYQLDVKQTLTLKPGD	448
EDX65100.1	VPHHAYKPFNGQRACIGMQFALHEARLVMGMLLQHFEEFID-YEDYQLDVKQTLTLKPGD	448
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EEL16232.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFEEFID-YEDYQLDVKQTLTLKPGD	456
EDZ53094.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
EEL81346.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFEEFID-YQDYQLDVKQTLTLKPGD	462
EEL87105.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQDYQLDVKQTLTLKPGD	462
EEL75761.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	389
ACK88541.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFEEFID-YEDYQLDVKQTLTLKPGD	448
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EEK50040.1	VPNHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLEVKQTLTLKPGD	448
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AAP10153.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
EEK83466.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFEEFID-YEDYQLDVKQTLTLKPGD	456

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EJS57156.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
EJS56605.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQDYQLDVKQTLTLKPGD	448
EJS68951.1	VPHHAYKPFNGQRACIGMQFALHEATLVLGMLLQHFELID-YANYELDIKQTLTLKPGD	447
EJQ10567.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
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EJQ20399.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
EJQ30236.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
EJQ51278.1	VPHHAYKPFNGQRACIGMQFALHEATVVLGMLLQHFELID-YANYELDIKQTLTLKPGD	447
EEL10858.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
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EEK94080.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	451
EEK99882.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YEDYQLDVKQTLTLKPGD	451
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ADK05784.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YEDYQLDVKQTLTLKPGD	448
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BAL18840.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YEDYQLDVKQTLTLKPGD	448
EDX69960.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YEDYQLDVKQTLTLKPGD	448
ACM13462.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YEDYQLDVKQTLTLKPGD	448
EEK75631.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQDYQLDVKQTLTLKPGD	448
EEL25491.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	389
EEL21990.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	456
EEL33825.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	456

EEL44933.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFEFID-YEDYQLDVKQTLTLKPGD	456
EEL50167.1	VPHHAYKPFNGQRACIGMQFALHEATLVLGMLLQHFEFID-YANYELDIKQTLTLKPGD	526
EJR22930.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
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EJR37623.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
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EJR91135.1	VPNYAYKPFNGKRACIGMQFALHEATLVLGMILQHFELID-YMNYQLKVTQTMTLKPED	445
EJR97241.1	VPHHAYKPFNGRRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
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ABY44122.1	IPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFEFID-YQDYQLDVKQTLTLKPGD	448
EDW23201.1	IPQHAYKPFNGQRACIGMQFALHEATMVLAMVHLNLELID-HTSYELDLKESLTIKPN	445
ABV62358.1	IPQHAYKPFNGQRACIGMQFALHEATMVLAMVHLNMELID-HTSYELNLKESLTIKPN	445
EIF12263.1	VPHHAYKPFNGQRACIGMQFALHEATLVLGMILQHFETFDID-HTDYELDIKQTLTIKPGD	445
EIF14027.1	IPADAYKPFNGQRACIGMQFALQEATMVLGLVLLKHFELID-HTDYELTIKEALTIKPGD	446
EHL75405.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
EJD67577.1	VPHHAYKPFNGQRACIGMQFALHEATLVLGMILQHFETFDID-HTDYELDIKQTLTIKPGD	445
EJD68347.1	IPADAYKPFNGQRACIGMQFALQEATMVLGLVLLKHFELID-HTDYELTIKEALTIKPGD	446
EFV73436.1	IPAHAYKPFNGQRACIGMQFALHEATLVLGMILQYFDLED-HANYQLKIKESLTLKPDG	460
CBY93692.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFEFID-YEDYKLDVKQTLTLKPGD	448
AFI27355.1	VPHHAYKPFNGQRACIGMQFALHEATLVLGMILKYFTLID-HENYELDIKQTLTLKPGD	446
AFI29229.1	IPHHAYKPFNGQRACIGMQFALQEATMVLGLVLLKHFDMLN-HTGYKLIKKEALTIKPD	446
EIL85422.1	IPQHAYKPFNGQRACIGMQFALHEATMVLGMVHLNLELID-HTSYELDLKESLTIKPN	445
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AEP85668.1	VPHHAYKPFNGQRACIGMQFALHEATLVLGMVLYFTLID-HENYELDIKQTLTLKPGD	446
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sp 008336.1 CYPB_BACSU	IPHHAYKPFNGQRACIGMQFALQEATMVLGLVLLKHFELIN-HTGYELKIKKEALTIKPD	446
sp 008394.1 CYPD_BACSU	VPHHAYKPFNGQRACIGMQFALHEATLVLGMILKYFTLID-HENYELDIKQTLTLKPGD	446
AEP89812.1	VPHHAYKPFNGQRACIGMQFALHEATLVLGMILKYFTLID-HENYELDIKQTLTLKPGD	446

AEP91702.1	IPHHAYKPFNGQRACIGMQFALQEATMVLGLVLKHFELIN-HTGYELKIKEALTIKPDD	446
EHA31094.1	IPHHAYKPFNGQRACIGMQFALQEATMVLGLVLKHFELIN-HTGYELKIKEALTIKPDD	448
ADH07708.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
EEM28177.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
AFQ14162.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
EEM95517.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQDYQLDVKQTLTLKPGD	448
EEN02344.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
AFU13781.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	456
EEM70897.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YEDYQLDVKQTLTLKPGD	456
ADY22413.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YEDYQLDVKQTLTLKPGD	448
EEM82895.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
EEM52818.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
EEM59126.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YEEYQLDVKQTLTLKPGD	456
EEM47193.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	389
EEM76899.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YEDYQLDVKQTLTLKPGD	456
EEM88909.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YEDYQLDVKQTLTLKPGD	456
EEM38196.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
EEM21858.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YEDYQLDVKQTLTLKPGD	451
ABK86139.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YEDYQLDVKQTLTLKPGD	456
EJQ37805.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQNYQLDVKQTLTLKPGD	448
CCF04242.1	VPHHAYKPFNGQRACIGMQFALHEATLVLGMILQHFTEFID-HTDYELDIKQTLTIKPGD	445
CCF05972.1	IPADAYKPFNGQRACIGMQFALQEATMVLGLVLKHFELID-HTDYELTIKEALTIKPGD	446
ABS73124.1	VPHHAYKPFNGQRACIGMQFALHEATLVLGMILQHFTEFID-HTDYELDIKQTLTIKPGD	445
ABS74786.1	IPADAYKPFNGQRACIGMQFALQEATMVLGLVLKHFELID-HTDYELTIKEALTIKPGD	446
EKE46398.1	VPHHAYKPFNGQRACIGMQFALHEATLVLGMILQHFTEFID-HTDYELDIKQTLTIKPGD	445
EKE48022.1	IPADAYKPFNGQRACIGMQFALQEATMVLGLVLKHFELID-HTDYELTIKEALTIKPGD	446
CCG48683.1	VPHHAYKPFNGQRACIGMQFALHEATLVLGMILQHFTEFID-HTDYELDIKQTLTIKPGD	445
AFJ60789.1	VPHHAYKPFNGQRACIGMQFALHEATLVLGMILQHFTEFID-HTDYELDIKQTLTIKPGD	452
AFJ62808.1	IPADAYKPFNGQRACIGMQFALQEATMVLGLVLKHFELID-HTDYELTIKEALTIKPGD	446
EEK66903.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQDYQLDVKQTLTLKPGD	462
EJQ52935.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQDYQLDVKQTLTLKPGD	448
EJS69574.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQDYQLDVKQTLTLKPGD	448
EJV63294.1	VPHHAYKPFNGQRACIGMQFALHEATLVMGMLLQHFELID-YQDYQLDVKQTLTLKPGD	448
EKF35778.1	IPQHAYKPFNGQRACIGMQFALHEATMVLAMVHLNLELID-HTSYELDLKESLTIKPKD	445
EGP08506.1	RPANAWKPFNGQRACIGRGFAMHEAALALGMILQRFRLID-HERYQMHLKETLTIKPDG	455
BAL78328.1	RPINAWKPFNGQRACIGRGFAMHEAALALGMILQRFKLID-HQRYQMHLKETLTMKPEG	456
BAC48147.1	RPINAWKPFNGQRACIGRGFAMHEAALALGMILQRFKLID-HQRYQMHLKETLTMKPEG	456
BAL12135.1	RPINAWKPFNGQRACIGRGFAMHEAALALGMVLRQFKLID-HQRYQMHLKETLTMKPEG	456

CCE00185.1 RPNVNAWKPFNGQRACIGRGFAMHEAALALGMILQRFKLID-HQRYQLHLKETLTMKPEG 459
EIG57609.1 RPNVNAWKPFNGQRACIGRGFAMHEAALALGMILQRFKLID-HQRYQMHLKETLTMKPEG 456
EHR02046.1 RPNVNAWKPFNGQRACIGRGFAMHEAALALGMILQRFKLID-HQRYQMHLKETLTMKPDG 456
EJN11211.1 RPNVNAWKPFNGQRACIGRGFAMHEAALALGMILQRFKLID-HQRYQMHLKETLTMKPEG 456
CCF15606.1 IPYDAYKPFNGQRACIGQQFALQEATLVLGMILKYFDI ID-HNHYQLKIKETLTLKPEG 388
CCF12687.1 VPHHAYKPFNGQRACIGMQFALHEATLVLGMILQNFELID-HTNYQLSIQQTTLTIKPEE 446
ABB05850.1 LPPNSWKPFNGARACIGRPFAMQEHLVLIIMLQRFD'FSFADPDYELDVAETLTLKPAG 451
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ABF10339.1 LPAHAYMPFGQGERACIGRQFALTEAKLALALMLRN'FAFQD-PHDYQFRLKETLTIKPDQ 453
CAJ95800.1 LPRHAYMPFGNGERACIGRQFALTEAKLALALMLRN'QFTD-AHDYQFRIKETLTIKPDG 479
AEI79937.1 LPRHAYMPFGNGERACIGRQFALTEAKLALALMLRN'QFTD-AHDYQFRIKETLTIKPDG 479
AFD27790.1 LPTNAWKPFNGQRACIGQPFAMQEALLVLASVLRFDLTAARPDAPLKVKETLTLKPHD 449
ABC62112.1 RPPHAYKPFNGQRACIGRQFAIQESILVLGMLLQRFE'LFH-DADYQLRIKETLSIKPDG 453
EAQ27850.1 RPPHAYKPFNGQRACIGRQFAIQESILV'LAMILQRFE'LFH-HSDYKLDIKETLSIKPDE 453
EIT84377.1 IPHHAYKPFNGQRACIGMQFALHEATLVIGMLLRRF'FTLGD-PTNYTLDIKQTLTIKPN 445
CCG43686.1 IPRHAYKPFNGQRACIGQQFALHEATLVLGMVLYQFDFED-HTNYQLDVKEALTMKPEG 446
ABX05160.1 IPEHAWKPFNGQRACIGRSFAMQEASLVLAMMLQRFE'LSQPQ-YQLHVKETLTLKPEG 450
BAJ96920.1 LPPNSWKPFNGMRACIGRFFAIQEVTLV'LALILQQFDLIEENPSYQLKIREALTIKPEN 447
GAB96874.1 IPANAWKPFNGQRSCIGRGFALQEALV'LALMLQRFDIALADPDYELAIKETLTLKPEG 493
EFH80345.1 RPNAYKPFNGERACIGRQFAMQEATLVLGQILQRFN'LLD-PHNYELKIKQTLTLKPEG 456
EFH88481.1 RPNAYKPFNGTQRSCIGREFALQEATLVLGMMLQRFY'PYT-TGIYQLKIREALTIKPAD 450
EAW32450.1 RLPNAFKPFNGQRACIGSQFALQESILAIGMALQRFK'FID-HTNYQLDVKETLTLKPDD 450
EIZ82104.1 LPPNAWKPFNGMRACIGRGFALQEHLV'LALILRRFELTEADPGYTLEIAETLTLKPHG 449
AEV70722.1 RPSALFKPFGTGARSCIGRQFALHEATMALARVVHRY'RLID-SQHYVLQWDNALSRRPVG 443
EFC41452.1 LPSNSWKPFNGSRGCIGRPFQAEAILV'LAMVLRFE'LIENDPNYHLSITQALTIKPNG 477
ACV78954.1 LPAGAYQPFVGVVRCIGR'L'FALAEARATLAVLLHRFE'IRD'PHP-APLTIALHITLKPQN 448
ACV78964.1 LPPNAYKPFNGTMRSCIGRQFALQEATLVLGMMLQR'FQFVD-HRNYQLHTKTTLTVKPDE 453
ACV81379.1 VPPLAYRPFNGTGLRACIGRQFALQEATLVLGMMLQR'FDI ID-HRNYQLHTRATLTVKPED 453
EIZ78677.1 LPPNAWKPFNGGRACIGRGFAMQEAMVLTMI'LRFTLTEADPGYQLKIAETLTLKPDA 447
EJW15291.1 IPHDAYKPFNGQRACIGQQFALQEATLMLGLILKN'FELID-HTNYQLKLME'SLTIKPEG 445
EJW16173.1 IPHHAYKPFNGQRACIGQQFALQEALV'LGMV'LKHFE'IID-HTNYQLKVKEALTLKPDD 448
EHQ58913.1 VPHDAYKPFNGQRACIGQQFALQEATLVLGLLLKH'FE'FID-HTRYQLKVKETLTVKPDG 445
EHQ59900.1 IPEHAYKPFNGQRACIGQQFALQEATLVLGMV'LKYFE'IID-HTNYQLKVKETLTLKPEG 446
EHB66924.1 VPHDAYKPFNGQRACIGQQFALQEATLVLGLV'LKYFE'LIID-DQSYELKVKETLTLKPEG 445
AFH60445.1 IPPHAYKPFNGQRACIGQQFALHEAVLVLGMV'L'RHFE'IID-HTNYQLKIKETLTLKPEG 446
AEI42011.1 IPPHAYKPFNGQRACIGQQFALHEAVLVLGMV'L'RHFE'IID-HTNYQLKIKETLTLKPEG 446
ADO57681.1 IPQDAYKPFNGQRACIGQQFALQEATLVLGMV'LKH'FE'LIID-HTHYELKVKETLTLKPGG 446
EGG32133.1 VPHDAYKPFNGQRACIGQQFALQEATLVLGLV'LKYFE'LIID-NQPYELKVKETLTLKPEG 446

EGL17662.1	IPYDAYKPFNGQRACIGQQFAMQEATLVLGMVLKHFNIMP-HTDYVLKVKETLTMKPEG	447
ACX65034.1	VPHDAYKPFNGQRACIGQQFALQEATLVLGLVLKYFELID-NQPYELQVKETLTLKPEG	446
ACT11327.1	LLPNSWQPFSGKRACIGRMFAMQEALVLLAMMLQRFDLSDPSYELKIVEHLTIKPDN	450
AEA28016.1	LPPNAFKPFGSGQRACIGRQFAMQEAVLVLGMLLQRFDLSD-HLGYELKIKEALTLKPEG	457
EFP68091.1	LHPHAYKPFNGERACIGRQFALTEAKLALAVILQRFDLSD-PYDYDFHIKETLTLKPDG	463
EGY61507.1	LHPHAYKPFNGERACIGRQFALTEAKLALAVILQRFDLSD-PYDYDFHIKETLTLKPDG	463
EIE85788.1	RSRFAWLPFSTGPRACIGMAFALQEAKTVLSMLLHRFDLFRHDGPNVRWDPKM-ATTKPLD	534
EIE92534.1	RSRFAWLPFSTGPRACIGMAFALQEAKTVLAMFLNRFDLFRHDGPNVRWDPKM-ATTKPVD	534
BAE46296.1	RPAHAYRPFSTGPRACIGRQFALHEAVLALAILQRYNFQS-DPEYKLDIRETSLKPVG	502
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EEN84644.1	RPAHVYKPFSTGPRACIGRQFAIHEAVLVLGTILQKYTIEA-DPDYELKVAERLTLMPEG	458
EEN88978.1	RPAHAYRPFSTGPRACIGRQFALHEAVLTLATILQRYSFQS-DPEYKLDVREALTLKPVG	542
ABG96413.1	RPAHVYKPFSTGPRACIGRQFALHESVLLVGTILRRYDIVG-DPDYRLKVAERLTLMPEG	490
BAH52971.1	RPAHVYKPFSTGPRACIGRQFALHESVLLVGTILRRYDIVG-DPGYRLKVAERLTLMPEG	457
EHI44575.1	RPAHVYKPFSTGPRACIGRQFALHESVLLVGTILRRYDIVG-DPSYRLKVAERLTLMPEG	492
EID73168.1	RPAHVYKPFSTGPRACIGRQFALHESVLLVGTILRRYDIVG-DPSYRLKVAERLTLMPEG	457
EHK83749.1	RPAHIFKPGWTGIRACIGRQFALHEAVLTLASLIRRYDFAP-EPGYELDVHEAITLKPRD	433
EJI96173.1	RPAHVYKPFSTGPRACIGRQFALHESVLLVGTILRRYDIVG-DPDYRLKVAERLTLMPEG	457
ABI79384.1	RPAHAYKPFSTGPRACIGRQFALHEAVLALAQILTRFDIVP-TADYELTVEELLTIRPEN	486
CAR47816.1	RPAHAYKPFSTGPRACIGRQFALHEAVLALALARVLTDFDIAP-VPGYELKVEELLTIRPKN	488
AEK26937.1	RPAHIFKPGWTGIRACIGRQFALHEAVLTLASLIRRYDFAP-EPGYELDVHEAITLKPRD	465
ABE39056.1	RPANAWKPFNGQRACIGRQFAMHEAALALGMILQRFLID-HQRYRMVLKETLTIKPEG	455
ABD08340.1	RPANAWKPFNGQRACIGRQFAMHEAALALGMILQRFLID-HTRYRMVLKETLTIKPEG	454
CAM03474.1	RGPHAFKPFSTGPRACIGRQFALDEATMVLAMLAHRYRLVD-HAGYRLKVKETLTLKPEG	447
EJF54063.1	IPHSAYLPGHGRRSCIGRPFQFAKLAIAMILQRFDLSDPNDYELVLDLTLTLKPDN	462
AFC23737.1	IPPSAYLPGHGRRSCIGRPFQFAKLAIAMILQRFDLSDPNDYELVLDLTLTLKPDN	450
ADG98903.1	LPPRIYKPFSTGPRACIGRQFALHEIILTAAIILHQFDLEP-DPGYTITATEHPTLKPDG	461
EGI54680.1	LPPHAWKPFNGQRACIGRQFAMQEAILVMALMLQRFDLSDPNDYELVLDLTLTLKPDN	446
AEW97204.1	RPVHAFKPFSTGPRACIGRQFALHEAVMLLGMILHRYRFLD-HADYRLRVRETTLKPDG	466
CAJ88567.1	RAPHTFKPFSTGPRACIGRQFALHEATLVLGMLLRRYELRP-EPEYRLRVTERLTLMPEG	476
BAC68285.1	HHPHAYKPFNGVRACIGRQFALTEARLALALVLQKFKFAD-TDDYKMDVKEALTRKPGG	454
BAC75137.1	RAAHTFKPFSTGPRACIGRQFALHEATLVLGMLLRRYELRA-EPGYRLRVAERLTLMPEG	469
EDY51256.1	RPGHLYKPFNGERSACIGRQFALHEATLMLGLIVHRYRLID-HADYELKIKETLTIKPDG	439
EFG07822.1	RPGHLYKPFNGERSACIGRQFALHEATLMLGLIVHRYRLID-HADYELKIKETLTIKPDG	471
EHN78335.1	RAPHTFKPFSTGPRACIGRQFALHEATLVLGMLLRRYELRP-DPGYRLRVTERLTLMPEG	479
CAB66201.1	RAPHTFKPFSTGPRACIGRQFALHEATLVLGMLLRRYELRP-EPEYRLRVTERLTLMPEG	483
EGG48117.1	RPAHTFKPFSTGPRACIGRQFALHEATLVLGMLLRRYTVKP-DPAYRLRIAERLTLMPEG	483
EFL20831.1	RPVHLFKPFNGERACIGRQFALHEATLVLALLVHRYRLID-HTNYQLKIKQSLTLKPDG	461

EFL28515.1	RPVHAYKPFPGTGERACIGRQFALHEATMLLAMLVHRYRLID-HADYRLHVKESLTLKPEG	455
AEY93311.1	RPPHTFKPFPGTGARACIGRQFALHEATLVLGLLLRRYDLHA-DPGYRLSVAERLTLMPEG	473
AEY93321.1	RPVHAFKPFPGTGERACIGRQFALHEATMLLALLVHRYRLHD-HAGYRLTVKETLTLKPEG	453
EFD71156.1	RAPHTFKPFPGTGARACIGRQFALHEATLVLGLLLRRYELRP-EPGYRLRVTERLTLMPEG	485
CBG67789.1	RPVHLFKPFGSGERACIGRQFALHEATLVLALVIHRYRLID-HTDYQLKIKQSLTIKPDE	456
CBG68112.1	RAPHTFKPFPGTGARACIGRQFALHEATLVLGLLLRRYELTP-EPGYRLRVVERLTLMPDG	474
EFL10082.1	RPAQAYKPFPGTGERACIGRQFALHEAVLALGIMLQRYDFEA-DPAYELKIVESLTLKPSG	485
EFF88741.1	RSVHLFKPFGNGERACIGRQFALHEATLVLGLLVHRYRLID-HADYELKIKSSLTIKPDG	455
EDY58112.1	RPPHVFKPFPGTGARACIGRQFALHEATLVLGLLLRRYELRA-DPGYRLSVTERLTLMPEG	466
EFL36674.1	RAPHTFKPFPGTGARACIGRQFALHEATLVLGLLLRRYELRP-DPAYRLRVTERLTLMPDG	483
EFL36680.1	RPVHAFKPFPGTGERACIGRQFALHEATMLLAMLVHRYRLRD-HADYRLDVKETLTLKPEG	503
EFE65335.1	RPPHVFKPFPGTGARACIGRQFALHEATLVLGLLLRRYELRP-DPGYRLRVTERLTLMPRG	471
EGX54696.1	RTPHAFKPFPGTGARACIGRQFALHEATLVLGLLLRRYDFAG-DPGYRLRVAERLTLMPQG	468
ACZ89135.1	LPDKAWLPFGNGSRSCIGRAFALQEATLVL SMLLQRFEFWAPEP-YDLKVKETLTLKPEG	451
ABD83817.1	RPVNAWRPFGNGQRACIGRQFALHEAALALGMILQRFKLID-HQRYQIRLKETLTIKPDG	456
ADU39615.1	RPVNAFKPFGNGQRACIGRQFALQEAVLTLGMILQRFNLVD-HTGYKLIKIKEALTIKPEN	454
EJL72014.1	RPANAFKPFNGQRACIGRQFALQEAVLTLGMILQRFNLVD-HTGYKLIKIKEALTIKPEN	454

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sp P14779.2 CPXB_PRIM2	FVVKAKSKKIPLGGI-----PS----PST-----EQSAKKVRKKAEN	477
ADF40088.1	FVVKAKSKKIPLGGI-----PS----PSP-----EQSAKKVRKKAEN	477
ADE70259.1	FVVKAKSKQIPLGGI-----PS----PSR-----EQSAKKERKTVEN	477
AEN88827.1	FVVKAKSKKIPLGGI-----PS----LST-----EQSAKKVRKKVEN	477
KFN05180.1	FVVKAKSKKIPLGGI-----PS----PST-----EQSAKKVRKKAEN	477
ACZ37122.1	FVVKAKSKQIPLGGI-----PS----PSR-----EQSAKKERKTVEN	477
ADA57055.1	FVVKAKSKKIPLGGI-----PS----PST-----EQSAKKVRKKVEN	477
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ADA57059.1	FVVKAKSKKIPLGGI-----PS----PST-----EQSAKKVRKKVEN	477
ADA57061.1	FVVKAKSKQIPLGGI-----PS----PSR-----EQSAKKERKTVEN	477
ADA57062.1	FVVKAKSKKIPLGGI-----PS----PST-----EQSAKKVRKKVEN	477
ADA57068.1	FVVKAKSKQIPLGGI-----PS----PSR-----EQSAKKERKTVEN	477
AAT62301.1	FKIRIVPRNQTISHTTVLAPT---EEK---LKK-----HEIKKQVQKTPSIIG	490
AAM54108.1	LVRARPRADRPGATATV-----ETV-VPHQVPATH	482
EFQ83738.1	FELTLTPRTPAALTGGPAEDDQEPSEV-----P-----P-S-----	484
EFL88452.1	FTMKVKLRPDVMYSAKGPTA---DA-----DTTDAKKPGENNRE	488
BAF89518.1	LDMLLERRPEVKGRFPVRTEAPKT-----QGAPLAVAQ	579
CBI43648.1	FKIRVKNKDVSNOQSAQVHK-----AEG-----GGHKEET----KEIP	480
AEB22839.1	FHIRVRPRSKEAVPAAFTAEE---KAA---EDV-----TK-EKQETKGASIIG	487
EDT22025.1	FKIRIVPRNQTISHTTVLAPT---EEK---LKN-----HEIKQQVQKTPSIIG	490
AFH84458.1	FKIRIVPRNQTISHTTVLAPT---EEK---LKN-----HEIKQQVQKTPSIIG	498
ADP31197.1	FKIRVQSRNQEAMNSAVLTS---EKA---PDD-----QK-EKPDTKSASIVG	487
ACP19384.1	FKIRILPRKQTISHPTVLAPT---EGK---LKN-----DEIKQNVQKTPSIIG	490
ADL27534.1	FKIRILPRKQTISHPTVLAPT---EDK---LKN-----DEIKQHVQKTPSIIG	490
ACO29732.1	FKIRIVPRNQTISHTTVLAPT---EEK---LKN-----HEIKQQVQKTPSIIG	490
EDX65100.1	FKIRIVPRNQTISHTTVLAPT---EEK---LKN-----HEIKQQVQKTPSIIG	490
EEK61456.1	FKIRILPRKQTISHPTALAPT---EDK---LKN-----DEIKQHVQKTPSIIG	490
EEL16232.1	FKIRIVPRNQTISHTTVLAPT---EEK---LKK-----HEIKQQVQKTPSIIG	498
EDZ53094.1	FKIRILPRKQTISHPTALAPT---EDK---LKN-----DEIKQHVQKTPSIIG	490
EEL81346.1	FKIRILPRNQTISHTTVLAPI---EEK---LKN-----HETKQQVQKTPSIIG	504
EEL87105.1	FKIRILPRNQTISHTTVLAPI---EEK---LKN-----DEIEQQVQKTPSIIG	504
EEL75761.1	FKIRILPRKQTISHPTVLAPT---EGK---LKN-----DEIKQHVQKTPSIIG	431
ACK88541.1	FKIRIVPRNQTISHTTVLAPT---EEK---LKK-----HEIKQQVQKTPSIIG	490
EJQ05303.1	FKIRIVPRNETISHNTVLAPT---EEK---LKN-----DETKQQVQKTPSIIG	490
EEK50040.1	FKIRILPRKQTISHPTVLAPT---EDK---LKN-----DEIKQHVQKTPSIIG	490
AAS42149.1	FKIRIVPRNQNISHTTVLAPT---EEK---LKN-----HEIKQQVQKTPSIIG	490
AAP10153.1	FKIRILPRKQTISHPTVLAPT---EDK---LKN-----DEIKQHVQKTPSIIG	490
EEK83466.1	FKIRIVPRNQTISHTTVLAPT---EEK---LKN-----HETKQQVQKTPSIIG	498

ACK63698.1	FKIRILPRKQTI SHPTVLAPT---EDK----LKN-----DEIKQHVQKTPSIIG	431
EJS57156.1	FKIRILPRKQTI SHPTVLAPT---EDK----LKN-----DEIKQHVQKTPSIIG	490
EJS56605.1	FKIRILPRNQTISHTTVLAPI---EEK----LKN-----HEIEQQVQKTPSIIG	490
EJS68951.1	FKIKVRSRNQAAIRPSVLTPV---AET----PED-----HKTEKQVQNAASLQG	489
EJQ10567.1	FKIRILPRKQTI SHPTALAPT---EDK----LKN-----DEIKQHVQKTPSIIG	490
EJQ13433.1	FKIRILPRNQTISHTTVLAPI---EEK----LKN-----DEIEQQVQKTPSIIG	490
EJQ20399.1	FKIRILPRKQTI SHPTALAPT---EDK----LKN-----DEIKQHVQKTPSIIG	490
EJQ30236.1	FKIRILPRKQTI SHPTALAPT---EDK----LKN-----DEIKQHVQKTPSIIG	490
EJQ51278.1	FKIKVQSRNQAAIRPSVLTPV---AET----PED-----HKTEKQVQNAASLQG	489
EEL10858.1	FKIRILPRKQTI SHPTVLAPT---EDK----LKN-----DEIKQHVQKTPSIIG	490
EEL05393.1	FKIRILPRNQTISHTTVLAPI---EEK----LKN-----DEIEQQVQKTPSIIG	504
EEK94080.1	FKIRILPRKQTI SHPTVLAPT---EDK----LKN-----DEIKQHVQKTPSIIG	493
EEK99882.1	FKIRIVPRNETISHNTVLAPT---EEK----LKN-----DETKQQVQKTPSIIG	493
EEK55784.1	FKIRIVPRNQTISHTTVLAPT---EEK----LKN-----HEIKQQVQKTPSIIG	498
ADK05784.1	FKIRIVPRNETISHTTVLAPT---EEK----LKN-----HETKQQVQKTPSIIG	490
AAU17340.1	FKIRIVPRNQTISHNTVLAPT---EEK----LKN-----HEIKQKVQKIPSIIG	490
EEL64394.1	FKIRILPRKQTI SHPTALPPT---EDK----LKN-----HEIKQHVQKTPSIIG	490
AEW56259.1	FKIRIVPRNQTISHTTVLAPT---EEK----LKN-----HEIKQQVQKTPSIIG	490
AFQ11690.1	FKIRIVPRNQTISHTTVLAPV---EEK----LKN-----HEIKQQVQKTPSIIG	490
EAL16831.1	FKIRIVPRNQTISHTTVLAPT---EEK----LKN-----HETKQQVQKTPSIIG	490
ACK94296.1	FKIRILPRKQTI SHPTVLAPT---EDK----LKN-----HEIKQHVQKTPSIIG	490
EDZ58760.1	FKIRIVPRNETISHNTVLAPT---EEK----LKN-----DETKQQVQKTPSIIG	490
EJV84218.1	FKIRILPRNQTISHTTVLAPI---EEK----LKN-----HEIEQQVQKNPSIIG	490
EJQ69212.1	FKIRILPRNQTISHTTVLAPI---EEK----LKN-----DEIEQQVQKTPSIIG	490
EJQ80339.1	FKIRILPRNQTISHTTVLAPI---EEK----LKE-----HEIKQQVQKTPSIIG	490
EJV81602.1	FKIRILPRKQTI SHPTVLAPT---EDK----LKN-----DEIKQHVQKTPSIIG	490
EJQ95474.1	FKIRIVPRNETISHTTVLAPT---EEK----LKN-----HETKQQVQKTPSIIG	490
EEK44229.1	FKIRIVPRNETISHTTVLAPT---EEK----LKN-----DETKQQVQKTPSIIG	498
EEK88560.1	FKIRILPRKQTI SHPTVLAPT---EDK----LKN-----DEIKQHVQKTPSIIG	490
EJR07451.1	FKIRILPRKQTI SHPTVLAPT---EDK----LKN-----HEIKQHVQKTP---G	487
EJR16542.1	FKIRIVPRNETISHTTVLAPT---EEK----LKN-----HETKQQVQKTPSIIG	490
BAL18840.1	FKIRIVPRNETISHNTVLAPT---EEK----LKN-----DETKQQVQKTPSIIG	490
EDX69960.1	FKIRIVPRNQTISHTTVLAPT---DEK----LKN-----REIKQQVQKTPSIIG	490
ACM13462.1	FKIRIVPRNQTISHTTVLAPT---EEK----LKN-----HETKQQVQKTPSIIG	490
EEK75631.1	FKIRILPRNQTINHPAVLAPI---EDK----PKN-----HEIKQHVQKTPSIIG	490
EEL25491.1	FKIRILPRKQTI SHPTVLAST---EDK----LKN-----DEIKQHVQKTPSIIG	431
EEL21990.1	FKIRILARNQTI SHPTVLAPI---EEK----QKD-----HEIKQQVQKTPSIIG	498
EEL33825.1	FKIRILARNQTI SHPTVLAPI---EEK----QKD-----HEIKQQVQKTPSIIG	498

EEL44933.1	FKIRIVPRNQTISHTTVLAPT---EEK----LKN-----HEIKQQVQKTPSIIG	498
EEL50167.1	FKIKVRFNRQAAIRPSVLTPV---AAT----PED-----HKTEQQVQNAASLQG	568
EJR22930.1	FKIRILPRKQTISHPTALAPT---EDK----LKN-----HEIKQHVQKTPSIIG	490
EJP91231.1	FKIRILPRKQTISHPTVLAPT---EDK----LKN-----HEIKQHVQKTPSIIG	490
EJR37623.1	FKIRILPRKQTISHPTVLAST---EDK----LKN-----DEIKQHVQKTPSIIG	490
EJR50635.1	FKIRIVPRNETISHTTVLAPT---EEK----LKN-----HETKQQVQKTPSIIG	490
EJR64551.1	FKIRILPRNQTISHPTVLAPI---EEK----QKD-----HEIKQQVRKTPSIIG	490
EJR75620.1	FKIRIIPRKQTISHPTVLAPT---EGK----LKN-----DEIKQHVQKTPSIIG	490
EJR82049.1	FKIRILPRKQTISHPTVLAPT---EDK----LKN-----DEIKQHVQKTPSIIG	490
EJR83659.1	FKIRILPRKQTISHPTVLAPT---EDK----LKN-----DEIKQHVQKTPSIIG	490
EJR91135.1	FKIRVQLRDKKITSTFNK---SEKE----NTS-----ISKQNNKAPNASIIG	486
EJR97241.1	FKIRILPRKQTISHPTVLAPT---EDK----LKN-----DEIKQHVQKTPSIIG	490
EJS05852.1	FKIRILPRNQTISHTTVLAPI---EEK----LKN-----DEIEQQVQKTPSIIG	490
EDX58768.1	FKIRIVPRNQTISHTTVLAPT---EEK----LKN-----HEIKQQVQKTPSIIG	490
AAU24352.1	FTIRVRPRKKEAMTAMPGAQ-----PEE-----NGRQEERPSAPAAEN	484
ABY44122.1	FKIRILPRNQTISHTTVLAPI---EEK----LKN-----DEIEQQVQKTPSIIG	490
EDW23201.1	FKIKVPRKQQLFMVPPKEE-----TKK-----S-----TTTDESKVK	478
ABV62358.1	FKIKVPRKQQLFMAPPKEE-----TKK-----S-----TTIEESKVK	478
EIF12263.1	FHIRVRPRNKEAVAAALPAAE---KAA----EDV-----GK-EKRETKGASIIG	486
EIF14027.1	FKIRVKNKDVSNHQPVQNHK-----AEG-----SGHKEET----KEIP	480
EHL75405.1	FKIRILPRKQTISHPTALAPT---EDK----LKN-----DEIKQHVQKTPSIIG	490
EJD67577.1	FHIRVRPRNKEAVAAALPAAE---KAA----EDV-----EK-EKRETKGASIIG	486
EJD68347.1	FKIRVKNKDVSNHQPVQNHK-----AEG-----SGHKEET----KEIP	480
EFV73436.1	FTIRVRPRKKEAMTAMPGAQ-----PEE-----NGRQEERPSAPAAEN	498
CBY93692.1	FKIRIVPRNQTISHTTVLAPT---EEK----LKN-----HETKQQVQKTPSIIG	490
AFI27355.1	FRIKVVQTRHQEAIHADIQATE---KPG----PDK-----QK-EETETKGASVIG	487
AFI29229.1	FKITVKPRKTAAINVORREQ-----ADI-----KTETKPK----ETQP	480
EIL85422.1	FKIKVPRKQQFFMAPPKEE-----PTK-----S-----TASAEAKIA	478
ADV93500.1	FKITVKPRKTAAINVORKEQ-----ADI-----KAETKPK----ETKP	480
ADV95715.1	FHIRVQSRNQDAIHADVQAVE---KAA----SDE-----QK-EKTEAKGTSVIG	487
BAI84248.1	FHIRVQSRHQEAIHADVQTAE---KAA----PDE-----QK-EKTEAKGASVIG	487
EFG90288.1	FKITVKPRKTAAINVORKEQ-----ADI-----KTETKPK----ETKP	480
EFG91781.1	FRIRVQTRHQEAIHTDVPAAE---KEA----PVE-----QK-EETETKGASVIG	487
AEP85668.1	FRIRVQTRHQEAIHADVPAAE---KAA----PDE-----QK-EKTETKGASVIG	487
AEP87558.1	FKITVKPRKTAAINVORKEQ-----ADI-----KTETKPK----ETKP	480
sp O08336.1 CYPB_BACSU	FKITVKPRKTAAINVORKEQ-----ADI-----KAETKPK----ETKP	480
sp O08394.1 CYPD_BACSU	FHISVQSRHQEAIHADVQAAE---KAA----PDE-----QK-EKTEAKGASVIG	487
AEP89812.1	FHIRVQSRHQEAIHADVQAAE---KAA----PDE-----QK-EKTEAKDASVIG	487

AEP91702.1	FKITVKPRKTAAINVQRKEQ-----ADI-----KAETKPK----ETKP	480
EHA31094.1	FKITVKPRKTAAINVQRKEQ-----ADI-----KAETKPK----ETKP	482
ADH07708.1	FKIRILPRKQTISHPTVLAPT---EDK---LKN-----DEIKQHVQKTPSIIG	490
EEM28177.1	FKIRILPRKQTISHPTVLTPT---EDK---LKN-----DEIKQHVQKPPSIIG	490
AFQ14162.1	FKIRILPRKQTISHPTVLAPT---EDK---LKN-----HEIKQHVQKTPSIIG	490
EEM95517.1	FKIRIVPRNQTISHTTVLAPT---EEK---LKK-----HEIEQHVQKTPSIIG	490
EEN02344.1	FKIRILPRKQTISHPTVLAPT---EDK---LKN-----HEIKQHVQKTPSIIG	490
AFU13781.1	FKIRILARNQTISHPTVLAPI---EEK---QKD-----HEIKQQVQKTPSIIG	498
EEM70897.1	FKIRIVPRNQTISHTTVLAPT---EEK---LKK-----HEIKQQVQKTPSIIG	498
ADY22413.1	FKIRIVPRNQTISHTTVLAPT---EEK---LKN-----HETKQQVQKTPSIIG	490
EEM82895.1	FKIRILPRKQTISHPTALAPT---EDK---LKS-----HEIKQHVQKTPSIIG	490
EEM52818.1	FKIRILPRKQTISHPTALAPT---EDK---LKN-----DEIKQHVQKTPSIIG	490
EEM59126.1	FKIRIVPRNQTISHTTVLAPT---EEK---LKN-----HEIKQQVQKTPSIIG	498
EEM47193.1	FKIRIIPRKQTISHPTVLAPT---EGK---LKN-----DEIKQHVQKTPSIIG	431
EEM76899.1	FKIRIVPRNQTISHTTVLAPT---EEK---LKK-----HEIKQQVQKTPSIIG	498
EEM88909.1	FKIRIVPRNQTISHTTVLAPT---EEK---LKN-----HETKQQVQKTPSIIG	498
EEM38196.1	FKIRILPRKQTISHPTVLAPT---EDK---LKN-----HEIKQHVQKTPSIIG	490
EEM21858.1	FKIRIVPRNQTISHTTVLAPT---EEK---LKN-----HETKQQVQKTPSIIG	493
ABK86139.1	FKIRIVPRNQTISHTTVLAPT---EEK---LKN-----HEIKQQVQKTPSIIG	498
EJQ37805.1	FKIRILARNQTISHPTVLAPI---EEK---QKD-----HEIKQQVQKTPSIIG	490
CCF04242.1	FHIRVRPRNKGAVAAALPAAE---KAA---EDV-----EK-EKRETKGASIIG	486
CCF05972.1	FKIRVKNKDVSNHQPVQNHK-----AEG-----GGHKEET----KEIP	480
ABS73124.1	FHIRVRPRNKEDVAAALPAAE---KAA---EDV-----GK-EKRETKGASIIG	486
ABS74786.1	FKIRVKNKDVSNHQPVQNHK-----AEG-----SGHKEET----KEIP	480
EKE46398.1	FHIRVRPRNKGAVAAALPAAE---KAA---EDV-----EK-EKRETKGASIIG	486
EKE48022.1	FKIRVKNKDVSNHQPVQNHK-----AEG-----GGHKEEM----KEIP	480
CCG48683.1	FHIRVRPRNKGAVAAALPAAE---KAA---EDV-----EK-EKRETKGASIIG	486
AFJ60789.1	FHIRVRPRNKGAVAAALPAAE---KAA---EDV-----EK-EKRETKGASIIG	493
AFJ62808.1	FKIRVKNKDVSNNQQAQNHK-----AEG-----SGHKEEM----KEIP	480
EEK66903.1	FKIRILPRNQTISHTTVLAPI---EEK---LKD-----HEIEQQVQKTPSIIG	504
EJQ52935.1	FKIRILSRNQTISHTTVLAPT---EEK---LKN-----HETKQQVQKTPSIIG	490
EJS69574.1	FKIRILPRNQTISHTTVLAPI---EEK---LKN-----HETKQQVQKTSSIIG	490
EJV63294.1	FKIRILPRNQTISHTTVLAPI---EEK---LKN-----HEIEQQVQKTPSIIG	490
EKF35778.1	FKIKVRPRKQQFFMAPPKEE-----PKK-----S-----TASAASKVA	478
EGP08506.1	FKIKVRPRPDSEKITAIPA-AAST-----GTAAPAAPARARP	492
BAL78328.1	FKIKVRPRADRERGAYGGPV-AA-S-----AAPKAPRQPTARP	492
BAC48147.1	FKIKVRPRADRERGAYGGPV-AAVS-----SAPRAPRQPTARP	493
BAL12135.1	FKIKVRPRADRERGAYGGPV-AVAS-----SGPRAPRKPTTRP	493

CCE00185.1	FKIKVRPRNDRDRSAPPSSR-PGTA-----AQGPSVQSARTRP	496
EIG57609.1	FKIKVRPRADRERGAYGGPV-AV-S-----SAPKAPRQPTARP	492
EHR02046.1	FKIKVRPRADRERGAYGGPV-AV-S-----SAPKAPRQPTARP	492
EJN11211.1	FKIKVRPRADRERGAYGGPV-AAAS-----SGPRAPRQPTTRP	493
CCF15606.1	FTMRVRLRTNELSFQITGK---EKER---E-K-----TQA-QPTASTIVD	425
CCF12687.1	FYIRVKQRKKQKLDQSSQEPE-VGAVN---IRG-----TDS-RWEQIKTSIAR	489
ABB05850.1	FRVNVKPRARGALKVPDT---ALHARS---NAQS-----PSV-APVQSIAPG	491
EHP43606.1	FTLRARRRRRAHERIVTAAAAAS--IA-----SAQSQPPVVR	510
ABF10339.1	FVLRVRRRRPHERFVTRQA-S--QA-----VADAAQTDVR	485
CAJ95800.1	FTVRARRRRPHERIAAAPLAG--TA-----QAPRAGPDVQ	512
AEI79937.1	FTVRARRRRPHERIAAAPVAG--TA-----QAPQAGPDVQ	512
AFD27790.1	LRLRARLRGGTARPGQP-DPADQSVAQ-----ITP--TGGGGPLT	486
ABC62112.1	FTIKARLRHDVERGGVATVEPESK-----T-PDQAAAVP	486
EAQ27850.1	FTIKARMRKDVERGGKATEDAEAA-----STEPAEPKVP	487
EIT84377.1	FFITAAPRVDAPPFMQQEK-----TSSQTPQLVVT	476
CCG43686.1	LTMRVKSRRDAALMQPAPA-----QKE---A-----EKSSKTEAQSVPD	482
ABX05160.1	LTVRARVRKNIVRSTKPT-Q-----PNV-AIQSNPNQA	481
BAJ96920.1	FFIRVKTRGTAPHVTPIS----LQPPQ---KG-----ITE-KAYSTPANV	484
GAB96874.1	LFARFTVRPGRSADRVSARRPEAEPR---NGQAG-----GETQS-AAQTLPEEQ	539
EFH80345.1	FTMKVRKRSDAERNLQGFVK-PVEV-----TATREEKKAQVVAN	494
EFH88481.1	FYMRVRPRTDIDHIIITPLDEDTVSET-----ELV-----MVEAIHPEPEVPQKI	495
EAW32450.1	FRLRLKKRTDQDRKLNVTGPEID-----DRPKVKDVANLTS	487
EIZ82104.1	FRIHARRRGAARPR--S-AVPTAPQRP-----MT--AGRTGAPAR	484
AEV70722.1	FCLDVVPRTPDDRRSDVLVDTADTAVR-----PTPAHV TAM	479
EFC41452.1	LFLKVKPRSNWKGSQLVVRTNASNTSSE-----NSH-TDDQNSTST	516
ACV78954.1	VTLRFLARPGVSAGTAAATASPADVRP---ADGRTGTDMPGATAAGSVAAGSVQPPNSD	505
ACV78964.1	FFIKVKLRPGRALVHRETAAAAATA-----AP-AAVARPAVA	489
ACV81379.1	MWIRLRPREGFAGVARAQAAVTGAA-----DEGPAEADASAVAT	492
EIZ78677.1	FRIRARRRDDITVRARS-KIPALAPKA-----LSP-VSAPAQANA	485
EJW15291.1	FTMQVRPRRTRNEAISVHG---GQRI---PSI-----LET-T-AISELNSSF	484
EJW16173.1	FRIRIRQRKKLGAVAWSEK---GAAA---GES-----REQEHVQQAPLAE	487
EHQ58913.1	FTIKIRPRRRQTGFIFAGG---GSGT---PAL-----RKN-AAELEALDPAE	485
EHQ59900.1	FTIRVRLRAGQGAFTISAV---GNEA---PVG-----KPA-VQTAAPTVE	484
EHB66924.1	FHIKIRNRQDGTALMIPGG---GAAA---STE-----SEKRQSTSPEP-VTH	485
AFH60445.1	FTMRVRSRIEPLAVVMPGR---EAAP---LEE-----KRE-QAAEAAPVP	484
AEI42011.1	FTMRVRSRIEPQAVVMPGR---EAAP---LEE-----KRE-QAAEAAPVP	484
ADO57681.1	FTIQVRPRSTQTTIMLPGA---AQEL---HEK-----EEQKVAAPHA	483
EGG32133.1	FRIQVRSRQGGTALLVPGG---GQVA---SLE-----SKKRDDVKSDPAAAF	487

EGL17662.1	FTMKVEPRQGGVAVTIPGT----AVSA----ADD-----KRVKEQAAPLSVN	486
ACX65034.1	FRIQVRSRQGGTALLVPGG----GQVA----SLE-----SKKRDDAKSDPSAAF	487
ACT11327.1	LKIRIRVRKPSKT--LAR---GVTPKE----TSNK-----MAV-MPVAKAQHH	488
AEA28016.1	LFIQLRPRPDRTTGTVVVAPNAAQA-----PAAKPKLRLAPVGD	496
EFP68091.1	FRLRARLRNARERLSIAAPSRAEAT-----TQVDAESALA	498
EGY61507.1	FRLRARLRNARERLSIAAPSRAEAT-----TQVDAESALA	498
EIE85788.1	LFMTIHPRENFPENPKAASKKSATM---TERDGKQTAM-----PVISDNIGTK	580
EIE92534.1	LFMTIHPRENFPKPNGDSVPPQKSDASSNQAESKTATAM-----PVISAQKNAD	583
BAE46296.1	FELSLQRR-----	510
BAH31604.1	FNLTVRRR-----	466
EEN84644.1	FNLTVRRR-----	466
EEN88978.1	LKLSLQRL-----	550
ABG96413.1	FTLQLRRR-----	498
BAH52971.1	FTLRIRRR-----	465
EHI44575.1	FTLQLRRR-----	500
EID73168.1	FTLQLRRR-----	465
EHK83749.1	LRVRLSPA-----	441
EJI96173.1	FTLQLRRR-----	465
ABI79384.1	LKLAMRPRGKG-----	497
CAR47816.1	LRLVMRPRKR-----	498
AEK26937.1	LRVRLSPA-----	473
ABE39056.1	FKIKVRPRSDKDRGDFVAAG-ASQV-----STPALAQAAPRARP	493
ABD08340.1	FKIKVRPRSDKDRATRIASG-VSHS-----VAP--APAAPRARP	490
CAM03474.1	LTLAVRARTAADRVTNRLALPVGLP-----SAAPGEP--ADAARRPGRV	489
EJF54063.1	YFLKFKKRPGFKPVEDG---PKVRPSQ---NLQLK-----GN-----KQVFV	498
AFC23737.1	YFLKFKKRPGFKPVENG---PKVPASQ---SLKLK-----GG-----KQIYV	486
ADG98903.1	LRLRLHTRSR-----	471
EGI54680.1	LHIHARRRDGLVARPRS-TAQDAPTRP-----LAA-AS---APSL	481
AEW97204.1	FTLKLARRTSADRVRTVASR-----AAEGTA--QDAGLPTTA	502
CAJ88567.1	LRLRLERRAGSGRA-----GTGPD-----	495
BAC68285.1	FELNVRARQEHERTVFGAADL--QT-----DDTQAQAAVS	487
BAC75137.1	LRLRLDRRVPAVEDVPPVAN-----	488
EDY51256.1	FTLVVVRREESERRAATVSRETAERA-----GAMG---P-SGTTGGPGATGTAVPAGLR	490
EFG07822.1	FTLVVVRREESERRAATVSRETAERA-----GAMG---P-SGTTGGPGATGTAVPAGLR	522
EHN78335.1	LRLHLDRRTAAPASSPPHPDGAGAA-----	504
CAB66201.1	LRLHLVRRTAAPAPGRR--TAAPG-----	506
EGG48117.1	LRLGLERREAPVPVRASPP-----	502
EFL20831.1	FTLDLVRRTAAEWRRPAAVT-SAP-----AALERPAARR	494

EFL28515.1	LTLRLIPRTTEERAVGA-----A-----AVATSAP--ARDASLPTRV	490
AEY93311.1	LRLRLERRPALTKADEGRPAGARGSVR-----G-----A-A-----	503
AEY93321.1	FTLTLTPRTPADRVHAPLPGAAAAP-----A---AGT--PAPDALPARV	492
EFD71156.1	LRLHLVRRRTAAAPAPGRR--TAAPG-----	508
CBG67789.1	FTLRLARRTAGERRLPLVASDRAP-----AGEAPPVRR	490
CBG68112.1	LRLRVRRRAGAGTDAPRTPSS-----	495
EFL10082.1	FTVRPRLRERAAVLTS-----	501
EFF88741.1	FTIKPARRSSGERRTPAIDASTAA-----ATATRDGSTVRR	491
EDY58112.1	LRLHLERRAGRVTVAAPEADP-----	487
EFL36674.1	LRLRPERRSAVR-----	495
EFL36680.1	FTLALAPRTCADRVHTPLPGAIQAQ-----D---AES--AEPQGLPARV	542
EFE65335.1	LRLRPERRTAPAVPRTRRADGDAAS-----	496
EGX54696.1	LRLRPARRAPAAAAPSGA-DAPGP-----	491
ACZ89135.1	LRIRARVRQAVERAAPAP-E-----PSA-PPQDRP-VT	481
ABD83817.1	FKIKVRPRSGHDRTVHAEAA-TAAV-----ATGAALPRARPRP	493
ADU39615.1	FKIKALLRDPASRPRGNGET-TAAP-----DAPAKPAARKPQAA	492
EJL72014.1	FKIKALLRDPATRPRGNMSDAAAAP-----VQPTQPAQRKQAAA	493

sp P14779.2 CPXB_PRIM2	AHNTPLLVLYGSNMGTAEGTARDLADIAMSKGFAPQ-VATLDSHA-----GN	523
ADF40088.1	AHNTPLLVLYGSNMGTAEGTARDLADIAMSKGFAPQ-VATLDSHA-----GN	523
ADE70259.1	AHNTPLLVLYGSNMGTAEGTARDLADIAMSKGFAPQ-VATLDSHA-----GN	523
AEN88827.1	AHNTPLLVLYGSNMGTAEGTARDLADIAMSKGFAPQ-VATLDSHA-----GN	523
KFN05180.1	AHNTPLLVLYGSNMGTAEGTARDLADIAMSKGFAPQ-VATLDSHA-----GN	523
ACZ37122.1	AHNTPLLVLYGSNMGTAEGTARDLADIAMSKGFAPQ-VATLDSHA-----GN	523
ADA57055.1	AHNTPLLVLYGSNMGTAEGTARDLADIAMSKGFAPQ-VATLDSHA-----GN	523
ADA57058.1	AHNTPLLVLYGSNMGTAEGTARDLADIAMSKGFAPQ-VATLDSHA-----GN	523
ADA57059.1	AHNTPLLVLYGSNMGTAEGTARDLADIAMSKGFAPQ-VATLDSHA-----GN	523
ADA57061.1	AHNTPLLVLYGSNMGTAEGTARDLADIAMSKGFAPR-VATLDSHA-----GN	523
ADA57062.1	AHNTPLLVLYGSNMGTAEGTARDLADIAMSKGFAPQ-VATLDSHA-----GN	523
ADA57068.1	AHNTPLLVLYGSNMGTAEGTARDLADIAMSKGFAPQ-VATLDSHA-----GN	523
AAT62301.1	ADNLSLLVLYGSDTGVAEGLARELADTASLEGVQTE-VVALNDRI-----GS	536
AAM54108.1	RHGTPHVFYGSNGGSGEGLARTIAGDGAARGWATS-VAPLDDAV-----RA	528
EFQ83738.1	-----ESTC-----	488
EFL88452.1	KHGGKVTIAFGSNLGTTEEIARDMARSANETNGFDVK-LKTLDELV-----GN	534
BAF89518.1	AGGRPMRVLYGSNMGGCRDIALSLAQQAGARGFAAT-VAELDEQVG-----QP	626
CBI43648.1	SHGTPLLILYGSNLGTAEGIAEELADIGRSKGFSSSE-TGPLDDYA-----GK	526
AEB22839.1	LDNRPLLLIYGSNTGTAEGVAVELADTAGMHGVRTE-TAPLNDRI-----GK	533
EDT22025.1	ADNLSLLVLYGSDTGVAEGLARELADTASLEGVQTE-VVALNDRI-----GS	536
AFH84458.1	ADNLSLLVLYGSDTGVAEGLARELADTASLEGVQTE-VVALNDRI-----GS	544
ADP31197.1	VNNRPLLVLYGSDTGTAEGVARELADTASMHGVRTE-VVALNDQI-----GK	533
ACP19384.1	ADNLSLLVLYGSDTGVAEGLARELADTASLEGVQTE-VVALNDRI-----GS	536
ADL27534.1	ADNLSLLVLYGSDTGVAEGLARELADTASLEGVQTE-VVALNDRI-----GS	536
ACO29732.1	ADNLSLLVLYGSDTGVAEGLARELADTASLEGVQTE-VVALNDRI-----GS	536
EDX65100.1	ADNLSLLVLYGSDTGVAEGLARELADTASLEGVQTE-VVALNDRI-----GS	536
EEK61456.1	ADNLSLLVLYGSDTGVAEGLARELADTASLEGVQTE-VVALNDRI-----GS	536
EEL16232.1	ADNLSLLVLYGSDTGVAEGLARELADTASLEGVQTE-VVALNDRI-----GS	544
EDZ53094.1	ADNLSLLVLYGSDTGVAEGLARELADTASLEGVQTE-VVALNDRI-----GS	536
EEL81346.1	ADNLSLLVLYGSDTGVAEGLARELADTASLEGVQTE-VVALNDRI-----GS	550
EEL87105.1	ADNLSLLVLYGSDTGVAEGLARELADTASLEGVQTE-VVALNDRI-----GS	550
EEL75761.1	ADNLSLLVLYGSDTGVAEGLARELADTASLEGVQTE-VVALNDRI-----GS	477
ACK88541.1	ADNLSLLVLYGSDTGVAEGLARELADTASLEGVQTE-VVALNDRI-----GS	536
EJQ05303.1	ADNLSLLVLYGSDTGVAEGLARELADTASLEGVQTE-VVALNDRI-----GS	536
EEK50040.1	ADNLSLLVLYGSDTGVAEGLARELADTASLEGVQTE-VVALNDRI-----GS	536
AAS42149.1	ADNLSLLVLYGSDTGVAEGLARELADTASLEGVQTE-VVALNDRI-----GS	536
AAP10153.1	ADNLSLLVLYGSDTGVAEGLARELADTASLEGVQTE-VVALNDRI-----GS	536
EEK83466.1	ADNLSLLVLYGSDTGVAEGLARELADTASLEGVQTE-VVALNDRI-----GS	544

ACK63698.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVRTE-VVALNDQI-----GS	477
EJS57156.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
EJS56605.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
EJS68951.1	LNNRPLLVLVLYGSDTGTAEGVARELADTASLHGVRTE-VSPLNDRI-----GN	535
EJQ10567.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
EJQ13433.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNERI-----GS	536
EJQ20399.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVRTE-VVALNDRI-----GS	536
EJQ30236.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
EJQ51278.1	LNNRPLLVLVLYGSDTGTAEGVARELADTASLHGVRTE-VSPLNDRM-----GN	535
EEL10858.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
EEL05393.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	550
EEK94080.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	539
EEK99882.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VAALNDRI-----GS	539
EEK55784.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	544
ADK05784.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VAALNDRI-----GS	536
AAU17340.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VAALNDRI-----GS	536
EEL64394.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
AEW56259.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
AFQ11690.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VAALNDRI-----GS	536
EAL16831.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VAALNDRI-----GS	536
ACK94296.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
EDZ58760.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VAALNDRI-----GS	536
EJV84218.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
EJQ69212.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
EJQ80339.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
EJV81602.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
EJQ95474.1	TDNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VAALNDRI-----GS	536
EEK44229.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VAALNDRI-----GS	544
EEK88560.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
EJR07451.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	533
EJR16542.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VAALNDRI-----GS	536
BAL18840.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VAALNDRI-----GS	536
EDX69960.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VTALNDRI-----GS	536
ACM13462.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VAALNDRI-----GS	536
EEK75631.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VAALNDRI-----GS	536
EEL25491.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	477
EEL21990.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNERI-----GS	544
EEL33825.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNERI-----GS	544

EEL44933.1	ADNLSLLVLYGSDTGVAEGIAARELADTASLEGVQTE-VAAALNDRI-----GS	544
EEL50167.1	LNNRLLLVLVLYGSDTGTAEGVARELADTASLHGVRTE-VSPLNDRI-----GN	614
EJR22930.1	ADNLSLLVLYGSDTGVAEGIAARELADTASLEGVQTE-VVALNDRI-----GS	536
EJP91231.1	ADNLSLLVLYGSDTGVAEGIAARELADTASLEGVQTE-VVALNDRI-----GS	536
EJR37623.1	ADNLSLLVLYGSDTGVAEGIAARELADTASLEGVQTE-VVALNDRI-----GS	536
EJR50635.1	ADNLSLLVLYGSDTGVAEGIAARELADTASLEGVQTE-VAAALNDRI-----GS	536
EJR64551.1	ADNLSLLVLYGSDTGVAEGIAARELADTASLEGVQTE-VVALNERI-----GS	536
EJR75620.1	ADNLSLLVLYGSDTGVAEGIAARELADTASLEGVQTE-VVALNDRI-----GS	536
EJR82049.1	ADNLSLLVLYGSDTGVAEGIAARELADTASLEGVQTE-VVALNDRI-----GS	536
EJR83659.1	ADNLSLLVLYGSDTGVAEGIAARELADTASLEGVQTE-VVALNDRI-----GS	536
EJR91135.1	AKYKTLVVLYGSNMGTAEHIAKEIVDFARLQGIQSE-LSALNDWS-----SN	532
EJR97241.1	ADNLSLLVLYGSDTGVAEGIAARELADTASLEGVQTE-VVALNDRI-----GS	536
EJS05852.1	ADNLSLLVLYGSDTGVAEGIAARELADTASLEGVQTE-VVALNDRI-----GS	536
EDX58768.1	ADNLSLLVLYGSDTGVAEGIAARELADTASLEGVQTE-VAAALNDRI-----GS	536
AAU24352.1	THGTPLLVLYGSNLGTAEEIAKELAAEAREQGFHSR-TAELDQYA-----GA	530
ABY44122.1	ADNLSLLVLYGSDTGVAEGIAARELADTASLEGVQTE-VVALNDRI-----GS	536
EDW23201.1	SHGTPLLVLYGSNLGTAQQIANELAAEGKAKGFDVT-TAPLDDYT-----RQ	524
ABV62358.1	SHGTPLLVLYGSNLGTAQQIANELAAEDGKAKGFDMT-TAPLDDYA-----RQ	524
EIF12263.1	LDNRPLLILYGSNTGTAEGVARELADTAGMHGVRTE-TAPLNDRI-----GK	532
EIF14027.1	SHGTPLLILYGSNLGTAEGIAEELADIGRSKGFSTE-TGPLDDYA-----GK	526
EHL75405.1	ADNLSLLVLYGSDTGVAEGIAARELADTASLEGVQTE-VVALNDRI-----GS	536
EJD67577.1	LDNRPLLILYGSNTGTAEGVARELADTAGMHGVRTE-TAPLNDRI-----GK	532
EJD68347.1	SHGTPLLILYGSNLGTAEGIAEELADIGRSKGFSTE-TGPLDDYA-----GK	526
EFV73436.1	THGTPLLVLYGSNLGTAEEIAKELAAEAREQGFHSR-TAELDQYA-----GA	544
CBY93692.1	ADNLSLLVLYGSDTGVAEGIAARELADTASLEGVQTE-VAAALNDRI-----GS	536
AFI27355.1	LNNRPLLVLVLYGSDTGTAEGVARELADTASLHGVRTE-VSPLNDQI-----GK	533
AFI29229.1	KHGTPLLVLVLYGSNLGTAEGIAGELAAQGRQMGTAE-TAPLDDYI-----GK	526
EIL85422.1	SHGTPLLVLYGSNLGTAKQMANEFAEDGKAKGFDVT-TAPLDDYT-----RK	524
ADV93500.1	KHGTPLLVLVLYGSNLGTAEGIAGELAAQGRQMGTAE-TAPLDDYI-----GK	526
ADV95715.1	LNNRPLLVLVLYGSDTGTAEGVARELADTASLHGVRTE-TAPLNDRI-----GK	533
BAI84248.1	LNNRPLLVLVLYGSDTGTAEGVARELADTASLHDVRTE-TAPLNDRI-----GK	533
EFG90288.1	KHGTPLLVLVLYGSNLGTAEGIAGELAAAYGRQMGTAE-TAPLDDYI-----GK	526
EFG91781.1	LNNRPLLVLVLYGSDTGTAEGVARELADTASLHGVRTE-VAPLNDRI-----GK	533
AEP85668.1	LNNRPLLVLVLYGSDTGTAEGVARELADTASLHGVRTE-VAPLNDRI-----GK	533
AEP87558.1	KHGTPLLVLVLYGSNLGTAEGIAGELAAAYGRQMGTAE-TAPLDDYI-----GK	526
sp 008336.1 CYPB_BACSU	KHGTPLLVLVLYGSNLGTAEGIAGELAAQGRQMGTAE-TAPLDDYI-----GK	526
sp 008394.1 CYPD_BACSU	LNNRPLLVLVLYGSDTGTAEGVARELADTASLHGVRTE-TAPLNDRI-----GK	533
AEP89812.1	LNNRLLLVLVLYGSDTGTAEGVARELADTASLHGVRTE-TAPLNDRI-----GK	533

AEP91702.1	KHGTPLLVLYGSNLGTAEGIAGELAAQGRQMGFTAE-TAPLDDYI-----GK	526
EHA31094.1	KHGTPLLVLYGSNLGTAEGIAGELAAQGRQMGFTAE-TAPLDDYI-----GK	528
ADH07708.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
EEM28177.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVRTE-VVALNDRI-----GS	536
AFQ14162.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
EEM95517.1	ADNLSLLVLYGSDTGVAEGIARELADTAGLEGVQTE-VAALNDRI-----GS	536
EEN02344.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
AFU13781.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNERI-----GS	544
EEM70897.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	544
ADY22413.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VAALNDRI-----GS	536
EEM82895.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
EEM52818.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVRTE-VVALNDRI-----GS	536
EEM59126.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VAALNDRI-----GS	544
EEM47193.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	477
EEM76899.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	544
EEM88909.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VAALNDRI-----GG	544
EEM38196.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
EEM21858.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VAALNDRI-----GS	539
ABK86139.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	544
EJQ37805.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNERI-----GS	536
CCF04242.1	LDNRPLLILYGSDTGTAEGVARELADTAGMHGVRTE-TAPLNDRI-----GK	532
CCF05972.1	SHGTPLLILYGSNLGTAEGIAEELADIGRSKGFSTE-TGPLNDYA-----GK	526
ABS73124.1	LDNRPLLILYGSDTGTAEGVARELADTAGMHGVRTE-TAPLNDRI-----GK	532
ABS74786.1	SHGTPLLILYGSNLGTAEGIAEELADIGRSKGFSTE-SGPLDDYA-----GK	526
EKE46398.1	LDNRPLLILYGSDTGTAEGVARELADTAGMHGVRTE-TAPLNDRI-----GK	532
EKE48022.1	SHGTPLLILYGSNLGTAEGIAEELADIGRSKGFSTE-TGPLDDYA-----GK	526
CCG48683.1	LDNRPLLILYGSDTGTAEGVARELADTAGMHGVRTE-TAPLNDRI-----GK	532
AFJ60789.1	LDNRPLLILYGSDTGTAEGVARELADTAGMHGVRTE-TAPLNDRI-----GK	539
AFJ62808.1	SHGTPLLILYGSNLGTAEGIAEELADIGRSKGFSTE-TGPLDDYA-----GK	526
EEK66903.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	550
EJQ52935.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
EJS69574.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
EJV63294.1	ADNLSLLVLYGSDTGVAEGIARELADTASLEGVQTE-VVALNDRI-----GS	536
EKF35778.1	SHGTPLLILYGSNLGTAKQMANEFAEDGQAKGFDVT-TAPLDDYT-----GK	524
EGP08506.1	GHNTPLLVLVLYGSNLGTAEEELATRVADLAEVNGFDTK-LGTLDEYA-----GH	538
BAL78328.1	GHNTPMLVLVLYGSNLGTAEEELATRMADLAEINGFAVH-LGPLDDYV-----GK	538
BAC48147.1	GHNTPMLVLVLYGSNLGTAEEELATRMADLAEINGFAVH-LGALDEYV-----GK	539
BAL12135.1	GHNTPMLVLVLYGSNLGTAEEELATRMADLAEINGFAVH-LGPLDDYV-----GK	539

CCE00185.1	GHNTPLLVLYGSNLGTAEDMATRVADLAEVNGFSTR-LAPLDDFA-----GQ	542
EIG57609.1	GHNTPLLVLYGSNLGTAEEELATRMADLAEINGFAVH-LGPLDDYV-----GK	538
EHR02046.1	GHNTPLLVLYGSNLGTAEEELATRMADLAEINGFAVH-LGPLDDYV-----GK	538
EJN11211.1	GHNTPLLVLYGSNLGTAEEELATRMADLAEINGFAVH-LGSLDDYV-----GK	539
CCF15606.1	AHNTPLLVLYGSNLGTAEGIARELAEDARFQGFKSE-VAPLNDYL-----GK	471
CCF12687.1	VNHVSLLLILYGSNLGTAERTARELSTIAGSLGIRSE-MAPLDDWL-----GK	535
ABB05850.1	EDLSNLLVLFGGNTGSAESFARRIAGDASRHGFHAT-CAPLDDFA-----GK	537
EHP43606.1	GNGQPLSVLCGSSLGTARELAEQIHAGALAAGFAAT-LRDLDEAV-----GA	556
ABF10339.1	GHGQAMTVLCASSLGTARELAEQIHAGAIAGFDAT-LADLDDAV-----GV	531
CAJ95800.1	GRGRTLAVLCGSSLGTARELAEQVHAGALAAGFDAT-LRDLDDVA-----DA	558
AEI79937.1	GGGRPLAVLCGSSLGTARELAEQVHAGALAAGFDAT-LRDLDDVA-----DA	558
AFD27790.1	AEGIQLLVLYGSESGASEGFARQIAGDAAHGCQAT-VHSLDEQAG-----TGS	534
ABC62112.1	SHGTPLLVLYGSNLGSSEGFARELAQRGEFSGFDVT-MAPLDAHV-----AK	532
EAQ27850.1	KHDTPLLVLYGSNLGSSESFAREVAQKGEFSGFEVE-MAPLDDYV-----GK	533
EIT84377.1	GKPASLLVLYGSEMGTAEGMAREIAETASQRGIKST-VAPLSAGI-----DA	522
CCG43686.1	AHLTPLLVLYGSNMGTAEGVARELAQTGKLGQFDVK-TAPLNQYT-----SA	528
ABX05160.1	QHNIPLLVLYGSNSGSSEAFARRIASDGEARGYQTS-VAALNNYV-----NK	527
BAJ96920.1	EANTPLLVLYGSNSGSSESFASRIASESKLNGYYST-LATLDEYV-----GH	530
GAB96874.1	QHGTVPVRIIFGSNAGTSEAFQAQQVAQQATRLGYAPR-VTSLDEGV-----DD	585
EFH80345.1	QHHTPLLVLHGSNMGTSEELAHTIMEDGKLRGFDAQ-VASLDDYT-----RK	540
EFH88481.1	AQKTTLLALYGSNTGTAEVVAHRIAEAGTARGFEAT-VGELDNYV-----DK	541
EAW32450.1	DHATPLLLILHGSNMGSAQQIAARLAEEGESVGFVVS-SGSLDEYT-----NR	533
EIZ82104.1	EATTPLLVLYGSNTGSCQAFARIAGEAAGQGYAAT-AAPMDDYV-----ER	530
AEV70722.1	KKGTTLAVLFGSNLGTCRALATQLAEEATDMGCTVT-VGPLVDAVG-----G-	525
EFC41452.1	ESKGPLLVLYGSNSGTCEFSASMLHQDAKSKGFDCK-VGRLNTFT-----GN	562
ACV78954.1	GHQQLVVAASSDGGTARHLGYDLAHEAVDAGDAAD-GVELNALV-----DR	551
ACV78964.1	GHGTPLTVLFGSNLGTAEGIATKLAREGTERGFVDT-LAPLDEHV-----GQ	535
ACV81379.1	AHGTPLLVLFGSNLGTAEGIANRLGREGADRGYAVT-VAALDDHG-----PD	538
EIZ78677.1	GAATPLLVLYGSNSGSSEAFAGRIARDAQAQGYAAL-AAPLDDYV-----ER	531
EJW15291.1	PHNIPLLVLYGSNLGTAEGIARELAEKGRQLGFKSK-VAPLNDYA-----AD	530
EJW16173.1	AHDTPLLVLYGSNLGTAEGIARELADEGRYQGFSSQ-VAPLSDYV-----GK	533
EHQ58913.1	RHDTPLLVLYGSDLGTAEGIAREMADTARYQGFQSK-VAPLDDYA-----GK	531
EHQ59900.1	AHNTPLLVLYGSNLGTAEGIARELADTARYQGFSE-VAPLNERV-----GK	530
EHB66924.1	AHHTPLLLALYGSNLGTAEGIAREVADAAKHLGFDSQ-VGTLDDFA-----GR	531
AFH60445.1	KHNTPLLVLYGSNLGTAEGIARELADAARYQGFSSQ-TAPLDEHV-----GS	530
AEI42011.1	KHNTPLLVLYGSNLGTAEGIARELADAARYQGFSSQ-TAPLDEHV-----GS	530
ADO57681.1	KHDTSLLSLYGSNLGTAEGLAGELADLGRNWGFKSS-IATLNDHV-----DH	529
EGG32133.1	AHHTPLLLALYGSNLGTAEGIAREVADAAKHQGFDSQ-VGTLDEYA-----GK	533

EGL17662.1	AHNTPLLVLVLYGSNLGTAEGIAARELADA AKYQGFRPE-VASMNDYA-----GK	532
ACX65034.1	AHHTPLLALYGSNLGTAEGIAREVADA AKHQGFDSQ-VGTLDEYA-----GK	533
ACT11327.1	QDLIPLLVLHGGNTGSSEAFANRIAADA QRYGFAST-LAALDDYA-----EK	534
AEA28016.1	RHGTPLTVLFGSNLGTAEGIATRIA QDGADRFAVT-LGALDDHV-----AD	542
EFP68091.1	GGGEPMHVLYGGSLGTCQDIAEQ LAATASRAGFDAK-VAPLDAIA-----DA	544
EGY61507.1	GGGEPMHVLYGGSLGTCQDIAEQ LAATASRAGFDAK-VAPLDAIA-----DA	544
EIE85788.1	VELPPITFLYGTQTGT AQDYATILSEQARSFGFTQVTLCEMDRWNVLADGKFISNDDDDK	640
EIE92534.1	VELPPITFLYGTQTGT AQDYATV LASQAKGFGFKNTTLCCEMDKWKVLADGKFISDNKDKK	643
BAE46296.1	-----	510
BAH31604.1	-----	466
EEN84644.1	-----	466
EEN88978.1	-----	550
ABG96413.1	-----	498
BAH52971.1	-----	465
EHI44575.1	-----	500
EID73168.1	-----	465
EHK83749.1	-----	441
EJI96173.1	-----	465
ABI79384.1	-----	497
CAR47816.1	-----	498
AEK26937.1	-----	473
ABE39056.1	DHNTPLLVLVLYGSNLGTAEE LATRVADLAELNGFSTR-LGALDQYV-----GH	539
ABD08340.1	GHNTPLLVLVLYGSNLGTAEE LAHRVADLADLNGFATR-LGALDQYV-----GQ	536
CAM03474.1	LPGTGLLLLHGSNYGTCRDFAAQLALAA GELGCDTA-VAPLDEYA-----GN	535
EJF54063.1	QNKPLLYLAYGSNMGSSKKFIQQLAETAQALGYQPS-VHSLNETKA-----LM	545
AFC23737.1	QNKPLLYLAYGSNMGSSKKFIQQLAETAQALGYQPS-VHSLNETKA-----LM	533
ADG98903.1	-----	471
EGI54680.1	GDNGSLLVLVLYGSNTGTSEAF AQRI GADAAAQGYAAT-VAPLDDYA-----SG	527
AEW97204.1	RPGTTLTVLHGSNLGACREFAAGLADLGERCGFETT-VAPL DAYRA-----GD	549
CAJ88567.1	-----RAAVAE-----	501
BAC68285.1	GVGVNLT VAYGSSSLGSCEDLARTIADR GERSGFGTT-LVGLDELG-----DN	533
BAC75137.1	-----	488
EDY51256.1	APGTTTLTVLHGSNLGTSRTLAADLADQ GARHGFRTS-LAPLDDAVG-----AL	537
EFG07822.1	APGTTTLTVLHGSNLGTSRTLAADLADQ GARHGFRTS-LAPLDDAVG-----AL	569
EHN78335.1	-----GEQDAG-----	510
CAB66201.1	-----AADDAG-----	512
EGG48117.1	-----	502
EFL20831.1	NTGTALTLLHGSNLGTCAGITRDLAEDGGERGFTAT-ATPLNEAVG-----KL	541

EFL28515.1	RQDTGALLLFGTNGTGRSFAEDLAAAADGLGCATE-VAPLDRYA-----GG	536
AEY93311.1	-----DAAWARPARDAAADRRHDP-----	524
AEY93321.1	RPGTRALFLHGSNYGTCRDFAAARLADEAAAVGCATE-VAALDAYK-----DG	538
EFD71156.1	-----AADDAG-----	514
CBG67789.1	AAGTTLTLLHGSNLGTCAGIARELAEDGEQHGFAPT-VASLDSAAG-----TL	537
CBG68112.1	-----	495
EFL10082.1	-----	501
EFF88741.1	ATGTALTLLHGSNLGTCSGMARDLAADGDEHGFTTA-VASLNDYAG-----RL	538
EDY58112.1	-----D-----	488
EFL36674.1	-----	495
EFL36680.1	RPGTAALFLHGSNYGTCRDFAAQLADEAAAVGCETE-VAPLDAYA-----GG	588
EFE65335.1	-----AARRSSARVG-----	506
EGX54696.1	-----	491
ACZ89135.1	AHGTPLLLLYGSNSGASEAFARRVAGDAAARGYAAR-VAPLDEHV-----GR	527
ABD83817.1	GHNTPLLVLYGSNLGTAEDLATRVADLAEVNGFATR-LAPLDDCA-----GQ	539
ADU39615.1	RHGTSLLVLQGSNLGTAEDLARQLAEAGELRGFSTQ-VASLDDYA-----ER	538
EJL72014.1	RHGTSLLVLQGSNLGTAEDLARQLAEAGETRGFSTQ-LASLDDYA-----ER	539

sp P14779.2 CPXB_PRIM2	LP-REGAVLIVTASYNGHPPDNAKQFVDWLDQAS-----ADEVKGVRYSVFGCGDKNWAT	577
ADF40088.1	LP-REGAVLIVTASYNGHPPDNAKQFVDWLDQAS-----ADEVKGVRYSVFGCGDKNWAT	577
ADE70259.1	LP-REGAVLIVTASYNGHPPDNAKEFVDWLDQAS-----ADEVKGVRYSVFGCGDKNWAT	577
AEN88827.1	LP-REGAVLIVTASYNGHPPDNAKEFVDWLDQAS-----ADEVKGVRYSVFGCGDKNWAT	577
KFN05180.1	LP-REGAVLIVTASYNGHPPDNAKQFVDWLDQAS-----ADEVKGVRYSVFGCGDKNWAT	577
ACZ37122.1	LP-REGAVLIVTASYNGHPPDNAKEFVDWLDQAS-----ADEVKGVRYSVFGCGDKNWAT	577
ADA57055.1	LP-REGAVLIVTASYNGHPPDNAKQFVDWLDQAS-----ADDVKGVRYSVFGCGDKNWAT	577
ADA57058.1	LP-PEGAVLIVTASYNGHPPDNAKEFVDWLDQAS-----ADEVKGVRYSVFGCGDKNWAT	577
ADA57059.1	LP-REGAVLIVTASYNGHPPDNAKQFVDWLDQAS-----ADDVKGVRYSVFGCGDKNWAT	577
ADA57061.1	LP-REGAVLIVTASYNGHPPDNAKEFVDWLDQAS-----ADEVKGVRYSVFGCGDKNWAT	577
ADA57062.1	LP-REGAVLIVTASYNGHPPDNAKQFVDWLDQAS-----ADDVKGVRYSVFGCGDKNWAT	577
ADA57068.1	LP-REGAVLIVTASYNGHPPDNAKEFVDWLDQAS-----ADEVKGVRYSVFGCGDKNWAT	577
AAT62301.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
AAM54108.1	LP-ASGPVVIVSSSYNGAPPDNAAHFVRWLTQDG-----P-DLSGVDYLVLGCGNLDWSA	581
EFQ83738.1	-----QAGLN AISQTCPSGSDT-----	505
EFL88452.1	MP-KEGALLLACASYNGQPPDNAAQFVDWVKE-Q-----PAGSMDGINYALFGCGHSDWSA	588
BAF89518.1	WL-TDGPVVIVTSTYNGTTPDNAARFAKWLETAP-----AGVCAGVRHAVLGCGNTQWHQ	680
CBI43648.1	LP-VKGAVVIVTASYNGAPPDNAAGFVKWMETLE-----DQELKGVSYAVFGCGDRNWAA	580
AEB22839.1	LP-KEGALLIITSSYNGKPPSNAGQFVQWLEEVK-----QGELEGVRYAVFGCGDHNWAA	587
EDT22025.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----GDELKGVQYAVFGCGDHNWAS	590
AFH84458.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----GDELKGVQYAVFGCGDHNWAS	598
ADP31197.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PGELTGVQYAVFGCGDHNWAS	587
ACP19384.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
ADL27534.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----SDELKGVQYAVFGCGDHNWAS	590
ACO29732.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EDX65100.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EEK61456.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EEL16232.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	598
EDZ53094.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EEL81346.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----ADELKGVQYAVFGCGDHNWAS	604
EEL87105.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----ADELKGVQYAVFGCGDHNWAS	604
EEL75761.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	531
ACK88541.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EJQ05303.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EEK50040.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
AAS42149.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
AAP10153.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EEK83466.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	598

ACK63698.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	531
EJS57156.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EJS56605.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----ADELKGVQYAVFGCGDHNWAS	590
EJS68951.1	LP-KEGAILIVTSSYNGKPPSNAGQFVQWLEELQ-----HGELQGVHYAVFGCGDHNWAS	589
EJQ10567.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EJQ13433.1	LP-QEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EJQ20399.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----TDELKGVQYAVFGCGDHNWAS	590
EJQ30236.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----TDELKGVQYAVFGCGDHNWAS	590
EJQ51278.1	LP-KEGAILIVTSSYNGKPPSNAGQFVQWLEELQ-----HGELQGVHYAVFGCGDHNWAS	589
EEL10858.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EEL05393.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	604
EEK94080.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	593
EEK99882.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	593
EEK55784.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	598
ADK05784.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
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EEL64394.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
AEW56259.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
AFQ11690.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EAL16831.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
ACK94296.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
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EJV84218.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWSS	590
EJQ69212.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----SDELKGVQYAVFGCGDHNWAS	590
EJQ80339.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EJV81602.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EJQ95474.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EEK44229.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	598
EEK88560.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EJR07451.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	587
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BAL18840.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EDX69960.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
ACM13462.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EEK75631.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EEL25491.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	531
EEL21990.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	598
EEL33825.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	598

EEL44933.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----GDELKGVQYAVFGCGDHNWAS	598
EEL50167.1	LP-KEGAILIVTSSYNGKPPSNAGQFVQWLEELQ-----PGELEGVHYAVFGCGDHNWAS	668
EJR22930.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EJP91231.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EJR37623.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EJR50635.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EJR64551.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGIQYAVFGCGDHNWAS	590
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EJR82049.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EJR83659.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EJR91135.1	LPQKEGAVLIITSSYNGKPPQNAKRFVHWLEHAE-----TGELKGVHFSVLGCGDRNWNT	587
EJR97241.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EJS05852.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----SDELKGVQYAVFGCGDHNWAS	590
EDX58768.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----GDELKGVQYAVFGCGDHNWAS	590
AAU24352.1	IP-AEGAVIIVTASYNGNPPDCAKEFVNWLEHDQ-----TDDLKGVKYAVFGCGNRSWAS	584
ABY44122.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----SDELKGVQYAVFGCGDHNWAS	590
EDW23201.1	LP-DKGAVFIVTASYNGHPPDHAKKFDWVDTQEK-----EQDLTNVTFVAVFGCGDRNWAS	578
ABV62358.1	LP-DKGAVLIVTASYNGHPPDHAKTFVDWVDTQDK-----EKDLTNVTFVAVFGCGDRNWAS	578
EIF12263.1	LP-KEGALLIITSSYNGKPPSNAAQFVQWLEEVK-----PGELEGVRYAVFGCGDHNWAA	586
EIF14027.1	LP-VKGAVVIVTASYNGAPPDAAAGFVKWMETLE-----DQELKGVSYAVFGCGDRNWAA	580
EHL75405.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EJD67577.1	LP-KEGALLIITSSYNGKPPSNAGQFVQWLEEVK-----PGELEGVRYAVFGCGDHNWAA	586
EJD68347.1	LP-VKGAVVIVTASYNGAPPDAAAGFVKWMETLE-----DQELKGVSYAVFGCGDRNWAA	580
EFV73436.1	IP-AEGAVIIVTASYNGNPPDCAKEFVNWLEHDQ-----TDDLKGVKYAVFGCGNRSWAS	598
CBY93692.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
AFI27355.1	LP-KEGAVVIVTSSYNGKPPSNARQFVQWLQEIK-----PGELEGVHYAVFGCGDHNWAS	587
AFI29229.1	LP-EEGAVVIVTASYNGAPPDAAAGFVEWLKELE-----EGRLKGVSYAVFGCGNRSWAS	580
EIL85422.1	LP-ESGVVLIVTASYNGHPPDHAKQFVDWVDTQDE-----EQDLSNVTFVAVFGCGDRNWAS	578
ADV93500.1	LP-EEGAVVIVTASYNGSPPDAAAGFVEWLKELE-----EGQLKGVSYAVFGCGNRSWAS	580
ADV95715.1	LP-KEGAVVIVTSSYNGKPPSNAGQFVQWLQEIK-----PGELEGVHYAVFGCGDHNWAS	587
BAI84248.1	LP-KEGAVVIVTSSYNGKPPSNAGQFVQWLQEIK-----PGELEGVHYAVFGCGDHNWAS	587
EFG90288.1	LL-EQGAVVIVTASYNGAPPDAAAGFVEWLEGLE-----EGRLNGVSYAVFGCGNRSWAS	580
EFG91781.1	LP-KEGAVVIVTASYNGKPPSNAGQFVQWLQEIK-----PGELEGVHYAVFGCGDHNWAS	587
AEP85668.1	LP-KEGAVVIVTSSYNGKPPSNAGQFVQWLQEIK-----PGELEGVHYAVFGCGDHNWAS	587
AEP87558.1	LP-EQGAVVIVTASYNGAPPDAAAGFVEWLEGLE-----EGQLKGVSYAVFGCGNRSWAS	580
sp O08336.1 CYPB_BACSU	LP-EEGAVVIVTASYNGAPPDAAAGFVEWLKELE-----EGQLKGVSYAVFGCGNRSWAS	580
sp O08394.1 CYPD_BACSU	LP-KEGAVVIVTSSYNGKPPSNAGQFVQWLQEIK-----PGELEGVHYAVFGCGDHNWAS	587
AEP89812.1	LP-KEGAVVIVTSSYNGKPPSNAGQFVQWLQEIK-----LGELEGVHYAVFGCGDHNWAS	587

AEP91702.1	LP-EEGAVVIVTASYNGAPPDNAAGFVEWLKELE-----EGQLKGVSYAVFGCGNRSWAS	580
EHA31094.1	LP-EEGAVVIVTASYNGSPDNAAGFVEWLKELE-----EGQLKGVSYAVFGCGNRSWAS	582
ADH07708.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EEM28177.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
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EEM52818.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----TDELKGVQYAVFGCGDHNWAS	590
EEM59126.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----GDELKGVQYAVFGCGDHNWAS	598
EEM47193.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	531
EEM76899.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	598
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EEM38196.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EEM21858.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	593
ABK86139.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	598
EJQ37805.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
CCF04242.1	LP-KEGALLIITSSYNGKPPSNAGQFVQWLEEVK-----PGELEGVRYAVFGCGDHNWAA	586
CCF05972.1	LP-VKGAVVIVTASYNGAPPDNAAGFVKWMETLE-----DQELKGVSYAVFGCGDRNWAA	580
ABS73124.1	LP-KEGALLIITSSYNGKPPSNAGQFVQWLEEVK-----PGELEGVRYAVFGCGDHNWAA	586
ABS74786.1	LP-VKGAVVIVTASYNGAPPDNAAGFVKWMETLE-----DQELKGVSYAVFGCGDRNWAA	580
EKE46398.1	LP-KEGALLIITSSYNGKPPSNAGQFVQWLEEVK-----PGELEGVRYAVFGCGDHNWAA	586
EKE48022.1	LP-VKGAVVIVTASYNGAPPDNAAGFVKWTETLE-----DQELKGVSYAVFGCGDRNWAA	580
CCG48683.1	LP-KEGALLIITSSYNGKPPSNAGQFVQWLEEVK-----PGELEGVRYAVFGCGDHNWAA	586
AFJ60789.1	LP-KEGALLIITSSYNGKPPSNAGQFVQWLEEVK-----PGELEGVRYAVFGCGDHNWAA	593
AFJ62808.1	LP-VKGAVVIVTASYNGAPPDNAAGFVKWMETLE-----DQELKGVSYAVFGCGDRNWAA	580
EEK66903.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	604
EJQ52935.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EJS69574.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EJV63294.1	LP-KEGAVLIVTSSYNGKPPSNAGQFVQWLEELK-----PDELKGVQYAVFGCGDHNWAS	590
EKF35778.1	LP-ESGAVLIVTASYNGHPPDDAKQFVDWVTQDE-----EQDLSNVTFAVFGCGDRNWAS	578
EGP08506.1	LP-DKGGVLIIFCASYNGAAPDNATQFVKWLSGDL----AKDALSGVRYAVFGCGNSDWAA	593
BAL78328.1	LP-QEGGVLIICASYNGAPPDNATQFVKWLGDDL----PKDAFANVRYAVFGCGNSDWAA	593
BAC48147.1	LP-QEGGVLIICASYNGAPPDNATQFVKWLGSDL----PKDAFANVRYAVFGCGNSDWAA	594
BAL12135.1	LP-HEGGVLIICASYNGAPPDNATQFVKWLGDDL----PEDAFANVRYAVFGCGNSDWAA	594

CCE00185.1	LP-KDGGVLIIFCASYNGAPPDNAGKFVSWLHGEL----	APDAFKGLRYAVFGCGNRDWAA	597
EIG57609.1	LP-REGGVLIICASYNGAPPDNATQFVKWLGDEL----	PKDAFANVRYAVFGCGNSDWAA	593
EHR02046.1	LP-QEGGVLIICASYNGAPPDNAIQFVKWLGDEL----	PKDAFANVRYAVFGCGNSDWAA	593
EJN11211.1	LP-QEGGVLIICASYNGAPPDNASQFVKWLGDDL----	PKDAFANVRYAVFGCGNSDWAA	594
CCF15606.1	LP-KEGAVFIITSSYNGKPPSNAKDFVQWLKEAE-----	PGEFTGVNYTVFGCGDHNWAS	525
CCF12687.1	LP-KEGVLLIVTASYNGKPPNARKFVQWLGGVE-----	ADALQGVTYAVFGCGDRNWAN	589
ABB05850.1	LG-GYPAIVIVTASYEGQPPDNAKSFPYVEALD-----	EGALDGVHFSVLGCGNKQWAR	591
EHP43606.1	LP-TDGLAVIVAATYNGRAPDSARRFEAMLD SGDA---	GGYRAANLRFALLGCGNSQWA-	611
ABF10339.1	LP-TSGLVVVVAATYNGRAPDSARKFEAMLDADDA---	SGYRANGMRLALLGCGNSQWA-	586
CAJ95800.1	LP-TTGLAVIIAATYNGRAPDSARRLEALLDSGAA---	SGYRAEALSVAVLGCGNSQWP-	613
AEI79937.1	LP-TTGLAVIIAATYNGRAPDSARRLEALLDSGAA---	SGYRAEGLSVAVLGCGNSQWP-	613
AFD27790.1	LP-TQGAVVIVTSSYSQPPANARRFMAWAQLD-----	AGALAGVQYAVFGCGNRDWAA	588
ABC62112.1	LP-TDGAVAIACASYNGMPPDNAAKFVDWLEQADA---	ADAPLSNVSYLVLGCGNSDWAA	588
EAQ27850.1	LP-EDGAVAIACASYNGMPPDNAAKFIDWIEGKDG---	AAPDLSGVSYMMMLGCGNSDWAA	589
EIT84377.1	LP-TDGAVLIVTSSYNGKPPKNAERFLNWLSTLD-----	ETALRGVSFSVFGCGDHNWAA	576
CCG43686.1	LP-AEGAVLIVSASYNGNPPDNADAFVRWLKEAD-----	GEEAKGVSYAVFGCGDRNWAS	582
ABX05160.1	LP-TTGAVSIVAASYNGQPADNAQAFQCQWLAGVE-----	PNSLKGVRYSVFGCGNRDWQS	581
BAJ96920.1	LP-TSGGVVIVTSSYEGHPTDNAKQFVSWLDTLQ-----	PDSLKGVKYTVFGCGDRDWLR	584
GAB96874.1	LP-TDGALVVVSASYEGQPPDNAKAFVRWLDEQP-----	DGALDGVRFVAVFGCGNTDWAR	639
EFH80345.1	LP-TEGVVVVVTSSYNGTTPDNAA AFCAWLQEDM---	AANSLKGVKYTVFGSGNHDWFA	595
EFH88481.1	LP-KEGLVVLVTSSYNGMPPDNASAFQCWLQSDL---	APDALKGVNYTIFGCGNHEWAG	596
EAW32450.1	LP-SDGAVLLITGSYNGTPTDDAKTFMAWLEST-----	EQSLGHVRYGVFGVGNRDWAT	586
EIZ82104.1	LP-KECAVIVVTASYEGHPPDNARRFLAWVEGLG-----	PEALAGVRFTVFGCGNRQWAR	584
AEV70722.1	LP-DADAILIITSSYNGOPTDDARAFLTWLTGDG-----	AALRGPNVAVLGVGDRNWAD	579
EFC41452.1	IP-LDTPILIVTASYEGOPTEDAKQFVGWLEHVP-----	ENTLKGLKYAVFGCGHSDWVD	616
ACV78954.1	LP-VDRPLVVITASYNGQPAAGARDFVSWLSAAP-----	DGAAHGVRFAVFGCGDHNWPT	605
ACV78964.1	VP-ANGALIVVSASYNGMPPENAEDFVAVMRDPSL---	PSDAFAGLSFTVFGCGD TDWAS	591
ACV81379.1	LP-AEGAVLVVSASYNGEAPENAAAFVDKLRRAV---	PDGAYAGVRFTVFGCGD TDWAA	594
EIZ78677.1	LP-RDGAVIIVTASYEGQPPDNARRFVTWIEGLG-----	AETLKGVRFAIFGCGNRQWAR	585
EJW15291.1	LP-KEGITFIVTASYNGQPPSNARRFVKWLKEVE-----	PESLKGVS YCVFGCGDHNWPS	584
EJW16173.1	LP-RTGAVLIVTSSYNGKPPSNAQT FVEWLERLD-----	DGELEGVRYSVFGCGDRNWAS	587
EHQ58913.1	LP-AEGVIYIVTSSYNGMPPNARGFVQWLREAA-----	PGELEGIRYCVFGCGDRNWAS	585
EHQ59900.1	LP-KEGVV FIVSASYNGKPPSNAREFVQWLEGAE-----	PGAFEGVRYAVFGCGDHNWAG	584
EHB66924.1	LP-KEGAVVIVSASYNGQPPSNAKS FVEWLENAD-----	ESELQGVRYAVFGCGDHNWAS	585
AFH60445.1	LP-KEGAVFIVTASYNGSPPDNARAFVQWLEQAE-----	PGSLDGVRYAVFGCGDHNWAS	584
AEI42011.1	LP-KEGAVFIVTASYNGSPPDNARAFVQWLEQAE-----	PGSLDGVRYAVFGCGDHNWAS	584
ADO57681.1	LP-KEGVLLITTATYNGHPPDNADAFVEWLKEVD-----	EGQLAGIRYAVFGCGDRNWAS	583
EGG32133.1	LP-KEGVVIVTASYNGQPPSNAKTFMEWLENAN-----	ESEIEGVRYAVFGCGDHNWAS	587

EGL17662.1	LP-KEGAVFLVTASYNGKPPSNAKDFMDWLESAE-----PSEIAGVRFVAVFGCGDHNWAS	586
ACX65034.1	LP-KEGVVVIVTASYNGQPPSNAKAFMEWLENAN-----ESEIEGVRYAVFGCGDHNWAS	587
ACT11327.1	LP-QTGALIVITASYEGMPPNARHFVPWVEGLA-----DDALSGLKFSVFGCGNLQWVR	588
AEA28016.1	LP-KEGGLVVVCASYNGMPPDNAERFCAWIRDAAT---PADTAAGAAYAVFGCGNMDWAS	598
EFP68091.1	LP-QQGVLIIVVAATYNGRAPDSARTLEARLDAAAA---LTRQATGLRYAVLGCNSQWP-	599
EGY61507.1	LP-QQGVLIIVVAATYNGRAPDSARTLEARLDAAAA---LTRQATGLRYAVLGCNSQWP-	599
EIE85788.1	KL-DKQLVVICTATYNGQPPDNAENFDKFLDKKMRDHDHENIFTGLSYAVFGLGKNKNR-	698
EIE92534.1	KL-DKELVVICTATYNGQPPDSAEKFDSFLDNKMREDDHENILTGLSYAVFGLGKNKNR-	701
BAE46296.1	-----	510
BAH31604.1	-----	466
EEN84644.1	-----	466
EEN88978.1	-----	550
ABG96413.1	-----	498
BAH52971.1	-----	465
EHI44575.1	-----	500
EID73168.1	-----	465
EHK83749.1	-----	441
EJI96173.1	-----	465
ABI79384.1	-----	497
CAR47816.1	-----	498
AEK26937.1	-----	473
ABE39056.1	LP-EEGGVLIFTASYNGAPPDNATQFVQWLSGDL---PKDAFAKLRYAVFGCGNRDWT	594
ABD08340.1	LP-EEGGVLIFAASYNGAPPDNATQFVRWLSGDL---PPDAFAKLRYAVFGCGNRDWT	591
CAM03474.1	LP-SDRPVIVVAASYNGRPTDDAVSFSRWLDEAE-----PGAADGVDFAVLGVGDRNWAA	589
EJF54063.1	AQ-NKGHYVIITASYEGQPTHDAEEFVDWIVAQP-----EGSLNQVQYSLFGCGNSDWHI	599
AFC23737.1	AQ-NKGHYVIITASYEGQPTHDAEEFVDWIVEQP-----EGSLDQVQYSLFGCGNSDWHI	587
ADG98903.1	-----	471
EGI54680.1	LP-DGVPLIIATASYEGRPPDNAARFVPWLECLP-----EQALAGRRTVFGCGNRQWAR	581
AEW97204.1	LP-RTSPVVVVAASYNGRPTDDAAGFVSWLEQAG-----PGAADGVRYAVLGVGDRNWAA	603
CAJ88567.1	-----DAASAPRCVPVPRADD-----	516
BAC68285.1	LP-TEGLLVVVASSYNGKAPDNAQRFDLLAAGLP---EGS-LSNVRFALLGAGNTQWVA	588
BAC75137.1	-----PEVSS-GPRCPVTGAGE-----	504
EDY51256.1	AP-G-QPVLIVASSYNGRPTDDACRFVEWLESGA-----APADVPIYAVLIGIGDRNWAA	588
EFG07822.1	AP-G-QPVLIVASSYNGRPTDDACRFVEWLESGA-----APADVPIYAVLIGIGDRNWAA	620
EHN78335.1	-----NAGSASRCPVHRAGD-----	525
CAB66201.1	-----DTVSAPGCPVHRAGD-----	527
EGG48117.1	-----EDSSAPGRPVRGAGE-----	517
EFL20831.1	TP-GAGPVVIVAASYNGRPTDDATEFVAVLEGLE-----PGSLDGVQYAVLGVGDRNWAA	595

EFL28515.1	LP-TDRPVVITAASYNGQPTDDAAAFLOWLETAE-----PGAADGVEYAVLGVGDRNWAA	590
AEY93311.1	-----GPAQPPSASRCPVHGAAD-----	542
AEY93321.1	LP-TDRPVVIAAASYNGRPTDDAVAFWLDGTP-----DLTGVTYAVLGVGDRNWAA	590
EFD71156.1	-----DTVSAPGCPVHRAGD-----	529
CBG67789.1	SA-VDGPVVIVAASYNGRPTDDATRMEWLDDLA-----PGSLDGLRYAVLGVGDRNWAA	591
CBG68112.1	-----PPTPSSAPSGRPVTGAGE-----	513
EFL10082.1	-----	501
EFF88741.1	SG-AKGPVVIVAASYNGKPTDDAAQFMKYLEGLE-----PGSLDGLTYAVLGVGDRNWAA	592
EDY58112.1	-----EAPVPASESGCPVHRAGD-----	506
EFL36674.1	-----EPASELRCPVPGAGD-----	510
EFL36680.1	LP-TDRPVVITAASYNGRPTDDATAFAARLEETH-----DLSGVTYAVLGVGDRNWAA	640
EFE65335.1	-----RVNPAASYRRSPGPRRAGAG-----	526
EGX54696.1	-----	491
ACZ89135.1	LP-AEGAVVVVTASYNGQPPDNARDFVTWLSVDP-----RGALEGVRYAVFGCGSRDWLS	581
ABD83817.1	LP-DSGGVLIFCASYNGAPPDNATKFGWLRGEL----PNDFAKLRYAVFGCGNRDWAA	594
ADU39615.1	LP-ANGAVAIVCASYNGVAPDNAAEFHRWLD--K---ADDALNGVRFVSVFGCGNTDWAA	591
EJL72014.1	LP-ANGAVAIVCASYNGVAPDNAAEFHRWLD--K---ADDSLNGVRFVSVFGCGNTDWAA	592

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sp|P14779.2|CPXB_PRIM2      TYQKVPAFIDETLAAKGAENIADRGEADASDDFEGTYEEWREHMWSDVAAYFNLDIENS- 636
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ADE70259.1                  TYQKVPAFIDETLAAKGAENIAERGEADASDDFEGTYEEWREHMWSDLAAYFNLDIENS- 636
AEN88827.1                  TYQKVPAFIDETLAAKGAENIAERGEADASDDFEGTYEEWREHMWSDVAAYFNLDIENS- 636
KFN05180.1                  TYQKVPAFIDETLAAKGAENIADRGEADASDDFEGTYEEWREHMWSDVAAYFNLDIENS- 636
ACZ37122.1                  TYQKVPAFIDETLAAKGAENIAERGEADASDDFEGTYEEWREHMWSDLAAYFNLDIENS- 636
ADA57055.1                  TYQKVPAFIDETLAAKGAENIADRGEADASDDFEGTYEEWREHMWSDVAAYFNLDIENS- 636
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ADA57062.1                  TYQKVPAFIDETLAAKGAENIADRGEADASDDFEGTYEEWREHMWSDVAAYFNLDIENS- 636
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AAT62301.1                  TYQRI PRYIDEQMAQKGATRFSTRGEADASGDFEEQLEQWKQSMWSDAMKAFGLELKNM 650
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EFQ83738.1                  ----- 505
EFL88452.1                  TFQATPRIIDEHMKRAGATAYVETGEGDAKEDLDAEFDTWFGPWWQHTGKALGLDV---- 644
BAF89518.1                  TFQKFPKTIASGLAALGGTALLDEGTADAAGDYEAAVEGWTAAALWPALEAAFGGGAAGAAV 740
CBI43648.1                  TYQRI PRLIDKVL EEKGAKRLT SIGEGDNADDFEYSQEAWEDSFWKDIMKAFHIEAA--- 637
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BAL78328.1	TYQSV PRFIDEQLSKHGGRVYPRGEGDARS DLDGQFQKWFPAQAQVATKEFGIDW----	649
BAC48147.1	TYQSV PRFIDEQLSGHGGRVYPRGEGDARS DLDGQFQKWFPAQAQVATKEFGIDW----	650
BAL12135.1	TYQSV PRFIDEQLSKHGGRVYPRGEGDARS DLDGQFQKWFPAQAQVATKEFGIDW----	650

CCE00185.1	TYQSVPRFIDDALAAHGAKRVHERGEGDARSDDLGGQFETWFAALGAAAVKEFGLDS----	653
EIG57609.1	TYQSVPRFIDEQLSAHGARAVYPRGEGDARSDDLGGQFQKWFPAAAQVATKEFGIDW----	649
EHR02046.1	TYQSVPRFIDEQLSAHGARAVYPRGEGDARSDDLGGQFQKWFPAAAQVATKEFGIDW----	649
EJN11211.1	TYQSVPRFIDEQLSRHSARAIYPRGEGDARSDDLGGQFQKWFPAAAQVATKEFGIDW----	650
CCF15606.1	TYQQVPHLIDKQLEAKGATRLMKQGEGDASGDFEKQLEDWRHQLWPGVMNALGLKINENR	585
CCF12687.1	TYQDVPRFIDEQLTLKGAKRLSLRGEADTSGDFEKQLEDWQKRMWLDVMETFILQEN---	646
ABB05850.1	TYQAI PKRVDEALEKAGATRVHFRGELDSGGDFEFGFDRWYTEMWNRFAISAGKEIPV--	649
EHP43606.1	TYQAFPKRLHGFFSAAGAVPPLLARGEADGNGDFDHAAESWLAALWQSLQALRVEQGAA--	669
ABF10339.1	TYQAFPRRVDFDFITAGAVPPLLPRGEADGNGDFDQAAERWLAQLWQALQADG-----	638
CAJ95800.1	TYQAFPRRVYEFFTNAGASPLLPRGEADGNGDFDQAVERWLALLWQALQAGD---GVG--	668
AEI79937.1	TYQAFPRRVYEFFTNAGASPLLPRGEADGNGDFDQAAERWLASLWQALQAGD---SVG--	668
AFD27790.1	TYQAVPKQLDALLE DAGARRFCGRGEADARGDFFGGFADWYTFWIEFGTAFGPLQTP--	646
ABC62112.1	TFQVVPRKIDALMEQHGAERLVP AEELDARGDLDTQFHDWLDGLI PQLGDAFDIDLDES--	646
EAQ27850.1	TFQAVPRLIDARMEELGAKRIVPTTELDARSVDVTQFHTWLDALMPQLGEHFDDLDSG--	647
EIT84377.1	TYQAVPRQLEQLLLAKGATVFSMRGEGDV AHDVEQAWQHWKQHMWKDACETF DLKVEETD	636
CCG43686.1	TYQRVPTLIDEELQALGAERILAREGGDASEDFEGDLEKWEAALWPALADTFNLELEEAD	642
ABX05160.1	TYQAVPTQIDQHLQAAGAERLLQRGAADARSDFFGDFERWYAPFWQTHNQTFAIASAE--	639
BAJ96920.1	TYQAI PKRIDEKLAESGATRIKDRGEADAKGDFFGDFDQWNSTLWSTLSEKLGTKTVA--	642
GAB96874.1	TYQAVPTHLDEALARAGATRLVDRGEANARGDFFGDFDAWHEGLWPAIGEALGIDATPA-	698
EFH80345.1	TFQAI PRLVDSRLEQYGAQRIYPRGEGDAADDGDFGQFQAWYQLLWSELGQTLNLDLGA--	653
EFH88481.1	TYQAI PKLLDSALEQAGARRVYQRGEGDAAGDFGQFRSWYNGLWNSVAQALSLTPQE--	654
EAW32450.1	TYQRVPRLIEQRLETLGAECVARGEADARGDFFGDIDSYAKTVWPELAVSLGLTV----	642
EIZ82104.1	TYQAI PKRTDAALAKAGAQRVREGETDAGGDFFGGFDAWYAGLWADLGRALGQTGGRG-	643
AEV70722.1	TYQAVPKRIDERLTELGAMP LLPRAEADTSGDLTGTVEEFEVALWTAMAQHFGDPDAAPI	639
EFC41452.1	TYQRIPTFIDNKLSEAGGERIAQRGIGNAAKDLFCFDQWRKTLWSSFPDPTS-----	669
ACV78954.1	TYQAVPALIDRELVRI GGERLIDRGEGDSSGDL DGAFTRWRSRLWQALDAGRPGPP----	661
ACV78964.1	TYQAVPTLLDTELERHGATRVHPRGAGDAHADFDDQYRSWHAGLWADLATALGLPATA--	649
ACV81379.1	TYQAVPILLDAELERLGGTRIHPRGAGDAQADDFGQYRAWHADLWADLAAGLGLSERQ--	652
EIZ78677.1	TYQAI PKRIDAAMEGAGATRIKPRGETDAAGDFFGAFDAWYGNLWTDLGTALGKQA----	641
EJW15291.1	TYQSIPIFIDEQLAAKGANRLLPVGHGDASGEFETEVEEWRDKLWPAVMRSLDLKFDGID	644
EJW16173.1	TYQDVPRFVDEQMOKKGAERLMMRGEGDASGDFELNVESWRTKLWPDMMNVLGLOPTKQS	647
EHQ58913.1	TFQSVPTWIDGQMAAKGAKRLVPLGGGDVGGDFETEVENWRDQLWPAVMSSLGLSFQAME	645
EHQ59900.1	TYQQVPRFIDEALADKGATRLVARGEADASGDFEKQLEEWGDRLWQDVLNGLKSGGQP	644
EHB66924.1	TYQRI PRLIDEQLAIKGAQRLLPRGESDASGDFEREVD AWTAE LWPDLMQALGLPVI AVN	645
AFH60445.1	TYQQVPRKIDALLADKGAKRLAGLGE G DVSDDFEQQLESWRGGLWPQVMEAFGLSLNENA	644
AEI42011.1	TYQQVPRKIDALLADKGAKRLAGLGE G DVSDDFEQQLESWRGGLWPQVMEAFGLSLNENA	644
ADO57681.1	TYQRI PRMIDELMTAKGAKRLYDRGEGDASGDFEKDWEVWNHGLWPELLNAFGIEHSDTE	643
EGG32133.1	TYQRI PRFIDEQLALKGAQR LIQRGESDASGDFEREVDEWTEHLWPDLMQALGLPVTA VH	647

EGL17662.1	TYQDVPRRADELLASKGGQRLAGRGECDASGDFEKQLEDWREALRPDVMKALGLELAEIS	646
ACX65034.1	TYQRI PRLIDEQLSLKGGQRLIHRGESDASGDFEREVDEWTEHLWPDLMQSLGLPVTAVH	647
ACT11327.1	TYQAI PKRVDLALEHAGGERIHERGVADSGGDFFGNFDDWYTKLWPALTTAFGRQGAV--	646
AEA28016.1	TYQAI PTMLDEQLERHGGRRVVPRGEGDARSDFDGQYEAWYATLWPAMTEALGLETAA--	656
EFP68091.1	AFQAFPKRVEAMLAAAGAQAIVPRGEADGNAGFDAAVEAWTRSLWSALGARQ-----	651
EGY61507.1	AFQAFPKRVEAMLAAAGAQAIVPRGEADGNAGFDAAVEAWTRSLWSALGARQ-----	651
EIE85788.1	TYQRFPNKINQCLSEFGAERFFTSGEGDSDKMDMATFNDWCARFWSHLLGTYGIAASESN	758
EIE92534.1	TYQHFPKIKVSQCLSELGAERLFASGEGDNDKMDAAFNWDCARFWSHLLIHHGIAACESK	761
BAE46296.1	-----	510
BAH31604.1	-----	466
EEN84644.1	-----	466
EEN88978.1	-----	550
ABG96413.1	-----	498
BAH52971.1	-----	465
EHI44575.1	-----	500
EID73168.1	-----	465
EHK83749.1	-----	441
EJI96173.1	-----	465
ABI79384.1	-----	497
CAR47816.1	-----	498
AEK26937.1	-----	473
ABE39056.1	TYQAI PRLVDERLAAHGGRNIFLRGEGDARDLLEGGQFESWFAKLGPLAVKEFGIDA----	650
ABD08340.1	TYQAI PRLIDERLAAHGGRNIFVRGEGDARDLLEGGQFEAWFATLGPLAVKEFGIDA----	647
CAM03474.1	TYQHVPTRIDARLAEELGGTRILERGEADASGDLGAVRRFSAALETALLERSGDPDAVAA	649
EJF54063.1	SYQAVPRKIDAQLQRLGAQPFLAPAEGNAKQNFVVSFNQWHDELWPALAKSLGQDAVS--	657
AFC23737.1	SYQAVPRKIDAQLKRLGAQPFLAPGEGNAKQNFVVSFNQWHDELWPALAKSLGQDAIS--	645
ADG98903.1	-----	471
EGI54680.1	TWQAI PKRVDAALAKAGAQAQAFHPRGEGDAAGDLFGAFESWYADLWSSLAASEGREP----	637
AEW97204.1	TYQKVPTLIDERLAECCGATRLLEAAADAAGDLAGTVRGGFGEALRRALLAEYGDPSVGA	663
CAJ88567.1	-----	516
BAC68285.1	TYQGFPKRIEAGLLAAGATRVIERGIADAAGDFDGMATRWMDTLWTTLAEY---AAD--	643
BAC75137.1	-----	504
EDY51256.1	TYQRVPTLIDEQLTAAGSTPLVERAAVDVSADVATEVERWSGRVWGALLDRYGPVDPFAE	648
EFG07822.1	TYQRVPTLIDEQLTAAGSTPLVERAAVDVSADVATEVERWSGRVWGALLDRYGPVDPFAE	680
EHN78335.1	-----	525
CAB66201.1	-----	527
EGG48117.1	-----	517
EFL20831.1	TYQRIPTLIDERLTAAGAVRLLERGAADASGDFAGTVDRWTGDLWTVLFDYRGAEGEAAA	655

EFL28515.1	TYQRVPTLIDERLAALGATRLIDRAAADASGDLSGTVRDFTERLRTALLERHGD PATVGA	650
AEY93311.1	-----	542
AEY93321.1	TYQQVPTRIDARLAELGATRLTERAAADASGDLTGAVREFTARVRSALLSAYGDPDAGHD	650
EFD71156.1	-----	529
CBG67789.1	TYQRVPALIDERLSAAGATALLERGAADASGDFAGTVDRWTGELWTTLLDRHGTAQDGVA	651
CBG68112.1	-----	513
EFL10082.1	-----	501
EFF88741.1	TYQRIPTLIDERLTAAGATPLLERCAADASGDFASVVDRWTEELWNALLEQHGEAAEGVA	652
EDY58112.1	-----	506
EFL36674.1	-----	510
EFL36680.1	TYQHVPTRIDERLAESGATRLLDRAAADASGDLTGTVREFTAALRTALLQQYGDPDATAP	700
EFE65335.1	-----	526
EGX54696.1	-----	491
ACZ89135.1	TYQAVPTMIDERLQGAGAQRVVARGEADAGDFFGDFERWYAPFWESLGD SLGVKEGG--	639
ABD83817.1	TYQSVPRLIDETLSAHGGKRVFPRGEGDARS DLGQFESWFAALGAAVKEFGLES----	650
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EJL72014.1	TYQAVPRRIDERLEALGATRVHPRGEGDAREDMDGAFQDWS DALWPELVKAFDIKTG---	649

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ADE70259.1 -----EDNKS-----TSLQFVDSA-----ADMPLAKMHGAFS 664
AEN88827.1 -----EENAS-----TSLQFVDSA-----SDMPLAKMHRAFS 664
KFN05180.1 -----EDNKS-----TSLQFVDSA-----ADMPLAKMHGAFS 664
ACZ37122.1 -----EENAS-----TSLQFVDSA-----ADMPLAKMHRAFS 664
ADA57055.1 -----EDNKS-----TSLQFVDSA-----ADMPLAKMHGAFS 664
ADA57058.1 -----EENAS-----TSLQFVDSA-----ADMPLAKMHRAFS 664
ADA57059.1 -----EDNKS-----TSLQFVDSA-----ADMPLAKMHGAFS 664
ADA57061.1 -----EENAS-----TSLQFVDSA-----ADMPLAKMHRAFS 664
ADA57062.1 -----EDNKS-----TSLQFVDSA-----ADMPLAKMHGAFS 664
ADA57068.1 -----EENAS-----TSLQFVDSA-----ADMPLAKMHRAFS 664
AAT62301.1 -----EKERS-----TSLQFVSRSL-----GGSPLARTYEAVY 678
AAM54108.1 -GPR-----FR-----VVE-----SDAADGLGDLAS 660
EFQ83738.1 -----
EFL88452.1 DF--EETLDDAP-----LYEVTFLKD-A-----SQNPLVEQMGAKP 677
BAF89518.1 IGSAAEA- AEAP-----AVKVEVVNFAGAATGAAPRTGTRLDQGAQL 781
CBI43648.1 -P----KQTNKS-----QLSIEYVSEA-----AETPIAKTYKAFE 667
AEB22839.1 -----EKERS-----TLGLQFVSGL-----GGSPLAQTYEAVY 675
EDT22025.1 -----EKERS-----TSLQFVSRSL-----GGSPLARTYEAVY 678
AFH84458.1 -----EKERS-----TSLQFVSRSL-----GGSPLARTYEAVY 686
ADP31197.1 -----EKERS-----TSLQFVSRSL-----GGSPLARSYEAVH 675
ACP19384.1 -----EKERS-----TSLQFVSRSL-----GGSPLARTYEAVY 678
ADL27534.1 -----EKERS-----TSLQFVSRSL-----GGSPLARTYEAVY 678
ACO29732.1 -----EKERS-----TSLQFVSRSL-----GGSPLARTYEAVY 678
EDX65100.1 -----EKERS-----TSLQFVSRSL-----GGSPLARTYEAVY 678
EEK61456.1 -----EKERS-----TSLQFVSRSL-----GGSPLARTYEAVY 678
EEL16232.1 -----EKERS-----TSLQFVSRSL-----GGSPLARTYEAVY 686
EDZ53094.1 -----EKERS-----TSLQFVSRSL-----GGSPLARTYEAVY 678
EEL81346.1 -----
EEL87105.1 -----EKERS-----TSLQFVSRSL-----GGSPLARTYEAVY 692
EEL75761.1 -----EKERS-----TSLQFVSRSL-----GGSPLARTYEAVY 619
ACK88541.1 -----EKERS-----TSLQFVSRSL-----GGSPLARTYEAVY 678
EJQ05303.1 -----EKERS-----TSLQFVSRSL-----GGSPLARTYEAVY 678
EEK50040.1 -----EKERS-----TSLQFVSRSL-----GGSPLARTYEAVY 678
AAS42149.1 -----EKERS-----TSLQFVSRSL-----GGSPLARTYEAVY 678
AAP10153.1 -----EKERS-----TSLQFVSRSL-----GGSPLARTYEAVY 678
EEK83466.1 -----EKERS-----TSLQFVSRSL-----GGSPLARTYEAVY 686

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EJS56605.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
EJS68951.1	-----EKERS-----TSLQFVSGL-----GGSPARSYEAMN	677
EJQ10567.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
EJQ13433.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
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EJQ30236.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
EJQ51278.1	-----EKERS-----TSLQFVSGL-----GGSPARSYEAMN	677
EEL10858.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
EEL05393.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	692
EEK94080.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	681
EEK99882.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	681
EEK55784.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	686
ADK05784.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
AAU17340.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
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AEW56259.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
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EAL16831.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
ACK94296.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
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EEK88560.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
EJR07451.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	675
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EDX69960.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
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EEK75631.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
EEL25491.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	619
EEL21990.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	686
EEL33825.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	686

EEL44933.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	686
EEL50167.1	-----EKERS-----TSLQFVSGL-----GGSPARSYEAVN	756
EJR22930.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
EJP91231.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
EJR37623.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
EJR50635.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
EJR64551.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
EJR75620.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
EJR82049.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
EJR83659.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
EJR91135.1	-----EKEQN-----TLNIQFVNNL-----VETPLAKSSEVLH	675
EJR97241.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
EJS05852.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
EDX58768.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
AAU24352.1	-Q----TETDRQ-----ALSVEFVNAP-----AASPLAKAYQVFT	674
ABY44122.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
EDW23201.1	-E----KGKENP-----KLSVAYTNEL-----VERPVAKTYGAFS	665
ABV62358.1	-E----KGKETP-----KLSVAYTNEL-----VERPVAKTYGAFS	665
EIF12263.1	-----EKERS-----ALGLQFVSGL-----GGSPLAQTYEAVY	674
EIF14027.1	-P----KQTNKS-----QLSIEYVSEA-----AETPIAKTYKAFE	667
EHL75405.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
EJD67577.1	-----EKERS-----ALGLQFVSGL-----GGSPLAQTYEAVY	674
EJD68347.1	-P----KQTNKS-----QLSIEYVSEA-----AETPIAKTYKAFE	667
EFV73436.1	-Q----TETDRQ-----ALSVEFVNAP-----AASPLAKAYQVFT	688
CBY93692.1	-----EKERS-----TSLQFVSRL-----GGSPARTYEAVY	678
AFI27355.1	-----DKERS-----TSLQFVRGL-----GESPLARSYEAAH	675
AFI29229.1	-A----QKEDRP-----SLSITFLSEA-----TETPVAKAYGAFE	667
EIL85422.1	-E----KRQEKP-----NLSIAYTNEL-----VERPVAKTYGAFS	665
ADV93500.1	-A----QKEDRP-----SLSIAFLSEA-----TETPVAKAYGAFE	667
ADV95715.1	-----DKERS-----TSLQFVRGL-----GESPLARSYEASH	675
BAI84248.1	-----DKERS-----TSLQFVRGL-----GESPLARSYEASH	675
EFG90288.1	-S----QKEDRP-----SLSIAFLSEA-----TETPLAKAYGAFE	667
EFG91781.1	-----DKERS-----TSLQFVRGL-----GESPLARSYEAAH	675
AEP85668.1	-----DKERS-----TSLQFVRGL-----GESPLARSYEASH	675
AEP87558.1	-A----QKEDRP-----SLSITFLSEA-----TETPLAKAYGAFE	667
sp O08336.1 CYPB_BACSU	-A----QKEDRP-----SLSITFLSEA-----TETPVAKAYGAFE	667
sp O08394.1 CYPD_BACSU	-----DKERS-----TSLQFVRGL-----GESPLARSYEASH	675
AEP89812.1	-----DKERS-----TSLQFVRGL-----GESPLARSYEASH	675

AEP91702.1	-A----	QKEDRP-----	SLSITFLSEA-----	TETPVAKAYGAFE	667
EHA31094.1	-A----	QKEDRP-----	SLSIAFLSEA-----	TETPVAKAYGAFE	669
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EEM28177.1	-----	EKERS-----	TLSQLQFVSRL-----	GG SPLARTYEAVY	678
AFQ14162.1	-----	EKERS-----	TLSQLQFVSRL-----	GG SPLARTYEAVY	678
EEM95517.1	-----	EKERS-----	TLSQLQFVSRL-----	GG SPLARTYEAVY	678
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AFU13781.1	-----	EKERS-----	TLSQLQFVSRL-----	GG SPLARTYEAVY	686
EEM70897.1	-----	EKERS-----	TLSQLQFVSRL-----	GG SPLARTYEAVY	686
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EEM59126.1	-----	EKERS-----	TLSQLQFVSRL-----	GG SPLARTYEAVY	686
EEM47193.1	-----	EKERS-----	TLSQLQFVSRL-----	GG SPLARTYEAVY	619
EEM76899.1	-----	EKERS-----	TLSQLQFVSRL-----	GG SPLARTYEAVY	686
EEM88909.1	-----	EKERS-----	TLSQLQFVSRL-----	GG SPLARTYEAVY	686
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EJQ37805.1	-----	EKERS-----	TLSQLQFVSRL-----	GG SPLARTYEAVY	678
CCF04242.1	-----	EKERS-----	ALGLQFVSGL-----	GG SPLAQTYEAVY	674
CCF05972.1	-P----	KQANKS-----	QLSIEYVSEA-----	AETPIAKTYKAFE	667
ABS73124.1	-----	EKERS-----	ALGLQFVSGL-----	GG SPLAQTYEAVY	674
ABS74786.1	-P----	KQTNKS-----	QLSIEYVSEA-----	AETPIAKTYKAFE	667
EKE46398.1	-----	EKERS-----	ALGLQFVSGL-----	GG SPLAQTYEAVY	674
EKE48022.1	-P----	KQANKS-----	QLSIEYVSEA-----	AETPIAKTYKAFE	667
CCG48683.1	-----	EKERS-----	SLGLQFVSGL-----	GG SPLAQTYEAVY	674
AFJ60789.1	-----	EKERS-----	SLGLQFVSGL-----	GG SPLAQTYEAVY	681
AFJ62808.1	-P----	KQTNKS-----	QLSIEYVSEA-----	AETPIAKTYKAFE	667
EEK66903.1	-----	EKERS-----	TLSQLQFVSRL-----	GG SPLARTYEAVY	692
EJQ52935.1	-----	EKERS-----	TLSQLQFVSRL-----	GG SPLARTYEAVY	678
EJS69574.1	-----	EKERS-----	TLSQLQFVSRL-----	GG SPLARTYEAVY	678
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EKF35778.1	-E----	KSQESP-----	DLSVYYTNEL-----	VERPVAKTYGAFS	665
EGP08506.1	SF--	ARSADDAP-----	LYQLEPVAP-T-----	AVNTIVVQGGVVQ	686
BAL78328.1	NF--	TRTAEDDP-----	LYAIEPVAV-T-----	AVNTIVAQGGAVA	682
BAC48147.1	NF--	TRTAEDDP-----	LYAIEPVAV-T-----	AVNTIVAQGGAVA	683
BAL12135.1	NF--	TRTAEDDP-----	LYAIEPVAV-T-----	AVNTIVAQGGAVA	683

CCE00185.1	GF--SRSAEDAP-----LYSVEPLAP-T-----AAGAVAALGGAAP	686
EIG57609.1	NF--TRTAEDDP-----LYAIEPVAV-T-----AVNTIVAQGGAVA	682
EHR02046.1	NF--TRTAEDDP-----LYAIEPVAV-T-----AVNTIVAQGGAVA	682
EJN11211.1	NF--TRTAEDDP-----LYAIEPVAV-T-----	670
CCF15606.1	-----ERERS-----TLSVQYVNGI-----AGVPLAESYDALR	613
CCF12687.1	-L----EEKHHG-----TLTIQFMNDL-----SDVPLALKYNAVY	676
ABB05850.1	-----IQHDDV-----ALKVSFAGSS-----REKVLNLGDMAH	677
EHP43606.1	-----PDAAGAS-----QIAVRLRDI-A-----TIRASTLPPSTQA	699
ABF10339.1	-----AGTGGL-----GVDVQVRSM-A-----AIRAETLPAGTQA	667
CAJ95800.1	-----GPAHGTP-----PVRVQVKDV-A-----EIRASTLPANTEA	698
AEI79937.1	-----GPAHGTP-----PVRVQMRDV-A-----EIRASTLPANTQG	698
AFD27790.1	-----APGPAT-----DAGAQIQRGA-----RPRLLRQGDLOT	674
ABC62112.1	----GFDVAFEP-----LYTVEITDS-I-----TGNTVADRVGARE	677
EAQ27850.1	----EAAGIAEP-----LYKVEVTQS-V-----TANTVASRVGAHA	678
EIT84377.1	-----VPSVA-----ALEVEWVTHE-----KTLPLLDHYGAFK	664
CCG43686.1	-----DPSS-----HVSMEFVSGV-----TQTPLARTHHAFT	669
ABX05160.1	-----INSKP-----LYKVPELLPSS-----SDQLAQQTGFMF	666
BAJ96920.1	-----TTAEP-----MFEVEIVKET-----RSVFLRQTDLQP	669
GAB96874.1	-----ADAP-----QLSVDIIGPG-----REQLLRASDLQL	724
EFH80345.1	-----SDAATGP-----RYEVEVLTETE-----APNPFVASFGAHG	684
EFH88481.1	----EVKRQYRP-----RYDIEIIRR-P-----HPYPFINSFGAQP	685
EAW32450.1	----AAPVDRGD-----RFTVDLLTDND-----RDTVFLQHHS LTP	674
EIZ82104.1	-GDREAAEPAGT-----GLDVEILRSG-----RETALHLTDLNP	676
AEV70722.1	SD-----TDEP-----LYDLRPIEG-P-----VTTALDERFMVVP	668
EFC41452.1	-----HELP-----PVETTIKGH-----RETILHFQSLEP	695
ACV78954.1	---RETRNPVGRYVASEVGRASADGPADAFGMGEAWVRSV-----TELTRRPPDLG-	709
ACV78964.1	----AEPAAAGP-----RLSITIVNR-Q-----LANPVVLSYEAQA	680
ACV81379.1	----AQVTAAGP-----RLTIATVNR-Q-----LTNPVVVSYDATP	683
EIZ78677.1	-----AATVAP-----GLDVEIVRSG-----RLEALRLPDLGQ	669
EJW15291.1	GI----EKSTAS-----SLTVEVVNIS-----VESPFADAYNVHC	675
EJW16173.1	-----EGARS-----TLTVEFVKDY-----AGSRLAQSYEAVH	675
EHQ58913.1	-----HQAGP-----DLSVDVVRGM-----IEAPLAESYDAHY	673
EHQ59900.1	-----HRERT-----TLSIQFVSGL-----IGTPLAETYDALL	672
EHB66924.1	-----ETKRS-----SLSVQFVPGA-----AAVPLANTYHAAC	673
AFH60445.1	-----GQERS-----SLTVQFVSGL-----IGTPLAESYDALQ	672
AEI42011.1	-----GQERS-----SLTVQFVSGL-----IGTPLAESYDALQ	672
ADO57681.1	-----PQDTS-----SLSIEFVSDV-----LSAPLAANYEAAAT	671
EGG32133.1	-----GLKRS-----ALSVRFVQGA-----AAVPLAETYRAVT	675

EGL17662.1	-----EKEKS-----SLSLQFVSGF-----AGTPLAESYDAVH	674
ACX65034.1	-----GQKRS-----ALSVQFVQGT-----AAVPLTETYRAVT	675
ACT11327.1	-----AEDAT-----ELELEFVHTD-----RVSTLQIPDMGR	673
AEA28016.1	----VGTAAGP-----RLTVTMTNR-Q-----TTNPVVVSYRARP	687
EFP68091.1	-----AQADGP-----SVHVDYVAP-D-----AVRAATLPSAARA	680
EGY61507.1	-----AQADGP-----SVHVDYVAP-D-----AVRAATLPSAARA	680
EIE85788.1	SVVPSAAAAKES-----IVKVKFIQPSN---KEAWEKAANDFYGSPN	797
EIE92534.1	PVVPTAA-IKES-----SVDIKFVQPSD---KEAWNSAINNHYGPNP	799
BAE46296.1	-----	510
BAH31604.1	-----	466
EEN84644.1	-----	466
EEN88978.1	-----	550
ABG96413.1	-----	498
BAH52971.1	-----	465
EHI44575.1	-----	500
EID73168.1	-----	465
EHK83749.1	-----	441
EJI96173.1	-----	465
ABI79384.1	-----	497
CAR47816.1	-----	498
AEK26937.1	-----	473
ABE39056.1	KF--ARAVDDAP-----LYRIEVPVAP-A-----AGNAVAAAGGAVP	683
ABD08340.1	AF--DRGADDTP-----LYGIEPLAP-A-----ASQPLAATGVAVA	680
CAM03474.1	AP-E---GDGP-----AYTVSEVTG-G-----ALDSLAARHGMVE	679
EJF54063.1	-----PIKKK-----SYKVQLLHDW-----HAEALGENDFVR	684
AFC23737.1	-----PINKK-----SYKVQLLHDW-----HAQTLGENDFVR	672
ADG98903.1	-----	471
EGI54680.1	-----AVQAQP-----RIDVEVRRGT-----RERLLKLDELQR	665
AEW97204.1	VA-----GAED-----GYEVTEVTG-G-----PLDALAARHEVVA	692
CAJ88567.1	-----	516
BAC68285.1	-----TSETTGP-----RFEVQLLTE-A-----EVRPAIVSEQAYP	673
BAC75137.1	-----	504
EDY51256.1	ADAERPAVPTG-----PRH-TVTD-T-D-----AAPGLPVPDGLVP	682
EFG07822.1	ADAERPAVPTG-----PRH-TVTD-T-D-----AAPGLPVPDGLVP	714
EHN78335.1	-----	525
CAB66201.1	-----	527
EGG48117.1	-----	517
EFL20831.1	VETEADH--DAG-----LYELQD-TD-S-----VIGELAARHGVQS	688

EFL28515.1	AP-AADAADDGP-----AYTVTEVTG-G-----PLDGLARQHGMVA	684
AEY93311.1	-----	542
AEY93321.1	TT-----DEPAH-----AYAVRTLSTG-G-----PLDALAERHGLVP	680
EFD71156.1	-----	529
CBG67789.1	AQPDTDA--EGG-----LYVLEDTTD-S-----VIGGLAARHGVQP	684
CBG68112.1	-----	513
EFL10082.1	-----	501
EFF88741.1	ATAEPQD--GER-----LYEIQDAPD-S-----VIGELAARHGVQP	685
EDY58112.1	-----	506
EFL36674.1	-----	510
EFL36680.1	DT-----GEPTA-----AYEVRTLSTG-G-----PLDALAERHGLVP	730
EFE65335.1	-----	526
EGX54696.1	-----	491
ACZ89135.1	-----VETGP-----LYEVEVIPSP-----SAELVAQNRLGL	666
ABD83817.1	RF--SRSADDAP-----LYSVEPVAP-S-----AVNAVAALGGTVP	683
ADU39615.1	-A--DTPAEAEP-----LYTLEELPP-P-----QKNALVDALGAVA	680
EJL72014.1	-A--DSPAQSEP-----LYTLEELPP-P-----QKNAIVDALGAVA	681

sp P14779.2 CPXB_PRIM2	TNVVASKELQQPG-----SARSTRHLEIELP-----KEASYQEGDHLGVIPRN	707
ADF40088.1	TNVVASKELQQPG-----SARSTRHLEIELP-----KEASYQEGDHLGIIPRN	707
ADE70259.1	ANVVASKELQKPG-----SARSTRHLEIELP-----KEASYQEGDHLGVIPRN	707
AEN88827.1	ANVVASKELQQPG-----SERSTRHLEIELP-----KEASYQEGDHLGVIPRN	707
KFN05180.1	TNVVASKELQQPG-----SARSTRHLEIELP-----KEASYQEGDHLGVIPRN	707
ACZ37122.1	ANVVASKELQKPG-----SARSTRHLEIELP-----KEASYQEGDHLGVIPRN	707
ADA57055.1	ANVVASKELQQLG-----SERSTRHLEIALP-----KEASYQEGDHLGVIPRN	707
ADA57058.1	ANVVASKELQKPG-----SARSTRHLEIELP-----KEASYQEGDHLGVIPRN	707
ADA57059.1	ANVVASKELQQLG-----SERSTRHLEIALP-----KEASYQEGDHLGVIPRN	707
ADA57061.1	ANVVASKELQKPG-----SARSTRHLEIELP-----KEASYQEGDHLGVIPRN	707
ADA57062.1	ANVVASKELQQPG-----SERSTRHLEIALP-----KEASYQEGDHLGVIPRN	707
ADA57068.1	ANVVASKELQKPG-----SARSTRHLEIELP-----KEASYQEGDHLGVIPRN	707
AAT62301.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
AAM54108.1	AVVLENRELVR-----GPDAGSKRHLELRP-----DGTSYRTGDYLSVLPQN	703
EFQ83738.1	-----	505
EFL88452.1	VVVRRTRELHSKSGP-----VPSESTRHIRVKLA-----PGQSYTAGDHLSVIPRN	724
BAF89518.1	SRIRVNRELLSPG-----AQGSTRHIEIPLP-----AGTSYAAGDHLAVFPVN	824
CBI43648.1	AEVTTNKELHTES-----SKRSVRHIELRLP-----ETETYQEGDHLGVLPQN	710
AEB22839.1	ASVAENRELQAPE-----SDRSTRHIEIILP-----KEAAYNEGDHLGVLPVN	718
EDT22025.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
AFH84458.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	729
ADP31197.1	ASVTENRELQAD-----SDRSTRHIEIALP-----PGVTYQEGDHLGVLPVN	718
ACP19384.1	ASILENRELQSPS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
ADL27534.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
ACO29732.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
EDX65100.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
EEK61456.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EEL16232.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	729
EDZ53094.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EEL81346.1	-----	663
EEL87105.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYQEGDHLGVLPIN	735
EEL75761.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	662
ACK88541.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
EJQ05303.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
EEK50040.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
AAS42149.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
AAP10153.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EEK83466.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGGHLGVLPIN	729

ACK63698.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	662
EJS57156.1	ASILENRELQSPS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EJS56605.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYQEGDHLGVLPIN	721
EJS68951.1	ATIVENRELQSAG-----SDRSTRHIEVALP-----QGVTYHEGDHLGVLPHN	720
EJQ10567.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EJQ13433.1	ASILENRELQSSS-----SDRSTQHIEISLP-----EGATYQEGDHLGVLPIN	721
EJQ20399.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EJQ30236.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EJQ51278.1	ATIVENRELQSAG-----SDRSTRHIEVALP-----QGVTYHEGDHLGVLPHN	720
EEL10858.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EEL05393.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYQEGDHLGVLPIN	735
EEK94080.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	724
EEK99882.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	724
EEK55784.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	729
ADK05784.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
AAU17340.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
EEL64394.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
AEW56259.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
AFQ11690.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
EAL16831.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
ACK94296.1	ATILENRELQSSS-----SDRSTRHIEVSLP-----EGATYQEGDHLGVLPIN	721
EDZ58760.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
EJV84218.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYQEGDHLGVLPIN	721
EJQ69212.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYQEGDHLGVLPIN	721
EJQ80339.1	ASVLENRELQLSS-----SDRSTRHIEISLP-----EGATYQEGDHLGVLPIN	721
EJV81602.1	ASILENRELQSPS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EJQ95474.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
EEK44229.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	729
EEK88560.1	ASILENRELQSPS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EJR07451.1	ATILENRELQSSS-----SDRSTRHIEVSLP-----EGATYQEGDHLGVLPIN	718
EJR16542.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
BAL18840.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
EDX69960.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
ACM13462.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
EEK75631.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYQEGDHLGVLPIN	721
EEL25491.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	662
EEL21990.1	ASILENRELQSSS-----SDRNTRHIEVSLP-----EGATYQEGDHLGVLPIN	729
EEL33825.1	ASILENRELQSSS-----SDRSTRHIEVFLP-----EGATYQEGDHLGVLPIN	729

EEL44933.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	729
EEL50167.1	ATIVENRELQSTG-----SDRSTRHIEVALP-----QGVTYHEGDHLGVLPHN	799
EJR22930.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EJP91231.1	ATILENRELQSSS-----SDRSTRHIEVSLP-----EGATYQEGDHLGVLPIN	721
EJR37623.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EJR50635.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
EJR64551.1	ASILENRELQSSS-----SDRSTRHIEISLP-----EGATYQEGDHLGVLPIN	721
EJR75620.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EJR82049.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EJR83659.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EJR91135.1	VSFIENCESQSN-----SEQSKRHIEIQLS-----KGVTYKEGDSLGVFPRN	718
EJR97241.1	ASILENRELQSPS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EJS05852.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYQEGDHLGVLPIN	721
EDX58768.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
AAU24352.1	AKISANRELQCEK-----SGRSTRHIEISLP-----EGAAYQEGDHLGVLPQN	717
ABY44122.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYQEGDHLGVLPIN	721
EDW23201.1	AVVLKNEELQSEK-----SERQTRHIELQLP-----EGKKYKEGDHIGIVPKN	708
ABV62358.1	AVVLKNEELQSQK-----SERKTRHIELRLP-----EGKKYKEGDHIGIVPKN	708
EIF12263.1	ASVAENRELQAPE-----SGRSTRHIEITLP-----KEAAYHEGDHLGVLPVN	717
EIF14027.1	AEVITNKELHTES-----SKRSVRHIELRLP-----ETETYQEGDHLGVLPQN	710
EHL75405.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EJD67577.1	ASVAENRELQAPE-----SGRSTRHIEITLP-----KEAAYHEGDHLGVLPVN	717
EJD68347.1	AEVITNKELHTES-----SKRSVRHIELRLP-----ETETYQEGDHLGVLPQN	710
EFV73436.1	AKISANRELQCEK-----SGRSTRHIEISLP-----EGAAYQEGDHLGVLPQN	731
CBY93692.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
AFI27355.1	ASIAENRELQSAD-----SDRSTRHIEIALP-----PDVEYQEGDHLGVLPKN	718
AFI29229.1	GIVLENRELQSAD-----STRSTRHIELEIP-----EGKTYKEGDHIGILPKN	710
EIL85422.1	AVVLKNQELQSEK-----STRQTRHIELQLP-----EGKHYKEGDHIGIVPKN	708
ADV93500.1	GIVLENRELQAD-----STRSTRHIELEIP-----AGKTYKEGDHIGIMPKN	710
ADV95715.1	ASIAENRELQSAD-----SDRSTRHIEIALP-----PDVEYQEGDHLGVLPKN	718
BAI84248.1	ASIAENRELQSAD-----SDRSTRHIEIALP-----PDVEYQEGDHLGVLPKN	718
EFG90288.1	GNVLENRELQAD-----SPRSTRHIELQIP-----DAKTYKEGDHIGILPKN	710
EFG91781.1	ASIAENRELQSAD-----SDRSTRHIEIALP-----PDVEYREGDHLGVLPKN	718
AEP85668.1	ASISENRELQSAD-----SDRSTRHIEITLP-----PDVEYREGDHLGVLPKN	718
AEP87558.1	GNVLENRELQAD-----SPRSTRHIELQIP-----DAKTYKEGDHIGILPKN	710
sp 008336.1 CYPB_BACSU	GIVLENRELQATA-----STRSTRHIELEIP-----AGKTYKEGDHIGILPKN	710
sp 008394.1 CYPD_BACSU	ASIAENRELQSAD-----SDRSTRHIEIALP-----PDVEYQEGDHLGVLPKN	718
AEP89812.1	ASIVENRELQSAD-----SDRSTRHIEIALP-----PDVEYQEGDHLGILPKN	718

AEP91702.1	GIVLENRELQTAD-----STRSTRHIELEIP-----DGKTYKEGDHIGILPKN	710
EHA31094.1	GVVLENRELQTAD-----STRSTRHIELEIP-----AGKTYKEGDHIGIMPKN	712
ADH07708.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EEM28177.1	ASILENRELQSPS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
AFQ14162.1	ATILENRELQSSS-----SDRSTRHIEVSLP-----EGATYQEGDHLGVLPIN	721
EEM95517.1	ASVLENRELQSSS-----SERSTRHIEVSLP-----EGATYQEGDHLGVLPIN	721
EEN02344.1	ATILENRELQSSS-----SDRSTRHIEVSLP-----EGATYQEGDHLGVLPIN	721
AFU13781.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYQEGDHLGVLPIN	729
EEM70897.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	729
ADY22413.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	721
EEM82895.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EEM52818.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	721
EEM59126.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	729
EEM47193.1	ASILENRELQSSS-----SDRSTRHIEVSLP-----EGATYKEGDHLGVLPVN	662
EEM76899.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	729
EEM88909.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	729
EEM38196.1	ATILENRELQSSS-----SDRSTRHIEVSLP-----EGATYQEGDHLGVLPIN	721
EEM21858.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	724
ABK86139.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	729
EJQ37805.1	ASILENRELQSSS-----SDRNTRHIEVSLP-----EGATYQEGDHLGVLPIN	721
CCF04242.1	ASVAENRELQAPE-----SGRSTRHIEITLP-----KEAAYHEGDHLGVLPVN	717
CCF05972.1	AEVITNKELHTES-----SKRSVRHIELRLP-----KTETYREGDHLGVLPQN	710
ABS73124.1	ASVAENRELQAPE-----SGRSTRHIEITLP-----KEAAYHEGDHLGVLPVN	717
ABS74786.1	AEVITNKELHTES-----SKRSVRHIELRLP-----ETETYQEGDHLGVLPQN	710
EKE46398.1	ASVAENRELQAPE-----SGRSTRHIEITLP-----KEAAYHEGDHLGVLPVN	717
EKE48022.1	AEVITNKELHTES-----SKRSVRHIELRLP-----KTETYREGDHLGVLPQN	710
CCG48683.1	ASVAENRELQAPE-----SGRSTRHIEITLP-----KEAAYHEGDHLGVLPVN	717
AFJ60789.1	ASVAENRELQAPE-----SGRSTRHIEITLP-----KEAAYHEGDHLGVLPVN	724
AFJ62808.1	AEVITNKELHTES-----SKRSVRHIELRLP-----ETETYQEGDHLGVLPQN	710
EEK66903.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYKEGDHLGVLPIN	735
EJQ52935.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYQEGDHLGVLPIN	721
EJS69574.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYQEGDHLGVLPIN	721
EJV63294.1	ASILENRELQSSS-----SERSTRHIEISLP-----EGATYQEGDHLGVLPIN	721
EKF35778.1	AVVLKNRELQSEQ-----SARQTRHIELQLP-----EGKPYKEGDHIGIVPKN	708
EGP08506.1	MRVLANDELQNVSGA-----NPSTRSTRHIEVELP-----DNLTYRVGDHLSVIVPRN	733
BAL78328.1	MKVLVNDELQNKTS-----NPSTRSTRHIEVQLP-----ANISYRVGDHLSVVPRN	729
BAC48147.1	MKVLVNDELQNKSGS-----NPSTRSTRHIEVQLP-----SNITYRVGDHLSVVPRN	730
BAL12135.1	MKVLVNDELQNKFGA-----NPSTRSTRHIEVQLP-----SNITYRVGDHLSVVPRN	730

CCE00185.1	MTILVNRELQNKSGA-----HPSERSTRHIEVQLP-----AGASYRVGDHLSVVPRN	733
EIG57609.1	MKVLGNDELQNKAGS-----NPSESTRHIEVQLP-----SNINYRVGDHLSVVPRN	729
EHR02046.1	MKVLVNDELQNKAGS-----NPSESTRHIEVQLP-----SNINYRVGDHLSVVPRN	729
EJN11211.1	-----	670
CCF15606.1	SYVTENRELQGET-----SERSTRHIEIAIP-----AGVHYHEGDHLGVLPKN	656
CCF12687.1	AYIKENRELESAN-----CGRSIRRVEITLP-----DGLSYQEGDQIGVLPKN	719
ABB05850.1	ASIVDNRELVDIS-----VAGSRSKKHIELKLP-----EAMTYRSGDYLA VLPRN	722
EHP43606.1	FTVLANTELVNDPAGLWDFALEAPRTATRD IQLRLP-----GGASYATGDHLAVYPQN	752
ABF10339.1	FTVLSNDELVGDP SGLWDFSIEAPRTSTRDIRLQLP-----PGITYRTGDHIAVWPQN	720
CAJ95800.1	FTVLANTELVNDP SGLWDFSHEAPRTSTRDIRLRLP-----DGVRYATGDHLAVYPQN	751
AEI79937.1	FTVLANTELVNDP SGLWDFSREAPRTSTRDIRLRLP-----AGVRYATGDHLAVYPQN	751
AFD27790.1	GRVTANRELVSPD-----HPQGRSKRHLDIELP-----EGMTYRAGDYLA VLDPN	719
ABC62112.1	VEVVANRELKDTS-----KDEGRSTRHLEVRLP-----EGMEYEPGDHLCVVPVN	722
EAQ27850.1	VKMLVANRELKNTD-----IGEGRSTRHIEVELA-----QGETYQPGDHL CVVPEN	723
EIT84377.1	ASVIKNDELQR-G-----HERSTRHLELLLP-----AHVSYHAGDHIGILPSN	706
CCG43686.1	AMVNNENRELQV-S-----SERSTRHLELKLP-----EGVNYQEGDHLGVLPQN	711
ABX05160.1	ASVLENRELVDLS-----SPLGRSKRHIELRLP-----NELQYQAGDYLA IILPQN	711
BAJ96920.1	GEI IENKQLAG-----GPRPKRHIEVALP-----EGITYRAGDYLVVLP MN	710
GAB96874.1	GQIVANRELVDTS-----VPGARSKRHLEIALP-----AGQTYETGDYLA VLPLN	769
EFH80345.1	MRVVANRELNSK-----EAERSTRHVELALP-----TGSAYRAGDHLGVVARN	727
EFH88481.1	MTILENRELVQHQP D-----ALNGDSTRHLQVSLP-----PNMPYRTGDHLGVLASN	732
EAW32450.1	MTVTVNDEMVDTR-----VDYGLSKRHISVNL P-----EGVNYKTGDHLLVM PRN	719
EIZ82104.1	ARILENRELVDTA-----SPLGTSKRHIEIALP-----AGMTYRTGDYLA VLPRN	721
AEV70722.1	MTVVQNDELVSAT-----NALNQAKRHVRVALP-----DDFTYNTGDHLTVLADN	713
EFC41452.1	GKVIENYDLVPED-Y---CDDHGTCRSKRHIEIQLP-----AGAHYESGDYLSVLPVN	744
ACV78954.1	-----SDLADIPDA---GPGADGERVTMHL DVELD-----PAVSYPGDHLLVLPQN	753
ACV78964.1	ARVTENRELTLTDPA-----SPGARSTRHLQV TLP-----EGVEYRAGDHLGVLP RN	727
ACV81379.1	TLVTRNVELT--ATG-----AAGVRSTRHVEVALP-----AGLSYRAGDHLGVLP RN	728
EIZ78677.1	GRIVENRELVDMT-----SPLGRSKRHIEIALP-----LGMRYRTGDYLA VLPRN	714
EJW15291.1	ATILDNHELQ RGG-----NGRSTRHIEIELP-----EGVSYLEGDHLGVFP IN	718
EJW16173.1	AEVVSNCELQQEG-----SGRSTRHIEIALP-----NGVTYEEGDHLGVLP RN	718
EHQ58913.1	AKVVINRELQKAG-----GGRSTRHIEIALP-----EGSVYQEGDHLGVFPQN	716
EHQ59900.1	ANIVENRELQGEG-----SERSTRHLEIALP-----DGVTYREGDHLGVLPVN	715
EHB66924.1	GRIVHSRNLQHED-----SGRITQHIEIISLP-----EGTEYHEGDHLGVLPAN	716
AFH60445.1	TTVAENRELQGEG-----SDRSTRHIEVVLP-----EEVSYREGDHLGVLP LN	715
AEI42011.1	TTVAENRELQGEG-----SDRSTRHIEVVLP-----EEVSYREGDHLGVLP LN	715
ADO57681.1	AVVTVNRELHAAE-----SERSTRHLEIQLP-----TGLSYREGDHLGVLP RN	714
EGG32133.1	GRIVLSRNLQHEG-----SGRITQHIEIISLP-----PETEYLEGDHLGVLPVN	718

EGL17662.1	AVIAGNTELQREE-----SGRSTRRIEVKLP-----EGVTYRVGDHLGVLPRN	717
ACX65034.1	GRIVFSRNLQHEG-----SGRITQHIEISLP-----PGTEYREGDHLGVLVFN	718
ACT11327.1	GVVVENRELVDMT-----SPFARSKRHIEIRLP-----EGMAYRAGDYLAFLVPRN	718
AEA28016.1	STVRVNRELNLDG-----ADRSTRHVEIALA-----PGTEYQTGDHLGVLPRN	730
EFP68091.1	MTVLANAELVGDASGLWDFAEAPRGPTRHLTVRLP-----DGMTYATGDHLAVYPRN	733
EGY61507.1	MTVLANAELVGDASGLWDFAEAPRGPTRHLTVRLP-----DGMTYATGDHLAVYPRN	733
EIE85788.1	AVILANKELQKDG-----SPRSTRHIEIDISKLLGVGEQGHLYHAGDHLEVMPEN	847
EIE92534.1	AIIVANSELQKQD-----SPRSTRHIEVDISKLSGVGEQGQLYSAGDHLEVMPEN	849
BAE46296.1	-----	510
BAH31604.1	-----	466
EEN84644.1	-----	466
EEN88978.1	-----	550
ABG96413.1	-----	498
BAH52971.1	-----	465
EHI44575.1	-----	500
EID73168.1	-----	465
EHK83749.1	-----	441
EJI96173.1	-----	465
ABI79384.1	-----	497
CAR47816.1	-----	498
AEK26937.1	-----	473
ABE39056.1	MKVLANRELQDCA-----ASGRSTRHIEIALP-----EGISYRVGDHLSVMPRN	727
ABD08340.1	MRVLENRELQDRA-----ASGRSTRHIEIALP-----QGMSYRVGDHLSVIPRN	724
CAM03474.1	MTVTEVADLTAPD-----YP--RTRKRFVRLALP-----EGTAYRTADHLAVLPVH	722
EJF54063.1	AQLLSKKELVQQD-----SPFASKIELQIEVP-----EEQSYQTGGYIDILPQN	729
AFC23737.1	AQLLSKKELVQQE-----SPFASKIELQIEVP-----EGQSYQTGGYIDILPQN	717
ADG98903.1	-----	471
EGI54680.1	GLVLINRELVDMQ-----RPGARSKRHIEIALP-----KGMTYRAGDYLAFLVPSN	710
AEW97204.1	MTVTETGDLADLT-----HPLGRSKRFVRLALP-----DGATYRTGDHLAVLPAN	737
CAJ88567.1	-----	516
BAC68285.1	LTVVANEELVSDATGLWDFSIEPPRPAKSITIELP-----DGVTYDTGNHLAVFAKN	726
BAC75137.1	-----	504
EDY51256.1	LTVVETGELADLD-----HPLGRSKRFLRLDLA-----HGMEYRTADHLLVRPAN	727
EFG07822.1	LTVVETGELADLD-----HPLGRSKRFLRLDLA-----HGMEYRTADHLLVRPAN	759
EHN78335.1	-----	525
CAB66201.1	-----	527
EGG48117.1	-----	517
EFL20831.1	MEVLEAYELVMD-----HPLGRSKRFVRLRLP-----DGVTYRTGDHLAVLPRN	733

EFL28515.1	MEVTETDLSLSDPS-----YP--RVKRFVRLALP-----EGVAYRTADHLTVLPSN	727
AEY93311.1	-----	542
AEY93321.1	MTVTEARDLTAPG-----HP--RTKRFLRVALP-----EGVTYRTADHLTVLPAN	723
EFD71156.1	-----	529
CBG67789.1	MEVLDARELVDMS-----HGLGRSKRFLRLRLP-----EGVTYRTGDHLAVLPRN	729
CBG68112.1	-----	513
EFL10082.1	-----	501
EFF88741.1	MQVLDARELVDMD-----HELGRSKRFLRLRLP-----EGVTYRTGDHLAVLPGN	730
EDY58112.1	-----	506
EFL36674.1	-----	510
EFL36680.1	MRVTEAHDLTAPG-----YA--RRKRFVRLALP-----EGVTYRTADHLTVLPAN	773
EFE65335.1	-----	526
EGX54696.1	-----	491
ACZ89135.1	ATVVENRELVDVG-----SPLGRSKRHIEFALP-----EGTTYQAGDYLTVPEN	711
ABD83817.1	MTILVSRELQNKSGP-----DASERSTRHIEVQLP-----GGMTYRVGDHLSVVPCN	730
ADU39615.1	LRVVENRELQSPGGD-----AGTSRSTRHVELMLP-----EGVNYVPGDHLSSVPRN	727
EJL72014.1	LRVIENRELQN-GGN-----GEAGRSTRHVELMLP-----EGLVYRAGDHLSSVPRN	727

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ADF40088.1	YEGIVNRVTARFGLDASQQIRLEAEEEE-KL-----	AHLPLAKTVSVEELLQ	752
ADE70259.1	YEGIVNRVTARFGLDASQQIRLEAEEEE-KL-----	AHLPLAKTVSVEELLQ	752
AEN88827.1	YEGIVNRVATRFGLDASQQIRLEAEEEE-KL-----	AHLPLGKTVSVEELLQ	752
KFN05180.1	YEGIVNRVATRFGLDASQQIRLEAEEEE-KL-----	AHLPLGKTVSVEELLQ	752
ACZ37122.1	YEGIVNRVATRFGLDASQQIRLEAEEEE-KL-----	AHLPLGKTVSVEELLQ	752
ADA57055.1	YEGIVNRVTARFGLDASQQIRLEAEEEE-KL-----	AHLPLGKTVSVEELLQ	752
ADA57058.1	YEGIVNRVATRFGLDASQQIRLEAEEEE-KL-----	AHLPLGKTVSVEELLQ	752
ADA57059.1	YEGIVNRVTARFGLDASQQIRLEAEEEE-KL-----	AHLPLGKTVSVEELLQ	752
ADA57061.1	YEGIVNRVATRFGLDASQQIRLEAEEEE-KL-----	AHLPLGKTVSVEELLQ	752
ADA57062.1	YEGIVNRVTARFGLDASQQIRLEAEEEE-KL-----	AHLPLGKTVSVEELLQ	752
ADA57068.1	YEGIVNRVATRFGLDASQQIRLEAEEEE-KL-----	AHLPLGKTVSVEELLQ	752
AAT62301.1	NEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVRLYDLLS	766
AAM54108.1	HPDLVRRAVARLGTTRAERVVTVESSAP--T-----	GLVPVGRALRVDELLT	747
EFQ83738.1	-----	-----	505
EFL88452.1	SPDLVRRVELRFGLQASASLVRNLNSANE---GH-----	SALPTGRPIELRTLLE	769
BAF89518.1	PPALVAAAAARCGLAPETQVLLTALHPDAASE-----	AGLPFGVPVSVGELLA	872
CBI43648.1	SGELISRVIRRFGLDPNQHFKIKG--R-QL-----	PHLPMDRPVNAPELLA	753
AEB22839.1	SKEQVSRVLRRLRYNLNGNDQVLLTASGQ-SA-----	AHLPLDRPVRLHDLLS	763
EDT22025.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVRLYDLLS	766
AFH84458.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVRLYDLLS	774
ADP31197.1	SQEKVNRILRRFGLKGNQVTLTASGR-SA-----	AHLPLDRPVSLHDLLS	763
ACP19384.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----	NHIPLDSPVSLLDLLS	766
ADL27534.1	CEKNINRILRRFGLNGKDQVILSASGR-SI-----	NHIPLDSPVSLLDLLS	766
ACO29732.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVRLYDLLS	766
EDX65100.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVRLYDLLS	766
EEK61456.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----	NHIPLDSPVSLLDLLS	766
EEL16232.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVRLYDLLS	774
EDZ53094.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----	NHIPLDSPVSLLDLLS	766
EEL81346.1	-----	-----	663
EEL87105.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVSLFDLLS	780
EEL75761.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----	NHIPLDSPVSLLDLLS	707
ACK88541.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVRLYDLLS	766
EJQ05303.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVRLYDLLS	766
EEK50040.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----	NHIPLDSPVSLLDLLS	766
AAS42149.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVRLYDLLS	766
AAP10153.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----	NHIPLDSPVSLLDLLS	766
EEK83466.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVRLYDLLS	774

ACK63698.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDLDS	707
EJS57156.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDLDS	766
EJS56605.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVSLFDLDS	766
EJS68951.1	SEENVSRVLRRLRYNLNGNDKIVLTASGR-NA-----AHLPLDMPVSLRDLLS	765
EJQ10567.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDLDS	766
EJQ13433.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVSLLDLDS	766
EJQ20399.1	SEKNINRILRRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDLDS	766
EJQ30236.1	SEKNINRILRRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDLDS	766
EJQ51278.1	SEENVSRVLRRLRYNLNGNDKIVLTASGR-NA-----AHLPLDMPVSLRDLLS	765
EEL10858.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDLDS	766
EEL05393.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVSLFDLDS	780
EEK94080.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDLDS	769
EEK99882.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVRLYDLDS	769
EEK55784.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVRLYDLDS	774
ADK05784.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVRLYDLDS	766
AAU17340.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVRLYDLDS	766
EEL64394.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDLDS	766
AEW56259.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVRLYDLDS	766
AFQ11690.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVRLYDLDS	766
EAL16831.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVRLYDLDS	766
ACK94296.1	SEKNVNRILKRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDLDS	766
EDZ58760.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVRLYDLDS	766
EJV84218.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVSLFDLDS	766
EJQ69212.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVSLFDLDS	766
EJQ80339.1	SQKNVNRVLKRFGLNGKDQVILSASGR-SV-----NHIPLDSPISLFDLDS	766
EJV81602.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDLDS	766
EJQ95474.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVRLYDLDS	766
EEK44229.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVRLFDLDS	774
EEK88560.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDLDS	766
EJR07451.1	SEKNVNRILKRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDLDS	763
EJR16542.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVRLYDLDS	766
BAL18840.1	SEKNVNRILRRFGLNGKDQVILSASGR-SV-----NHIPLDSPVRLYDLDS	766
EDX69960.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVRLYDLDS	766
ACM13462.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVRLYDLDS	766
EEK75631.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVSLYDLDS	766
EEL25491.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDLDS	707
EEL21990.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVSLFDLIS	774
EEL33825.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVSLFDLIS	774

EEL44933.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVRLYDILLS	774
EEL50167.1	SEENVSRVLRRLNGLNGNDQVLTASGR-NA-----AHLPLDMPASLRDILLS	844
EJR22930.1	SEKNINRILRRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDILLS	766
EJP91231.1	SEKNVNRILKRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDILLS	766
EJR37623.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDILLS	766
EJR50635.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVRLYDILLS	766
EJR64551.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHLPLDSPVSLFDLIS	766
EJR75620.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDILLS	766
EJR82049.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDILLS	766
EJR83659.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDILLS	766
EJR91135.1	SKENVDRILKRFGLNGKDQVILTTS GG-PA-----FHLPLERPVS LFDILLS	763
EJR97241.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDILLS	766
EJS05852.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVSLFDILLS	766
EDX58768.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVRLYDILLS	766
AAU24352.1	SEVLIGRVFQRFGLNGNEQILISGR-N-QA-----SHLPLERP VHVKDLFQ	761
ABY44122.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVSLFDILLS	766
EDW23201.1	SDALVQRVINRFNLDPKQH IKLYSE-K-KA-----NHLPLDQPIQMRELLA	752
ABV62358.1	RDVLVQRVIDRFNLDPKQH IKLSSE-K-EA-----NHLPLGQPIQIRELLA	752
EIF12263.1	SKEQVSRVLRRLNGLNGNDQVLLTASGQ-SA-----AHLPLDRPVRLHDILLS	762
EIF14027.1	SGELISRVIRRFGLDPNQHF KIKG--R-QL-----PHLPMDR PVNAPELLA	753
EHL75405.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----NHIPLDSPVSLLDILLS	766
EJD67577.1	SKEQVSRVLRRLNGLNGNDQVLLTASGQ-SA-----AHLPLDRPVRLHDILLS	762
EJD68347.1	SGELISRVIRRFGLDPNQHF KIKG--R-QL-----PHLPMDR PVNAPELLA	753
EFV73436.1	SEVLIGRVFQRFGLNGNEQILISGR-N-QA-----SHLPLERP VHVKDLFQ	775
CBY93692.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----NHIPLDSPVRLFDILLS	766
AFI27355.1	SPTNVSRILHRFGLKGT DQVTL LASGR-SA-----GHLPLGRPVSLNDILLS	763
AFI29229.1	SREL VQRVLSRFGLQSNHVIQISGS-A-HM-----AHLPMDRPIKVADILLS	754
EIL85422.1	SATLVQRVTD RFKLDPEQH MILSSE-K-EA-----SHLPLNQPIQV GELLA	752
ADV93500.1	SREL VQRVLSRFGLQSNHVIKVSGS-A-HM-----SHLPMDRPIKVADILLS	754
ADV95715.1	SQTNVSRILHRFGLKGT DQVTL SASGR-SA-----GHLPLGRPVSLHDILLS	763
BAI84248.1	SQTNVSRILHRFGLKGT DQVTL SASGR-SA-----GHLPLGRPVSLYDILLS	763
EFG90288.1	SQKLVQRVLSRFDLQSNHVIKITGG-P-HM-----AHLPMDRPIKVTDILLA	754
EFG91781.1	SQTNVSRILHRFGLKGT DQVTL SASGR-SA-----GHLPLGRPVSLHDILLS	763
AEP85668.1	SQTNVSRILHRFGLKGT DQVTL SASGR-SA-----GHLPLGRPVSLHDILLS	763
AEP87558.1	SQKLVQRVLSRFDLQSNHVMKMSGG-P-HM-----AHLMDRPIKVM DILLA	754
sp O08336.1 CYPB_BACSU	SREL VQRVLSRFGLQSNHVIKVSGS-A-HM-----AHLPMDRPIKVVDILLS	754
sp O08394.1 CYPD_BACSU	SQTNVSRILHRFGLKGT DQVTL SASGR-SA-----GHLPLGRPVSLHDILLS	763
AEP89812.1	SQTNVSRILHRFGLKGT DQVTL SASGR-SA-----GHLPLGRPVSLHDILLS	763

AEP91702.1	SRELVQRVLSRFGLQSNHVIKVS GS-A-HM-----	AHLPMDRPIRVVDLLS	754
EHA31094.1	SRELVQRVLSRFGLQSNHVIKVS GS-A-HM-----	SHLPMDRPIKVADLLS	756
ADH07708.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----	NHIPLDSPVSLLDLLS	766
EEM28177.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----	NHIPLDSPVSLLDLLS	766
AFQ14162.1	SEKNVNRILKRFGLNGKDQVILSASGR-SI-----	NHIPLDSPVSLLDLLS	766
EEM95517.1	SEKNVNRILKRFGLNGKDQVILSASGR-SI-----	NHIPLDSPVSLFDLLS	766
EEN02344.1	SEKNVNRILKRFGLNGKDQVILSASGR-SI-----	NHIPLDSPVSLLDLLS	766
AFU13781.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVSLFDLIS	774
EEM70897.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVRLYDLLS	774
ADY22413.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVRLFDLLS	766
EEM82895.1	SEKNINRILRRFGLNGKDQVILSASGR-SI-----	NHIPLDSPVSLLDLLS	766
EEM52818.1	SEKNINRILRRFGLNGKDQVILSASGR-SI-----	NHIPLDSPVSLLDLLS	766
EEM59126.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVRLYDLLS	774
EEM47193.1	SEKNINRILKRFGLNGKDQVILSASGR-SI-----	NHIPLDSPVSLLDLLS	707
EEM76899.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVRLYDLLS	774
EEM88909.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVRLYDLLS	774
EEM38196.1	SEKNVNRILKRFGLNGKDQVILSASGR-SI-----	NHIPLDSPVSLLDLLS	766
EEM21858.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVRLYDLLS	769
ABK86139.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVRLYDLLS	774
EJQ37805.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVSLFDLIS	766
CCF04242.1	SKKQVSRVLRFRFNLNGNDQVLLTASGQ-SA-----	AHLPLDRPVRLHDLLS	762
CCF05972.1	SGELISRVIRRFGLDPNQHFKIKG--R-QL-----	PHLPMDRVPVNAPELLA	753
ABS73124.1	SKEQVSRVLRFRFNLNGNDQVLLTASGQ-SA-----	AHLPLDRPVRLHDLLS	762
ABS74786.1	SGELISRVIRRFGLDPNQHFKIKG--R-QL-----	PHLPMDRVPVNAPELLA	753
EKE46398.1	SKKQVSRVLRFRFNLNGNDQVLLTASGQ-SA-----	AHLPLDRPVRLHDLLS	762
EKE48022.1	SGELISRVIRRFGLDPNQHFKIKG--R-QL-----	PHLPMDRVPVNAPELLA	753
CCG48683.1	SKEQVSRVLRFRFNLNGNDQVLLTASGQ-SA-----	AHLPLDRPVRLHDLLS	762
AFJ60789.1	SKEQVSRVLRFRFNLNGNDQVLLTASGQ-SA-----	AHLPLDRPVRLHDLLS	769
AFJ62808.1	SGELISRVIRRFGLDPNQHFKIKG--R-QL-----	PHLPMDRVPVNAPELLA	753
EEK66903.1	SQKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVRLFDLLS	780
EJQ52935.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVSLFDLLS	766
EJS69574.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVSLFDLLS	766
EJV63294.1	SEKNVNRILKRFGLNGKDQVILSASGR-SV-----	NHIPLDSPVSLFDLLS	766
EKF35778.1	SAALVQRVTNRFKLDPQQHIMLSSA-K-EA-----	SHLPLNQAIQIRELLA	752
EGP08506.1	DPVLVDVARRFGFLPADQVRLHVAAG---RR-----	AQLPVDNAVSVGRLLT	778
BAL78328.1	DPTLVDSVARRFGFLPADQIRLQVAEG---RR-----	AQLPVGDAVSVGRLLS	774
BAC48147.1	DPTLVDSVARRFGFLPADQIRLQVAEG---RR-----	AQLPVGEAVSVGRLLS	775
BAL12135.1	DPTLVDSVARRFGFLPADQIRLQVAEG---RR-----	AQLPVGDAVSVGRLLS	775

CCE00185.1	DPELVDRVARRFGFSPADQIRLRVAEG---RR-----AQLPVGEAVSVGRLLT	778
EIG57609.1	DPTLVDSVARRFGFLPADQIRLQVAEG---RR-----AQLPVGDAVSVGRLLS	774
EHR02046.1	DPTLVDSVARRFGFLPADQIRLQVAEG---RR-----AQLPVGDAVSVGRLLS	774
EJN11211.1	-----	670
CCF15606.1	CPQLVERIVHRFGLNGNDYLILSGSGR-SA-----AHLPLDRPVSVYDLLS	701
CCF12687.1	RKEHVERILRRFGLNGNDHLILRAEGR-NI-----AHLPLDRPVRLDDLLS	764
ABB05850.1	AKNNVDRVLRFRVSWDTQVVIEGT-S--S-N-----PRLPLGQAIGCGELFS	766
EHP43606.1	HRATVRDLCEERLDLDPDAMVTLSSAHA---GA-----ARGLPLDEALPLRELLT	798
ABF10339.1	DAQLVSELCERLDLDPDAQATISAP-H---GM-----GRGLPIDQALPVRQLLT	765
CAJ95800.1	QPGMVAALCERIGIDPDAIVTLSAS-G---GA-----ARGLPLGEALSVRQLLT	796
AEI79937.1	QPGMVAALCERIGIDPDAIVTLSAS-G---GA-----ARGLPLGEALSVRQLLT	796
AFD27790.1	PADLVERVLRFRVAPDDQVAQAG--R--A-L-----GFLPGDLTSLAGDLLT	762
ABC62112.1	DPAVVDRLLKRFGLDRDTFVRIESRSD---MR-----GPFPSGSTFVSNLAE	767
EAQ27850.1	DDAVVERLLRRFNLDADTYVRIESRSE---MR-----GPFPSGSTFVSNLAK	768
EIT84377.1	SVDLIQRVIKRFALAPSAYVKLQASSS-LA-----THLPLGETVAIEDVLR	751
CCG43686.1	GTELVVERVLRFRFQLKGEEYVVLGEDTG-KA-----THLPTSQPISLRELLT	756
ABX05160.1	HPSLIERACKHFGLKPEQTIILHATR--A-----ANLPIDRPISLGELLS	755
BAJ96920.1	SGYIMDRALKQFGLNRESQIIHSD-----KQ-----TYLPTGYSVNITVILA	753
GAB96874.1	PVPVIDRALARFDLAYDTRLQLS---G--A-A-----TSLPVDAPVLAGELEFG	811
EFH80345.1	TPEMVRRVAAHFHFAEDAKIRLRQGDE---RR-----THLPINEPVRVFDLLA	772
EFH88481.1	PEEQVTRIADHFQFDRQTI IQLHANDE---RK-----PAAPVEEPI SVYDLLA	777
EAW32450.1	PAVNVERAAVRFGLGIQQLRLSLKHG---SA-----GAIPINS DITVNTLLS	764
EIZ82104.1	PHPDVERALRRFGLAGDTRILIRKGAG--T-A-----TALPAGYPVSAAEILA	766
AEV70722.1	PPELVDAVLEGLGIDGAQRLAVNPRRS---SR-----RLIALDREVSVRELLT	758
EFC41452.1	SMKVVNKALSHFKLTHDDQIVLKRSET--ISS-----SSYPVNEPISAVNLFM	790
ACV78954.1	RQTI IWRAARTLKFDP SLVVELHATTT--V-E-----TGVPLGQPTMMYDLLA	798
ACV78964.1	GIDLIRRV MFRFALDAGMYLTIIPNSG---TH-----THLPTDEQTPLLGVLG	772
ACV81379.1	NQAQIRRV MRRFGLDMGYVTITANS---TH-----THLPVDEPSPLLGVLG	773
EIZ78677.1	PQVDVDRVLRFRGLAADTQVVIG-GQP--N-A-----TSLPSGYPVALSQILA	758
EJW15291.1	ADNLVERVISRFDLNGSDHVVLRTTGN-SP-----SHLPLHRPVLINDLLS	763
EJW16173.1	HAAQVGRVLRFRFGLNGSDHLIVNASGR-SA-----AHLPTGQPVSLSDLLS	763
EHQ58913.1	RKELVERVLSRFDLNGSDHVLKTSGL-RV-----AHLPLDRPVKLYELLG	761
EHQ59900.1	AQELVDRVLRFRFGLQGS DHLIISASGR-SA-----AHLPLDRPISVH DLLS	760
EHB66924.1	PATLVQRVLRFRFKLDAGAHLILSAEGR-SG-----AHLPTGVPVRLDDLLS	761
AFH60445.1	PKDLVGRVLQRFGLOGGDHLVLSATGR-SA-----AHLPLGRPVRLSDLLG	760
AEI42011.1	PKDLVGRVLQRFGLOGGDHLVLSATGR-SA-----AHLPLDRPVRLSDLLG	760
ADO57681.1	PALLVNRVMQRFKLQDQNYIVLRGSDR-DA-----AHLPLDRPVSVGDLLT	759
EGG32133.1	PKTLVQRVLRFRFKLNSGSHLMLSAEGR-SG-----AHLPTGIPVRLDDLLS	763

EGL17662.1	SRESVARVLRFFGLQGSDDLILSGSGR-SA-----AHLPLDRPVSLEDLLG	762
ACX65034.1	PKTLVQRVLRFFKLNAGSHLILSAEGR-SG-----AHLPTGIPVRLDDLLS	763
ACT11327.1	SDDQIDRVLRFFGLSPDMMLVINQA-P--D-V-----TGLPIGQPISCAELLG	762
AEA28016.1	NVDLIRRVIARFKLDAGTYVTITPTGG---SW-----THLPLDEPAPLLGLVGLG	775
EFP68091.1	ADDRVDAAITRLALEGDALVTLTAR-H---AH-----VRHLPLNQPVSVRQLLR	778
EGY61507.1	ADDRVDAAITRLALEGDALVTLTAR-H---AH-----VRHLPLNQPVSVRQLLR	778
EIE85788.1	SKVIVEAIALKFGWVLDVFEIDQETLLNV-----SPRSVASNVKGPCTIRNMLT	897
EIE92534.1	SKASVESIALSFGWILDSVFEINQETLSDV-----SPRSLAANIKGPCTIRNMLT	899
BAE46296.1	-----	510
BAH31604.1	-----	466
EEN84644.1	-----	466
EEN88978.1	-----	550
ABG96413.1	-----	498
BAH52971.1	-----	465
EHI44575.1	-----	500
EID73168.1	-----	465
EHK83749.1	-----	441
EJI96173.1	-----	465
ABI79384.1	-----	497
CAR47816.1	-----	498
AEK26937.1	-----	473
ABE39056.1	DPALVAAVAQRLGFAPDDQIKLQVAPG---RR-----AQLPIGEAISVGRLLG	772
ABD08340.1	DPALVAAVAQRFGFAPDDQIRLSAAPG---RR-----AQLPVGEAVSIGGLL	769
CAM03474.1	DAALVERAAGVLGVDLDTVLDIRAK-----RP-----GRLTFDRSLTVRELLS	765
EJF54063.1	SPANIQRVLRHFQMQHDPYIKLESEEQ--SVA-----LKLPLDQHIRLTDLLK	775
AFC23737.1	SPATIQRVLRHFQMQHDPYIKLESEEQ--SVA-----LKLPLDQHIRLTDLLK	763
ADG98903.1	-----	471
EGI54680.1	PPETVRRALARFGLPDAEVIVHGAPG--V-P-----SVLPVDRPVTAETLFG	755
AEW97204.1	DPALVERAARLLGADPDTVLGVRARRP---GR-----GTLPVDRPVTVRELLT	782
CAJ88567.1	-----	516
BAC68285.1	EPVLVNRALARLGVDRDQVLRDQP-G---GG-----RTHLPVGTPTVTTGLLFT	771
BAC75137.1	-----	504
EDY51256.1	PAALVDRTAAVLGLDPERTVVVGAAPG---A-----TGRGPSLPTGEPMTVRTLLT	775
EFG07822.1	PAALVDRTAAVLGLDPERTVVVGAAPG---A-----TGRGPSLPTGEPMTVRTLLT	807
EHN78335.1	-----	525
CAB66201.1	-----	527
EGG48117.1	-----	517
EFL20831.1	PDDLQVQVADRFGLDLDRTVRLCARRR---S-----RNILPVDRPLPLRRLLT	778

EFL28515.1	DPELVTRAAKLLHADPGTVLSIVPARP---ARR-----GSLAVDRPVSVRELLT	773
AEY93311.1	-----	542
AEY93321.1	APELVDRVAFAFGLDADAVLDIRPTRS---RPWGSARTGEAERGGALAVDRPVTVRQLLT	780
EFD71156.1	-----	529
CBG67789.1	PDHLVRRVTDRFGLDPDRTVRLRARR---G-----RNTLPVDRPLTVRRLLT	774
CBG68112.1	-----	513
EFL10082.1	-----	501
EFF88741.1	PEALVRRVADRFALDLERTVIRIGTRRR---S-----RAALPVDRPLTLRRLLT	775
EDY58112.1	-----	506
EFL36674.1	-----	510
EFL36680.1	DPGLVTRAATALGVLDLDEVLDIRATRP---RR-----DGIADVDRPVTVRQLLT	818
EFE65335.1	-----	526
EGX54696.1	-----	491
ACZ89135.1	HPELVERAARRFGIQTDAAVVLHSSRG--AMA-----ASLPTGQPVSVRELLG	757
ABD83817.1	APALVDRVARRFGFLPADQIRLAVAEG---RR-----AQLPVGEAVSIGQLLT	775
ADU39615.1	SPAQVERAMARFGFDRSAHVRLSAAPG---RK-----TALPVDQVIAVDRLLG	772
EJL72014.1	SPAQVERAMARFGFDRTSHVRLHAAAG---RK-----AALPVEQVIAVDRLLG	772

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sp|P14779.2|CPXB_PRIM2      -YVELQDPVTRTQLRAMAAKTV--CPPHKVELEALLE-K-----QAYKEQVLAKRLTMLE 803
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ADE70259.1                  -YVELQDPVTRTQLRAMAAKTV--CPPHKVELEVLLLE-K-----QAYKEQVLAKRLTMLE 803
AEN88827.1                  -YVELQDPVTRTQLRAMAAKTV--CPPHKVELEALLE-K-----QTYKEQVLAKRLTMLE 803
KFN05180.1                  -YVELQDPVTRTQLRAMAAKTV--CPPHKVELEALLE-K-----QAYKEQVLAKRLTMLE 803
ACZ37122.1                  -YVELQDPVTRTQLRAMAAKTV--CPPHKVELEVLLLE-K-----QAYKEQVLAKRLTMLE 803
ADA57055.1                  -YVELQDPVTRTQLRAMAAKTV--CPPHKVELEALLE-K-----QAYKEQVLAKRLTMLE 803
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AAT62301.1                  YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLE-D-----GVYQEIQILKKRISMLD 818
AAM54108.1                  RCVDLSAPAGAGVVARLAERCP--CPPERAELAATTG-----ATLLE 787
EFQ83738.1                  ----- 505
EFL88452.1                  DLVELQSPASRRDVQLLVKHTR--CPDSKPKLEALAGDD-----FKDKVQGTRTSILD 820
BAF89518.1                  EHVDLAGPVTRRDLRAWAQAAQ--CPPDRARIAGWL-----SDFPSAVAEAKPRMED 922
CBI43648.1                  SYVELQEPATRAQLRELAHATV--CPPHQKELEHLYSDY-----AAYKENVLKKRMTMLD 806
AEB22839.1                  SCVELQEAASRAQIREMAAYTV--CPPHKHELEGLLE-E-----GVYQEIQILTLRVSMMLD 815
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AFH84458.1                  YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLE-D-----GVYQEIQILKKRISMLD 826
ADP31197.1                  YSVDVQEAATRAQIRELAAFTV--CPPHKRELEGLAE-E-----GVYQEKILQKRISMLD 815
ACP19384.1                  YSVEVQEAATRAQIREMVTFTA--CPPHKKELEALLE-E-----GVYHEQILKKRISMLD 818
ADL27534.1                  YSVEVQEAATRAQIREMVTFTP--CPPHKKELEALLE-K-----GVYHEQILKKRISMLD 818
ACO29732.1                  YSVEVQEAATRAQIREMVTFTV--CPPHKKELESLE-E-----GVYQEIQILKKRISMLD 818
EDX65100.1                  YSVEVQEAATRAQIREMVAFTA--CPPHKKELESLE-D-----GIYHEQILKKRISMLD 818
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EDZ53094.1                  YSVEVQEAATRAQIREMVTFTA--CPPHKKELEALLE-E-----GVYHEQILKKRISMLD 818
EEL81346.1                  ----- 663
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EEL75761.1                  YSVEVQEAATRAQIREMVTFTA--CPPHKKELEALLE-E-----GVYHEQILKKRISMLD 759
ACK88541.1                  YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLE-D-----GVYQEIQILKKRISMLD 818
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EEK50040.1                  YSVEVQEAATRAQIREMVTFTA--CPPHKKELEALLE-E-----GVYHEQILKKRISMLD 818
AAS42149.1                  YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLE-D-----GVYHEQILKKRISMLD 818
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EEK83466.1                  YSVEVQEAATRAQIREMVTFTV--CPPHKKELESLE-E-----GVYQEIQILKKRISMLD 826

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ACK63698.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELEALLE-E-----GVYHEQILKKRISMLD	759
EJS57156.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELEALLE-E-----GVYHEQILKRISMLD	818
EJS56605.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLE-E-----GVYHEQILKKRMSMLN	818
EJS68951.1	YSVEVQEAATRAQIRELASFTV--CPPHKRELETLVE-E-----GIYQEILKKRISMLD	817
EJQ10567.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELEALLE-E-----GVYHEQILKKRISMLD	818
EJQ13433.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLE-E-----GVYHEQILKKRMSMLD	818
EJQ20399.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELEALLE-E-----GVYHEQILKKRISMLD	818
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EJQ51278.1	YSVEVQEAATRAQIRELASFTV--CPPHKRELETLVE-E-----GIYQEILKKRISMLD	817
EEL10858.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELEALLE-E-----GVYHEQILKKRISMLD	818
EEL05393.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELELLE-E-----GVYHEQILKKRMSMLD	832
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ACM13462.1	YSVEVQEAATRAQIREMVTFTV--CPPHKKELESLE-E-----GVYQEILKKRISMLD	818
EEK75631.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLE-D-----GIYHEQILKKRISMLN	818
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EEL21990.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLE-E-----GVYHERILKKRISMLD	826
EEL33825.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLE-E-----GVYHERILKKRISMLD	826

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EJR22930.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELEALLE-E-----GVYHEQILKKRISMLD	818
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EJR91135.1	HCIEIQDAATLTQIREVAAFTV--CPPHKCELEVLLE-Q-----KIYEEQILKKRITMLD	815
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EIF12263.1	SCVELQEAASRAQIREMAAYTA--CPPHKRELEDFLE-E-----GVYQEEILTSRVSMMLD	814
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EJD68347.1	SYVELQEPATRAQLRELAHTV--CPPHQKELEHLYSDD-----AAYKENVLKKRMTMLD	806
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CBY93692.1	YSVEVQEAATRAQIREMVTFTV--CPPHKKELESLE-E-----GVYQEQILKKRISMLD	818
AFI27355.1	YSVEVQEAATRAQIRELAAFTV--CPPHKRELEELTA-E-----GVYQEQILKKRISMLD	815
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ADV93500.1	SYVELQEPASRLQLRELAAYTV--CPPHQKELEQLVLDL-----GIYKEQVLAKRLTMLD	807
ADV95715.1	YSVEVQEAATRAQIRELAAFTV--CPPHRRELEELSA-E-----GVYQEQILKKRISMLD	815
BAI84248.1	YSVEVQEAATRAQIRELAAFTV--CPPHRRELEELSA-E-----GVYQEQILKKRISMLD	815
EFG90288.1	SYVELQDPASRLQLRELAAYTV--CPPHKKELEQLVSDD-----GIYKEQVLAKRLTMLD	807
EFG91781.1	YSVEVQEAATRAQIRELAAFTV--CPPHKRELEDMTE-E-----GVYQEQILKKRISMLD	815
AEP85668.1	YSVEVQEAASRAQIRELAAFTV--CPPHKRELEDLAT-E-----GIYQEQILKKRISMLD	815
AEP87558.1	SYVELQDPASRLQLRELAAYTV--CPPHKKELEQLVSDD-----GIYKEQVLAKRLTMLD	807
sp 008336.1 CYPB_BACSU	SYVELQEPASRLQLRELAAYTV--CPPHQKELEQLVSDD-----GIYKEQVLAKRLTMLD	807
sp 008394.1 CYPD_BACSU	YSVEVQEAATRAQIRELASFTV--CPPHRRELEELSA-E-----GVYQEQILKKRISMLD	815
AEP89812.1	YSVEVQEAATRAQIRELAAFTV--CPPHRRELEELTA-E-----GVYQEQILKKRISMLD	815

AEP91702.1	SYVELQEPASRLQLRELASYTV--CPPHQKELEQLVSDD-----GIYKEHVLAKRLTMLD	807
EHA31094.1	SYVELQEPASRLQLRELASYTV--CPPHQKELEQLVLDD-----GIYKEQVLAKRLTMLD	809
ADH07708.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELEALLE-E-----GVYHEQILKKRISMLD	818
EEM28177.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELEALLE-E-----GVYHEQILKKRISMLD	818
AFQ14162.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELEALLE-E-----GVYHEQILKKRISMLD	818
EEM95517.1	YSVEVQEAATRAQIREMVAFTV--CPPHKKELESLLLE-E-----GVYHEQILKKRISMLD	818
EEN02344.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELEALLE-E-----GVYHEQILKKRISMLD	818
AFU13781.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLLLE-E-----GVYHERILKKRISMLD	826
EEM70897.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLLLE-E-----GVYHERILKKRISMLD	826
ADY22413.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLLLE-E-----GVYHERILKKRISMLD	826
EEM82895.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLLLE-E-----GVYHERILKKRISMLD	826
EEM52818.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLLLE-E-----GVYHERILKKRISMLD	826
EEM59126.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLLLE-E-----GVYHERILKKRISMLD	826
EEM47193.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLLLE-E-----GVYHERILKKRISMLD	826
EEM76899.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLLLE-E-----GVYHERILKKRISMLD	826
EEM88909.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLLLE-E-----GVYHERILKKRISMLD	826
EEM38196.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLLLE-E-----GVYHERILKKRISMLD	826
EEM21858.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLLLE-E-----GVYHERILKKRISMLD	826
ABK86139.1	YSVEVQEAATRAQIREMVAFTA--CPPHKKELESLLLE-E-----GIYHEQILKKRISMLD	818
EJQ37805.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLLLE-E-----GVYHERILKKRISMLD	818
CCF04242.1	SCVELQEAASRAQIREMAAYTV--CPPHKRELEDFLE-E-----GVYQEQILTSRVSMMLD	814
CCF05972.1	SYVELQEPATRAQLRELAHHTV--CPPHQKELEHLYSDD-----AAYKENVLKKRMTMLD	806
ABS73124.1	SCVELQEAASRAQIREMAAYTV--CPPHKRELEDFLE-E-----GVYQEQILTSRVSMMLD	814
ABS74786.1	SYVELQEPATRAQLRELAHHTV--CPPHQKELEHLYSDD-----AAYKENVLKNRMTMLD	806
EKE46398.1	SCVELQEAASRAQIREMAAYTV--CPPHKRELEDFLE-E-----GVYQEQILTSRVSMMLD	814
EKE48022.1	SYVELQEPATRAQLRELAHHTV--CPPHQKELEHLYSDD-----AAYKENVLKKRMTMLD	806
CCG48683.1	SCVELQEAASRAQIREMAAYTV--CPPHKRELEDFLE-E-----GVYQEKILTLRVSMMLD	814
AFJ60789.1	SCVELQEAASRAQIREMAAYTV--CPPHKRELEDFLE-E-----GVYQEKILTLRVSMMLD	821
AFJ62808.1	SYVELQEPATRAQLRELAHHTV--CPPHQKELEHLYSDD-----AAYKENVLKKRMTMLD	806
EEK66903.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLLLE-E-----GVYHEQILKKRISMLD	832
EJQ52935.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLLLE-E-----GVYHEQILKKRMSMLD	818
EJS69574.1	YSVEVQEAATRAQIREMVTFTA--CPPHKKELESLLLE-E-----GVYHEQILKKRMSMLD	818
EJV63294.1	YSVEVQEAATRAQMREMVTFTA--CPPHKKELESLLLE-E-----GVYHEQILKKRMSMLD	818
EKF35778.1	SHVELQEPATRTQLRELAKYTV--CPPHRIELEQMA--G-----EIYQEAILKKRVTMLD	803
EGP08506.1	EFVELQQIATRQIQIQAENTR--CPRTKPKLEAFVGGD--PASTELYSRSEILGKRRSVYS	835
BAL78328.1	EFVELQQVATRQIQIQAENTR--CPVTKPKLLAFVGGEE--PETLERYRTEILARRKSVFD	831
BAC48147.1	EFVELQQVATRQIQIQAENTR--CPVTKPKLLAFVGGEE--AEPAERYRTEILAMRKSVYD	832
BAL12135.1	EFVELQQVATRQIQIQAENTR--CPVTKPKLLAFVGGEE--AEPLERYRTEILARRKSVFD	832

CCE00185.1	DFVELQQVATRQIQIMSEHTR--CPVTRPKLAAYLGDD-ADSGERYRAEILAKRKSVD	835
EIG57609.1	EFVELQQVATRQIKIMAEHTR--CPVTKPKLLGFVGD-EAPLEHYRGEILARRKSVFD	831
EHR02046.1	EFVELQQVATRQIQIMAEHTR--CPVTQPKLLAFVGE-E-PETLERYRSEILAKRKSVD	831
EJN11211.1	-----	670
CCF15606.1	HSVELQEAAATRAQLRELASYTT--CPPHKRELEALLE-E-----DTYKTNIMNKRISMFN	753
CCF12687.1	QNVLDLQATVTHAQLRELAAYTV--CPPHKRELQALLD-E-----IIYEQQVEKNGMSMLE	816
ABB05850.1	SYVELAVPATRSQVSSLAAATR--CPPEKVELERLS-A-----DGFECEILGKRRTVMD	817
EHP43606.1	HFIELQDVVSRQTLRLLQYTR--CPVTRAALER-LG-S-DHADDGYAAQVAARRMGLVD	853
ABF10339.1	HFIELQDVVSRQTLRALAQATR--CPFTKQSIEQ-LA-S-DDAEHGYATKVVARRLGILD	820
CAJ95800.1	HFVELQDVVSRHTLRLLSQSSR--CPVTRQALRQ-LA-S-DDAGSGYAAQVAPRRLGLAD	851
AEI79937.1	HFVELQDVVSRQTLRLLSQSSR--CPVTRQALQQ-LA-S-DDAESGYAAQVAPRRLGLAD	851
AFD27790.1	HYTELTQPATRRQVERLRDATR--CPPERQILAALA-----DGYDTEVLAQRLSVLD	812
ABC62112.1	TAGELQAVATRQDIATLARYSE--CPNSRAALEALAAPPADGTDRYTSEVLEKRRSVLD	825
EAQ27850.1	TAGELQAVATRQDIATLALYTE--CPNSKPALEKLAQPPQEDGTDQYATDVLAKRKSVD	826
EIT84377.1	NCVELQDTATPSQIELLAAHTN--CPPHAQQLRALAT-G-----DSYQQDIVKKHISMLD	803
CCG43686.1	SYVELQEPATRSQIRDLAHNP--CPPHKMELEKLE-D-----ETYKNEILAHRLTMLD	808
ABX05160.1	SHVELATPATQRDLELLAQKNV--CPSHQIHLAALAADH-----ERYTTEILQKRLSLLD	808
BAJ96920.1	AYVELSQPATRKQILKMAEYSA----DDKDKLISLA--E-----KSYKEEILEKHTSILD	802
GAB96874.1	SYVELSRPAGRRQIEQLAAACP--CPPEKAQLLALT-DE-----STYSAQVLGKRLSVLD	863
EFH80345.1	DYVELQEVATRTQIKVLAEQTE--CPPEKMRLLALCGDD-EASAARYREEVLAKRKTLD	829
EFH88481.1	NYIELQDVATRTHIELMLEYTN--DDSERARLEMLVGSG-SESEAAYKKEVLEQHKSILD	834
EAW32450.1	RYVELCDPATVRQIKLLAEHAS--CPPDVTALNNLAHSD-----HYKSEVLDKRVSMIL	816
EIZ82104.1	DYVELGQPATRAQVQGLAAATR--CPPDRAALEELA-QP-----EAYAAEVLEKRVSLLD	818
AEV70722.1	HFVELRKPATPSQLRRLAASNA--CEPERQRLEELAEAS-----GPELSPVE	804
EFC41452.1	NYFELSQPATKRQLEILLEHTK--EASDKQVLQQLIEK-----D-----SNIPPILD	835
ACV78954.1	GYCDLRAPATRRGIDILAAHVD--RDPARAALLALTADD-----DAFAGGVLARRVSLLD	851
ACV78964.1	SCVELQATATRADIEVLAEYTD--DPAQRAELQALLGDD-EQSRTRYREQVSGPNLSVLD	829
ACV81379.1	ACVELQATATRADLEVLAEHTD--DPAQQAALRALTDD-----ETYRTQVREPNSVLD	825
EIZ78677.1	DYVELGQPATRAQVAQLTAATR--CLPDRAALEAHG-DE-----ATYARDVLARRVTLDD	810
EJW15291.1	RSVELQEPATRAQIRELAALTV--CPPHRIELEALLE-A-----ESYRQNILEKRVSMIL	815
EJW16173.1	HSVELQEAAATRAQLRELASYTA--CPPHRRELESLLT-E-----DKYVAEVLKRVSMIL	815
EHQ58913.1	RSVELQEAAATRVQIRELAARTA--CPPHKRELEALLE-E-----EAYKSNILQQRISMIL	813
EHQ59900.1	HSVELQEAAATRAQLREMAFSTV--CPPHKQELEALLQ-E-----DTYQDQVLSKRVTMID	812
EHB66924.1	RSVELQEPATRAQIREMAECTV--CPPHAKELLELLE-D-----PTYQDEVRAKRISMIL	813
AFH60445.1	SSVELQEPATRAQLRELAAYTV--CPPHKRELEALLQ-E-----DAYKTEVLRKRVTMLE	812
AEI42011.1	SSVELQEPATRAQLRELAAYTV--CPPHKRELEALLQ-E-----DAYKTEVLRKRVTMLE	812
ADO57681.1	LSVELQEPATRAQLRQLASFSTV--CPPHKKEIEALLE-D-----TTFDQEIIRKRVTMLD	811
EGG32133.1	RSVELQEPATRAQIREMAASTV--CPPHAKELQELIE-E-----ASYQAEVRAKRITMLD	815

EGL17662.1	HSVDLQEAATRAQLRELACTA--CPPHKRELEALLE-E-----DAYREQVWKKRVSMMLD	814
ACX65034.1	RSVELQEPATMAQIREMAASTV--CPPHAKELQELIE-E-----ASYQAEVRAKRITMLD	815
ACT11327.1	NYVELSQPATRAQVAALAAATR--CPPEKMELEKLA-T-----EHYENDVLAPRLSVLD	813
AEA28016.1	SCVELQDVAGRSDIATLAASAT--DPAEREALQALTTLD-DEGRARYRKTIAEPRVTVLD	832
EFP68091.1	DFVELQDTATVRDITALHAATR--CPFTRGQLAVWLE-G-DEAAERFDRDIQAPHVSVLD	834
EGY61507.1	DFVELQDTATVRDITALHAATR--CPFTRGQLAVWLE-G-DEAAERFDRDIQAPHVSVLD	834
EIE85788.1	YYADVTSPPSRAVLGYFATQLKLTAPETASEFEKLIMPD-SNNQDQYPN-FIKQHRTLLD	955
EIE92534.1	YYADVTSPPSRAVLGCFAAQLKLVAPETASEFEKLIMPD-ANNQDQYPD-FIKQYRTLLD	957
BAE46296.1	-----	510
BAH31604.1	-----	466
EEN84644.1	-----	466
EEN88978.1	-----	550
ABG96413.1	-----	498
BAH52971.1	-----	465
EHI44575.1	-----	500
EID73168.1	-----	465
EHK83749.1	-----	441
EJI96173.1	-----	465
ABI79384.1	-----	497
CAR47816.1	-----	498
AEK26937.1	-----	473
ABE39056.1	DFVELQQVATRQKQIIVMAEHTR--CPQTRPKLQALAGGD-GAADEAYRAGVLAKRKSVDYD	829
ABD08340.1	DHVELQQVATRQKQIVALAAHTR--CPQTRPKLQALAGGD-GAADDAYRAEVLGKRRSVFD	826
CAM03474.1	HHVELQDPPTPDGLDALAALNP--CPPERAALRGLAEEA-----RSGTADHRTLWD	814
EJF54063.1	YYVELQRPAGKKLLEEVLQTR--CPFSAQGLQQFI-----DNYESEVLQKNRSLLS	825
AFC23737.1	YYVELQRPAGKKWLEEVLAQTR--CPFSAQGLQQFI-----EQYESEVLQKNRSLLS	813
ADG98903.1	-----	471
EGI54680.1	DYLELQQPATRGQITTLATIIP--CPPERKEAERLA-QE-----DIYAAEILARRVTLDD	807
AEW97204.1	YHLELSDPATAAQIIVLADRNP--CPPEQAELKKLA-----PGRASVLD	824
CAJ88567.1	-----	516
BAC68285.1	EFVELQDVATRSQIQELAEHTQ--CPWTRPQLQAYTADT-AEAEERYQKEILGKRVSVLN	828
BAC75137.1	-----	504
EDY51256.1	HLVELGRPATARQARALAAHAP--CPPERATLERHADGP-----TDGPTAATATVTD	825
EFG07822.1	HLVELGRPATARQARALAAHAP--CPPERATLERHADGP-----TDGPTAATATVTD	857
EHN78335.1	-----	525
CAB66201.1	-----	527
EGG48117.1	-----	517
EFL20831.1	DFVELQDAATQEQVAVLAEHTA--CPPEKRPLAELAAVE-----PEAFREQVTVAGRSVLD	832

EFL28515.1	HHVELNHRPNAEQLALLAELNP--CPPEKAALAAQA-----PGERTLLD	815
AEY93311.1	-----	542
AEY93321.1	HHVELQERPTSRQAALLAEANP--CPPERAALAALPG-----DDPRTLVE	823
EFD71156.1	-----	529
CBG67789.1	DFVELQDPATREQIAVLAEHTA--CPPEKRPLTELAAAD----PETFREQVTAAGRSVLD	828
CBG68112.1	-----	513
EFL10082.1	-----	501
EFF88741.1	DFVELQDPAAQEQVAVLAEHTE--CPPEQRPLAELATAD----PVTFREQVTDAGRSVLD	829
EDY58112.1	-----	506
EFL36674.1	-----	510
EFL36680.1	HHVELQERPSTGQLAALAAANP--CPPERMALAAL-S-----DDPRTLVE	860
EFE65335.1	-----	526
EGX54696.1	-----	491
ACZ89135.1	HHVELSAPATRKDLERLARHAQ--CPPDRDRLSALAGDP----VRHRQEILDRRVSVLD	810
ABD83817.1	DFVELQQVATRKQIQIMSEHTR--CPVTKPKLVAYVGDD-ADSSERYRADILSRKSVYD	832
ADU39615.1	DYVELQDVATRKQIATLAAYTE--CPFTKPKLVALSGSD-EASQAAYKAEVLHKRKSLLE	829
EJL72014.1	DYVELQDVATRKQIATLAAYTE--CPFTKPRLAALSGSD-EASQAMYKTEVLHKRKSLLD	829

sp P14779.2 CPXB_PRIM2	LLEKYPA-CE--MKFSEFIA-LLPSIRPRYYSISSSPRV-DEKQASITVSVVSGEAW-SG	857
ADF40088.1	LLEKYPA-CE--MEFSEFIA-LLPSIRPRYYSISSSPRV-DEKQASITVSVVSGEAW-SG	857
ADE70259.1	LLEKYPA-CE--MEFSEFIA-LLPSMRPRYYSISSSPRV-DEKQASITVSVVSGEAW-SG	857
AEN88827.1	LLEKYPA-CE--MEFSEFIA-LLPSMRPRYYSISSSPRV-DEKQASITVSVVSGEAW-SG	857
KFN05180.1	LLEKYPA-CE--MKFSEFIA-LLPSIRPRYYSISSSPRV-DEKQASITVSVVSGEAW-SG	857
ACZ37122.1	LLEKYPA-CE--MEFSEFIA-LLPSMRPRYYSISSSPRV-DEKQASITVSVVSGEAW-SG	857
ADA57055.1	LLEKYPA-CE--MEFSEFIA-LLPSISPRYYSISSSPHV-DEKQASITVSVVSGEAW-SG	857
ADA57058.1	LLEKYPA-CE--MEFSEFIA-LLPSMRPRYYSISSSPRV-DEKQASITVSVVSGEAW-SG	857
ADA57059.1	LLEKYPA-CE--MEFSEFIA-LLPSISPRYYSISSSPHV-DEKQASITVSVVSGEAW-SG	857
ADA57061.1	LLEKYPA-CE--MEFSEFIA-LLPSMRPRYYSISSSPRV-DEKQASITVSVVSGEAW-SG	857
ADA57062.1	LLEKYPA-CE--MEFSEFIA-LLPSIRPRYYSISSSPRV-DEKQASITVSVVSGEAW-SG	857
ADA57068.1	LLEKYPA-CE--MEFSEFIA-LLPSMRPRYYSISSSPRV-DEKQASITVSVVSGEAW-SG	857
AAT62301.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAAPAW-SG	872
AAM54108.1	LLERFPS-CA--VDLALALE-LLPAPRTRLYSISSAAEE-QRAEVALTVSV-----	833
EFQ83738.1	-----	505
EFL88452.1	LLEEFPA-CE--LPFAVYLE-TCPNMVPYYSISSSPKA-GSDRCSITVAVVDDVAR-NG	874
BAF89518.1	LLAQVPS-VQ--LDLAALLT-VRPALKPRYYSISSSPLM-SPDACALTGVGHQFTTA-DG	976
CBI43648.1	LLEDYPA-CE--LPFERFLE-LLPSLKARYYSISSSPKA-NKRELSITVGVVTAPAW-SG	860
AEB22839.1	LLEKYEA-CE--LPFERFLE-LLRPLKPRYYSISSSPLK-HPGQASITVGVVVRGPAPAW-SG	869
EDT22025.1	LLEKYEA-CE--IRFEPFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAAPAW-SG	872
AFH84458.1	LLEKYEA-CE--IRFEPFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAAPAW-SG	880
ADP31197.1	LLEEYEA-CE--MPFERFLE-LLRPLKPRYYSISSSPRV-NPEQAAITVGVVVRSPAW-SG	869
ACP19384.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AHNRLSITVGVVNAAPAW-SG	872
ADL27534.1	LLEKNEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-VQNRLSITVGVVNAAPAW-SG	872
ACO29732.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAAPAW-SG	872
EDX65100.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAAPAW-SG	872
EEK61456.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQNRLSITVGVVNAAPAW-SG	872
EEL16232.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAAPAW-SG	880
EDZ53094.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQNRLSITVGVVNAAPAW-SG	872
EEL81346.1	-----	663
EEL87105.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQNRLSITVGVVNAAPAW-SG	886
EEL75761.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AHNRLSITVGVVNAAPAW-SG	813
ACK88541.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAAPAW-SG	872
EJQ05303.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAAPAW-SG	872
EEK50040.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQNRLSITVGVVNAAPAW-SG	872
AAS42149.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLI-AQDRLSITVGVVNAAPAW-SG	872
AAP10153.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AHNRLSITVGVVNAAPAW-SG	872
EEK83466.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAAPAW-SG	880

ACK63698.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AHNRLSITVGVVNAPAW-SG	813
EJS57156.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AHNRLSITVGVVNAPAW-SG	872
EJS56605.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQNRLSITVGVVNAPAW-SG	872
EJS68951.1	LLEKYEA-CE--MPFERFLE-LLPALKPRYYSISSSPLV-AEDRLSITVRVVS GPAR-SG	871
EJQ10567.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQNRLSITVGVVNAPAW-SG	872
EJQ13433.1	LLEKYGA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQNRLSITVGVVNAPAW-SG	872
EJQ20399.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-VQNRLSITVGVVNAPAW-SG	872
EJQ30236.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQNRLSITVGVVNAPAW-SG	872
EJQ51278.1	LLEKYEA-CE--MPFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVSGPAR-SG	871
EEL10858.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AHNRLSITVGVVNAPAW-SG	872
EEL05393.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	886
EEK94080.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AHNRLSITVGVVNAPAW-SG	875
EEK99882.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	875
EEK55784.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	880
ADK05784.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	872
AAU17340.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQNRLSITVGVVNAPAW-SG	872
EEL64394.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQNRLSITVGVVNAPAW-SG	872
AEW56259.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	872
AFQ11690.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLI-AQDRLSITVGVVNAPAW-SG	872
EAL16831.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	872
ACK94296.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQNRLSITVGVVNAPAW-SG	872
EDZ58760.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	872
EJV84218.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	872
EJQ69212.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	872
EJQ80339.1	LLEKYEA-CE--LRFERFLE-FLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	872
EJV81602.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AHNRLSITVGVVNAPAW-SG	872
EJQ95474.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	872
EEK44229.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	880
EEK88560.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AHNRLSITVGVVNAPAW-SG	872
EJR07451.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQNRLSITVGVVNAPAW-SG	869
EJR16542.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	872
BAL18840.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	872
EDX69960.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	872
ACM13462.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	872
EEK75631.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	872
EEL25491.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AHNRLSITVGVVNAPAW-SG	813
EEL21990.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	880
EEL33825.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	880

EEL44933.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	880
EEL50167.1	LLEKYEA-CE--MPFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVSGPAR-SG	950
EJR22930.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AHNRLSITVGVVNAPAW-SG	872
EJP91231.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQNRLSITVGVVNAPAW-SG	872
EJR37623.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AHNRLSITVGVVNAPAW-SG	872
EJR50635.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	872
EJR64551.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	872
EJR75620.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AHNRLSITVGVVNAPAW-SG	872
EJR82049.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQNRLSITVGVVNAPAW-SG	872
EJR83659.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AHNRLSITVGVVNAPAW-SG	872
EJR91135.1	LIEKYEA-CE--MPFERFLE-LLPPLKPGF-----	841
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EJS05852.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	872
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ABV62358.1	LLDQYEA-CE--MPFAHFLA-LLPGLKPRYYSISSSPKI-DEKRVSITVAVVKGKAW-SG	857
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EIF14027.1	LLEDYPA-CE--LPFERFLE-LLPSLKARYYSISSSPKA-ASGELSITVGVVTAPAW-SG	860
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EFV73436.1	LLEQYPA-CE--LPFARFLA-LLPPLKPRYYSISSSPQL-NPRQTSITVSVVSGPAL-SG	881
CBY93692.1	LLEKYEA-CE--IRFERFLE-LLPALKPRYYSISSSPLV-AQDRLSITVGVVNAPAW-SG	872
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AFI29229.1	LLEDYPA-CE--MPFERFLA-LLPSLKPRYYSISSSPKA-HANIVSMTVGVVKASAW-SG	861
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BAL12135.1	MLLEYPA-CE--LPFHVYLE-MLSLLAPRYYSISSSPSV-DPARCSVTVGVVEGPAA-SG	886

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EIG57609.1	LLLEYPA-CE--LPFHVYLE-MLSLLAPRYYSISSSPSV-DPVRCSVTVGVVEGPAA-SG	885
EHR02046.1	LLLEYPA-CE--LPFHVYLE-MLSLLAPRYYSISSSPSV-DPVRCSVTVGVVEGPAA-SG	885
EJN11211.1	-----	670
CCF15606.1	LMEQYPA-CE--LPFERFLE-LLPPLKARYYSISSPHL-LPDRASITVSVVVRGPAA-SG	807
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ABB05850.1	LLERFGS-VD--LSLEKFLD-MLPALKARQYSISSSPLW-KADHVTLTVAVVDAPAL-SG	871
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CAJ95800.1	VLDRFPA-IE--VDLAGLLA-CTVPMRPRFYSIASSPLV-SPGVATITVGTVWSPAL-SG	905
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CAR47816.1	-----	498
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ADU39615.1	LLEEHRA-CQ--VPFAVFLE-MLSPLSPRYYSISSSPSM-TPGRCSVTVGVVSEPAL-SG	883
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ADA57068.1                  -YGEYKGIASNYLANLQEGDTITCFVSTPQ-SGFTLPKGP-ETPLIMVGP GTGVAPFRGF 914
AAT62301.1                  -EGTYEGVASNYLAQRHNKDEIICFIRTPQ-SNFQLPENP-ETPIIMVGP GTGIAPFRGF 929
AAM54108.1                  -----TGVTSGYLSRV RPD R VAVG IASPP-ESFRPPADN-TVPVVLIAAGTGIAPFRGF 886
EFQ83738.1                  ----- 505
EFL88452.1                  -KGRYLGTCSNYLAGLKEGSSFHAATRQPS-AGFTLPEDP-LRPVIMIGP GTGIAPFRGF 931
BAF89518.1                  --VRHDGLCSSYLVSCGEDAPVRV LVKDTG-STFHLPADP-AVPLILVGP GTGLAPLRGF 1032
CBI43648.1                  -RGEYRGVASNYLAGLQNGDSAVCFIRSPQ-SGFALPENT-KTPLIMIGAGTGIAPFRGF 917
AEB22839.1                  -LGEYRGVASNYLADRSPDDGIVMFVRTPE-TKFRLPEDP-EKPIIMVGP GTGVAPFRGF 926
EDT22025.1                  -EGTYEGVASNYLAQRHNKDEIICFIRTPQ-SNFQLPENP-ETPIIMVGP GTGIAPFRGF 929
AFH84458.1                  -EGTYEGVASNYLAQRHNKDEIICFIRTPQ-SNFQLPENP-ETPIIMVGP GTGIAPFRGF 937
ADP31197.1                  -HGEYRGVASNYLADRTPGDDIDMFVRTPE-SRFQLPEDP-EKPIIMVGP GTGVAPFRGF 926
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EDZ53094.1                  -EGTYEGVASNYLAQRHNKDEIICFIRTPQ-SNFELPKDP-ETPIIMVGP GTGIAPFRGF 929
EEL81346.1                  ----- 663
EEL87105.1                  -VGTYEGVASNYLAQRHNKDEIICFIRTPQ-SNFQLPENP-ETPIIMVGP GTGIAPFRGF 943
EEL75761.1                  -EGTYEGVASNYLAQRHNKDEIICFIRTPQ-SNFELPKNP-ETPIIMVGP GTGIAPFRGF 870
ACK88541.1                  -EGTYEGVASNYLAQRHNKDEIICFIRTPQ-SNFQLPENP-ETPIIMVGP GTGIAPFRGF 929
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AAS42149.1                  -EGTYEGVASNYLAQRHNKDEIICFIRTPQ-SNFQLPENP-ETPIIMVGP GTGIAPFRGF 929
AAP10153.1                  -EGTYEGVASNYLAQRHNKDEIICFIRTPQ-SNFELPKDP-ETPIIMVGP GTGIAPFRGF 929
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ACV78964.1	-DHEFAGVCSNYLASMARNSTIFAFRREPT-IPFRPPADP-TIPMIMIAAGTGLAPFRGF	940
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EIZ78677.1	-ERRHLGVASTHLAGLTEGAAVSVAVRPSQ-AAFHPPEDP-ATPIILVCAGSGIAPFHGF	921
EJW15291.1	-RHEYRGVASNFLADRQPGESIMMFIQPPQ-SNFRLPEDP-STPIIMVGPVGIAPFRGF	926
EJW16173.1	-NGEYRGVASNYLAAREAGDSILMFVRTPE-SRFQPPADP-VTPIIMVGPVTGVAPFRGF	926
EHQ58913.1	-QGEYRGVASNYLAGLQAGESVMMFVRTPE-SGFRLPEDP-GTPMIMVGPVGVAPFRGF	924
EHQ59900.1	-RGEFRGVTSNYLAVRQPGDAIAMFVRTPE-SGFLLPEQA-DTPMIMVGPVTGVAPFRGF	923
EHB66924.1	-RGEYRGIASNYLAELEVGAEVLI FIRSPE-SGFELPEDP-ATPMIMIGPGTGVAPFRGF	924
AFH60445.1	-RGEYRGIASNYLAERKPGDPVVVFVRSPE-SGFELPEDP-STPVIMVGPVTGVAPFRGF	923
AEI42011.1	-RGEYRGIASNYLAERKPGDPVVVFVRSPE-SGFELPEDP-STPVIMVGPVTGVAPFRGF	923
ADO57681.1	-QGEYLGIASNYLAQLQPDVVI FVRKPQ-SGFRLPEDP-TVPVIMVGPVTGVAPFRGF	922
EGG32133.1	-KGEYRGIASNYLAELETGAEVL MFIRSPE-SGFALPKDP-ATPMIMIGPGTGVAPFRGF	926

EGL17662.1	-RGEYRGVSNYLAERREGDAIVMFVRTPE-SGFGLPDDP-KTPVIMVGP GTGVAPFRGF	925
ACX65034.1	-KGEYRGIASNYLALETGAEVLMFIRSPE-SGFALPEDP-ATPMIMIGP GTGVAPFRGF	926
ACT11327.1	-IGRYKGVASNYLASLKPDDRIAIVVRPSS-PFFHLPDDP-SIPIILIGAGSGIAPFRGF	924
AEA28016.1	-DGRFAGVCSTHLRSCETDSTVFTFVRRPT-IPFRPPENP-HTPMIMVGAGTGMAPFRGF	942
EFP68091.1	-VGTYRGTASTYLMMLRAGAEIAAAVRTPN-PPFAPDADA-SKPMVLIGAGTGIAPFRGF	945
EGY61507.1	-VGTYRGTASTYLMMLRAGAEIAAAVRTPN-PPFAPDADA-SKPMVLIGAGTGIAPFRGF	945
EIE85788.1	-DRHYPGLCSSFLKGAY-DLSIRATLKSK-NTFSLPQDP-STPLIMISAGTGLAPFRGF	1064
EIE92534.1	-NRHYPGLSSSFLKGAH-ELPIRAILKSSK-STFSLPQDL-ATPLIMISAGTGFAPFRGF	1066
BAE46296.1	-----	510
BAH31604.1	-----	466
EEN84644.1	-----	466
EEN88978.1	-----	550
ABG96413.1	-----	498
BAH52971.1	-----	465
EHI44575.1	-----	500
EID73168.1	-----	465
EHK83749.1	-----	441
EJI96173.1	-----	465
ABI79384.1	-----	497
CAR47816.1	-----	498
AEK26937.1	-----	473
ABE39056.1	-RGHYRGVCSTWLAGRSVGDTHATVRATK-AGFRLPDDD-RVPLIMIGP GTGLAPFRGF	940
ABD08340.1	-RGIYRGACSSWLAGRSGD TVQATVRATK-ACFRLPDDD-RVPLIMIGP GTGVAPFRGF	937
CAM03474.1	-RGEFRGAGSRHLSEVRPGD TVLARVQPCR-EDFRV--AP-DEPLIMVAAGTGLAPFRGV	925
EJF54063.1	-QGEYQGLASAYLNKLEEGQLLWLRFTPNL-PNFPAPKS--EDKLILIAAGTGIAPFRAF	935
AFC23737.1	-QGEYQGLASGYLSQLEEGQLLWLRFSNL-PNFPAPKS--EDKLILIAAGTGIAPFRAF	923
ADG98903.1	-----	471
EGI54680.1	-DRLHRGVASTFLARLKDGD TLGVAVRPSQ-TGFHLPADP-LTPVIMVCAGSGIAPFRGF	918
AEW97204.1	----RRGTGSGHLHRVRPGDVVYARVAPCR-EAFRIAAGD-EVPVVMVAAGTGLAPFRGA	932
CAJ88567.1	-----	516
BAC68285.1	-DGRYRGTCSYIAGLES GDVFYGYVRVPS-PTFAPPADP-ATPLLLIGP GTGIAPLRGF	939
BAC75137.1	-----	504
EDY51256.1	-EGTFLGTGAAYMADLAPGD TVHGRI SPCR-DAFRLPDDP-SVPAILVSAGTGLAPFRAE	936
EFG07822.1	-EGTFLGTGAAYMADLAPGD TVHGRI SPCR-DAFRLPDDP-SVPAILVSAGTGLAPFRAE	968
EHN78335.1	-----	525
CAB66201.1	-----	527
EGG48117.1	-----	517
EFL20831.1	-EGTFNGIASHYIQTVRAGD TVQARVLPCS-ESFRLPEDP-SVPVILVSAGTGLAPFRGA	943

EFL28515.1	-TSGFQGTGSGHLNAVRPGDTVLRVQPCR-DAFRIGHAP-DRPVIMVSAGTGLAPFRGT	924
AEY93311.1	-----	542
AEY93321.1	-KGRHRGTGSGHLASLRPGDTVYARVQPCR-EAFRIDH---TAPVVMVAAGTGLAPFRGA	934
EFD71156.1	-----	529
CBG67789.1	-EGMFHGIGSHFLQTVRPGDTLQARVLPCS-EAFRLPDDT-SASVILVSAGTGLAPFRGA	939
CBG68112.1	-----	513
EFL10082.1	-----	501
EFF88741.1	-EGTFHGIASHHLQTVNAGDIVQARVLPCA-DSFRLPDDP-EVPVVLVSAGTGVAPFRGA	940
EDY58112.1	-----	506
EFL36674.1	-----	510
EFL36680.1	-KGVYRGTGSGHLNTVEPGDIVYARVQPCR-EAFRIDAADASAPVVMIAAGTGLAPFRGA	974
EFE65335.1	-----	526
EGX54696.1	-----	491
ACZ89135.1	-VGRFRGISSTYLARLRPGDRVPIAVRRPN-VPFQPPVSN-GTPVIMIAAGTGIAPFRGF	921
ABD83817.1	-RGLYRGVCPYYLASRREGESVFATVRETK-AGFRLPDDP-SVPIIMIGPGTGLAPFRGF	944
ADU39615.1	-NGIFEGVCSNYLARAEEAGDTVHGVIRETTAEGFRLPEDA-MRPLIMVGP GTGLAPFRGF	941
EJL72014.1	-SGTFEGVCSNFLARAEEAGDTVHGVIRETTAEGFRLPDDA-ARPLIMVGP GTGLAPFRGF	941

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ADE70259.1	VQARKQLK-EQG-QSLGEAHLYFGCRSPHEDYLYQKELENAQNEGIITLHT-AFSRVPN-	970
AEN88827.1	VQARKQLK-EQG-QSLGEAHLYFGCRSPHEDYLYQEELENAQNEGIITLHT-AFSRVPN-	970
KFN05180.1	VQARKQLK-EQG-QSLGEAHLYFGCRSPHEDYLYQEELENAQSEGIITLHT-AFSRMPN-	970
ACZ37122.1	VQARKQLK-EQG-QSLGEAHLYFGCRSPHEDYLYQKELENAQNEGIITLHT-AFSRVPN-	970
ADA57055.1	VQARKQLK-EQG-QSLGEAHLYFGCRSPHEDYLYQEELENAQNEGIITLHT-AFSRVPN-	970
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ADA57062.1	VQARKQLK-EQG-QSLGEAHLYFGCRSPHEDYLYQEELENAQNEGIITLHT-AFSRVPN-	970
ADA57068.1	VQARKQLK-EQG-QSLGEAHLYFGCRSPHEDYLYQKELENAQNEGIITLHT-AFSRVPN-	970
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AAM54108.1	LRARAA----LG-GEPPALLLFGCRGPELDDLAAEEFAALGD--WLEVDR-AYSRHPD-	937
EFQ83738.1	-----	505
EFL88452.1	LQDRAADM-AAG-IDLGPAALFFGCRHPDQDFIYRQELEAWSEQVCDLHT-AFSRA-D-	986
BAF89518.1	IQERHALR-AQG-RATGPVLLFFGCRD-DGDYLYREELEAYRDEGTLSLLAVGFSTRPG-	1088
CBI43648.1	IQARAAEK-MSG-NSLGEAHLYFGCRHPEEDDLKDFDHAEKNGLVTVHR-AYSRLDQ-	973
AEB22839.1	LQARAALK-GEG-KELGEAHLYFGCRN-DYDFIYRDELEAYEKDGIVTLHT-AFSRKEG-	981
EDT22025.1	LQARRVQK-QKG-MNVGEAHLYFGCRHPEKDYLRYTELENDERDGLISLHT-AFSRLEG-	985
AFH84458.1	LQARRVQK-QKG-MNVGEAHLYFGCRHPEKDYLRYTELENDERDGLISLHT-AFSRLEG-	993
ADP31197.1	LQARAALK-QEG-KTLGEAHLYFGCRN-DNDFIYRGELEAYEKEGIVTLHT-AFSRKEG-	981
ACP19384.1	LQARRVQK-QKG-MNLGQAHLYFGCRHPEKDYLRYTELENDERDGLISLHT-AFSRLEG-	985
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EEL81346.1	-----	663
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EEK50040.1	LQARRVQK-QKG-INLGEAHLYFGCRHPEKDYLRYTELENDERDGLISLHT-AFSRLEG-	985
AAS42149.1	LQARRVQK-QKG-MNLGEAHLYFGCRHPEKDYLRYTELENDERDGLISLHT-AFSRLEG-	985
AAP10153.1	LQARRVQK-QKG-MNLGQAHLYFGCRHPEKDYLRYTELENDERDGLISLHT-AFSRLEG-	985
EEK83466.1	LQARRVQK-QKG-MNLGEAHLYFGCRHPEKDYLRYTELENDEREGLISLHT-AFSRLEG-	993

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EJS56605.1	IQARRVQK-QKG-INLGEAHLYFGCRHPEQDYLRYRTELENDERDGLISLHA-AFSRLEG-	985
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EJQ10567.1	LQARRVQK-QKG-INLGQAHLYFGCRHPEKDYLRYRTELENDERDGLISLHT-AFSRLEG-	985
EJQ13433.1	LQARRVQK-QKG-MNLGQAHLYFGCRHPEKDYLRYRTELENDERDGLISLHT-AFSRLEG-	985
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EJQ51278.1	LQARRVQK-QKG-INLGEARLYFGCRHPEQDYLRYRTELENDERDGLISLHT-AFSRLEG-	984
EEL10858.1	LQARRVQK-QKG-MNLGQAHLYFGCRHPEKDYLRYRTELENDERDGLISLHT-AFSRLEG-	985
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EJQ95474.1	LQARRVQK-QKG-MKVGEAHLYFGCRHPEKDYLRYRTELENDEREGLISLHT-AFSRLEG-	985
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EJR07451.1	LQARRVQK-QKG-INLGQAHLYFGCRHPEKDYLRYRTELENDERDGLISLHT-AFSRLEG-	982
EJR16542.1	LQARRVQK-QKG-MKVGEAHLYFGCRHPEKDYLRYRTELENDERDGLISLHT-AFSRLEG-	985
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EEL21990.1	LQARRVQK-QKG-INLGQAHLYFGCRHPEKDYLRYRTELENDERDGLISLHT-AFSRLEG-	993
EEL33825.1	LQARRVQK-QKG-INLGQAHLYFGCRHPEKDYLRYRTELENDERDGLISLHT-AFSRLEG-	993

EEL44933.1	LQARRVQK-QKG-MNVGEAHLYFGCRHPEKDYLRYRTELENDERDGLISLHT-AFSRLEG-	993
EEL50167.1	LQSRRIQK-QQG-IKLGEAHLYFGCRHPEQDYLRYRTELEKDEKDGILSLHT-AFSRLEG-	1063
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EIF12263.1	LQARAALK-KEG-KELGEAHLYFGCRN-DHDFIYRDELEAYEKDGIVTLHT-AFSRKEG-	980
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AFI27355.1	LQARDVLK-REG-KTLGEAHLYFGCRN-DRDFIYRDELEQFEKDGIVTVHT-AFSRKEG-	981
AFI29229.1	IQARSVLN-KEG-STLGEALLYFGCRRPDHDDLYREELDQAEQGLVTIRR-CYSRVEN-	974
EIL85422.1	IQAREAWQ-NEG-KPLGEAHLYFGCRHPHEDDLYDEMQLAEQKGVVTIHR-AYSRYE--	969
ADV93500.1	IQARSVLK-KEG-STLGEALLYFGCRRPDHDDLYREELDQAEQGLVTIRR-CYSRVEN-	974
ADV95715.1	LQARDVLK-REG-KTLGEAHLYFGCRN-DRDFIYRDELEQFEKDGIVTVHT-AFSRKEG-	981
BAI84248.1	LQAREVLK-REG-KTLGEAHLYFGCRN-DRDFIYRDELEQFEKDGIVTVHT-AFSRKEG-	981
EFG90288.1	IQARSVLK-KEG-SALGEALLYFGCRHPDHHDLRYEELDQAEQDGLVTIRR-CYSRVEN-	974
EFG91781.1	LQARAALK-REG-KALGEAHLYFGCRN-DHDFIYRDELEQFEKDGIVTVHT-AFSRKEG-	981
AEP85668.1	LQARAALK-REG-KALGEAHLYFGCRN-DHDFIYRDELEQFEKDGIVTVHT-AFSRKEG-	981
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sp 008394.1 CYPD_BACSU	LQARDVLK-REG-KTLGEAHLYFGCRN-DRDFIYRDELEQFEKDGIVTVHT-AFSRKEG-	981
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EEM52818.1	LQARRVQK-QKG-INLGEAHLYFGCRHPEKDYLRYTELENDERDGLISLHT-AFSRLEG-	985
EEM59126.1	LQARRVQK-QKG-MNVGEAHLYFGCRHPEKDYLRYTELENDERDGLISLHT-AFSRLEG-	993
EEM47193.1	LQARRVQK-QKG-MNLGQAHLYFGCRHPEKDYLRYTELENDERDGLISLHT-AFSRLEG-	926
EEM76899.1	LQARRVQK-QKG-MNVGEAHLYFGCRHPEKDYLRYTELENDERDGLISLHT-AFSRLEG-	993
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ABK86139.1	LQARRVQK-QKG-MKVGEAHLYFGCRHPEKDYLRYTELENDEREGLISLHT-AFSRLEG-	993
EJQ37805.1	LQARRVQK-QKG-INLGQAHLYFGCRHPEKDYLRYTELENDERDGLISLHT-AFSRLEG-	985
CCF04242.1	LQARAALK-KEG-KELGEAHLYFGCRN-DHDFIYRDELEAYEKDGIVTLHT-AFSRKEG-	980
CCF05972.1	IQARAAEK-MSG-NSLGEAHLYFGCRHPEEDDLKDEFDHAEKNGLVTVHR-AYSRLDQ-	973
ABS73124.1	LQARAALK-KEG-KELGEAHLYFGCRN-DHDFIYRDELEAYEKDGIVTLHT-AFSRKEG-	980
ABS74786.1	IQARAAEK-MSG-NSLGEAHLYFGCRHPEQDDLKDEFDHAEKNGLVTVHR-AYSRLDQ-	973
EKE46398.1	LQARAALK-KEG-KELGEAHLYFGCRN-DHDFIYRDELEAYEKDGIVTLHT-AFSRKEG-	980
EKE48022.1	IQARAAEK-MSG-NSLGEAHLYFGCRHPEEDDLKDEFDHAEKNGLVTVHR-AYSRLDQ-	973
CCG48683.1	LQARAALK-KEG-KELGEAHLYFGCRN-DHDFIYRDELEAYEKDGIVTLHT-AFSRKEG-	980
AFJ60789.1	LQARAALK-KEG-KELGEAHLYFGCRN-DHDFIYRDELEAYEKDGIVTLHT-AFSRKEG-	987
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BAC48147.1	LQERAARK-AGK-ASLGPAMLFFGCRHPDQDFLYADELKALAASGVTELFT-AFSRA-D-	998
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ABX05160.1	IQERVARQ-GQG-EALGPNALFFGCDHPEVDLLYHEQIQAWQKAGVLEFFP-AFYRQPV-	975
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ACX65034.1	IQARQALR-EAG-QELGAAHLYFGCRNPEQDFLYREEFERAEQEGLVTLHT-AFSRVSG-	982
ACT11327.1	LQERALQQ-AAG-VRVGPALLFFGTGHPDVDYLYRDELAWEKSHIVTVLP-AFSHQPD-	980
AEA28016.1	LQERAGLR-RRG-VPVGESLLFFGCRTPEQDFLYSDELRAFERDGIIVRLCM-AFSRVA--	997
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BAH52971.1	-----	465
EHI44575.1	-----	500
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EJI96173.1	-----	465
ABI79384.1	-----	497
CAR47816.1	-----	498
AEK26937.1	-----	473
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CAB66201.1	-----	527
EGG48117.1	-----	517
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EFL36674.1	-----	510
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EGX54696.1	-----	491
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ADU39615.1	LQERAAQV-ERG-EALGEAMLFFGCRHPEQDFIYAEELQGWSHRGLMKLHT-AFSRS-G-	996
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EEL44933.1	---HPKTYVQHVIKEDRIHLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1043
EEL50167.1	---HPKTYVQHLMKQDGEKLISLLDN----	G---	AHLYICGDGSRMAPDVEDTLCQAYQR	1113
EJR22930.1	---HPKTYVQHHLIKQDRINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EJP91231.1	---HPKTYVQHHLIKQDSINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EJR37623.1	---HPKTYVQHHLIKQDRINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EJR50635.1	---HPKTYVQHI IKEDRIHLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EJR64551.1	---NPKTYVQHHLIKQDRINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EJR75620.1	---HPKTYVQHHLIKQDRSNLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EJR82049.1	---HPKTYVQHHLIKQDRINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EJR83659.1	---HPKTYVQHHLIKQDRINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EJR91135.1	-----			841
EJR97241.1	---HPKTYVQHHLIKQDRINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EJS05852.1	---YPKTYVQHHLIKQDRINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EDX58768.1	---HPKTYVQHVIKEDRIHLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
AAU24352.1	---RPKTYVQDLLREDAALLIHLNE----	G---	GRLYVCGDGSRMAPAVEQALCEAYRI	1030
ABY44122.1	---YPKTYVQHHLIKQDRINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EDW23201.1	---EQKVYVQHLLKEDGGMLIKLLDQ----	G---	AYLYVCGDGKVMAPDVEATLIDLYQH	1019
ABV62358.1	---DQKVYVQHLLKEDGGMLIKLLDE----	G---	AYLYVCGDGKVMAPDVESTLIDLYQH	1019
EIF12263.1	---VPKTYVQHLMKADAGALISILGR----	G---	GHLVYVCGDGSKMAPDVETTLQKAYQS	1030
EIF14027.1	---DCKVYVQDVLLREAEQI IALLDQ----	G---	GHLVYVCGDGSKMAPAVENVLLQAYEK	1023
EHL75405.1	---HPKTYVQHHLIKQDRINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EJD67577.1	---VPKTYVQHLMKADAGALISILGR----	G---	GHLVYVCGDGSKMAPDVEATLQKAYQS	1030
EJD68347.1	---DCKVYVQDVLLREAAQI IALLDQ----	G---	GHLVYVCGDGSKMAPAVENVLLQAYEK	1023
EFV73436.1	---RPKTYVQDLLREDAALLIHLNE----	G---	GRLYVCGDGSRMAPAVEQALCEAYRI	1044
CBY93692.1	---HPKTYVQHVIKEDRIHLIALLDN----	G---	AHLYICGDGSKMAPDVEDTLCEAYQE	1035
AFI27355.1	---MPKTYVQHLMMAEHAETLISILDR----	G---	GRLYVCGDGSKMAPDVEAALQKAYQS	1031
AFI29229.1	---ESKGYVQHLLKQDSQKLMTLIEK----	G---	AHIYVCGDGSQMAPDVEKTLRWAYEI	1024
EIL85422.1	---EQKVYVQHFIKNDGAKLIELLDK----	G---	AYLYICGDGKVMAPDVEATLIELYQT	1019
ADV93500.1	---ESKGYVQHLLKQDSQKLMTLIEK----	G---	AHIYVCGDGSQMAPDVEKTLRWAYET	1024
ADV95715.1	---MPKTYVQHLMADQADTLISILDR----	G---	GRLYVCGDGSKMAPDVEAALQKAYQA	1031
BAI84248.1	---MPKTYVQHVMADHAETLISILDR----	G---	GRLYVCGDGSKMAPDVEAALQKAYQS	1031
EFG90288.1	---ESKGYVQHLLKQDTQKLMSLIEK----	G---	ASIYVCGDGSQMAPDVENSLRQAYET	1024
EFG91781.1	---MPKTYVQHLMADHAETLISILDR----	G---	GRLYVCGDGSKMAPDVEAGLQKAYQS	1031
AEP85668.1	---MPKTYVQHLMADHAETLISILDR----	G---	GRLYVCGDGSKMAPDVEAGLQKAYQS	1031
AEP87558.1	---ESKEYVQHLLKQDTQKLMSLIEK----	G---	AHIYVCGDGSQMAPDVENTLRQAYEA	1024
sp 008336.1 CYPB_BACSU	---EPKGYVQHLLKQDTQKLMTLIEK----	G---	AHIYVCGDGSQMAPDVERTLRLAYEA	1024
sp 008394.1 CYPD_BACSU	---MPKTYVQHLMADQADTLISILDR----	G---	GRLYVCGDGSKMAPDVEAALQKAYQA	1031
AEP89812.1	---MPKTYVQHLMADHAETLISILDR----	G---	GRLYVCGDGSKMAPDVEAALQKAYQS	1031

AEP91702.1	---EPKEYVQHLLKQDTQKLMTLIEK----	G---	AHIYVCGDGSQMAPDVEKTLRLAYEA	1024
EHA31094.1	---ESKGYVQHLLKQDSQKLMTLIEK----	G---	AHIYVCGDGSQMAPDVEKTLRWAYET	1026
ADH07708.1	---HPKTYVQHHLIKQDRINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EEM28177.1	---HPKTYVQHHLIKQDRINLISLLDN----	G---	AHLYICGDGSRMAPDVEDTLCQAYQE	1035
AFQ14162.1	---HPKTYVQHHLIKQDSINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EEM95517.1	---HPKTYVQHHLIKQDRINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EEN02344.1	---HPKTYVQHHLIKQDSINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
AFU13781.1	---HPKTYVQHHLIKQDRINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYEE	1043
EEM70897.1	---HPKTYVQHVIKEDRIHLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1043
ADY22413.1	---HPKTYVQHVIKEDRIHLIALLDN----	G---	AHLYICGDGSKMAPDVEDTLCEAYQE	1035
EEM82895.1	---HPKTYVQHHLIKQDRINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EEM52818.1	---HPKTYVQHHLIKQDRINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EEM59126.1	---HPKTYVQHVIKEDRIHLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1043
EEM47193.1	---HPKTYVQHHLIKQDRSNLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	976
EEM76899.1	---HPKTYVQHVIKEDRIHLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1043
EEM88909.1	---HPKTYVQHIIKEDRIHLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1043
EEM38196.1	---HPKTYVQHHLIKQDSINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EEM21858.1	---HPKTYVQHVIKEDRIHLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1038
ABK86139.1	---HPKTYVQHVIKEDRIHLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1043
EJQ37805.1	---HPKTYVQHHLIKQDRINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYEE	1035
CCF04242.1	---VPKTYVQHLMKADAGALISILGR----	G---	GRLYVCGDGSKMAPDVEATLQKAYQS	1030
CCF05972.1	---DCKVYVQDVLLREAAQI IALLDQ----	G---	GHLYICGDGSKMAPAVENVLLQAYEK	1023
ABS73124.1	---VPKTYVQHLMKADAGALISILGR----	G---	GHLYVCGDGSKMAPDVEATLQKAYQS	1030
ABS74786.1	---DCKVYVQDVLLREAAQI IALLDQ----	G---	GHLYICGDGSKMAPAVENVLLQAYEK	1023
EKE46398.1	---VPKTYVQHLMKADAGALISILGR----	G---	GHLYVCGDGSKMAPDVEATLQKAYQS	1030
EKE48022.1	---DCKVYVQDVLLREAAQI IALLDQ----	G---	GHLYICGDGSKMAPAVENVLLQAYEK	1023
CCG48683.1	---VPKTYVQHLMKADAGALISILGR----	G---	GHLYVCGDGSKMAPDVEATLQKAYQS	1030
AFJ60789.1	---VPKTYVQHLMKADAGALISILGR----	G---	GHLYVCGDGSKMAPDVEATLQKAYQS	1037
AFJ62808.1	---DCKVYVQDVLLREAAQI IALLDQ----	G---	GHLYICGDGSKMAPAVENVLLQAYEK	1023
EEK66903.1	---YPKTYVQHHLIKQDRINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1049
EJQ52935.1	---YPKTYVQHHLIKQDRINLISLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EJS69574.1	---YPKTYVQHHLIKQDRINLITLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EJV63294.1	---YPKTYVQHHLIKQDRINLITLLDN----	G---	AHLYICGDGSKMAPDVEDTLCQAYQE	1035
EKF35778.1	---EHKVVYVQHLIKKGDKVWVWVLDQ----	G---	AYLYICGDGKVMAPDVEAALIDLYMT	1019
EGP08506.1	---TPKSYVQDLIAAQKDKVWVWVWVLDQ----	G---	AI IYVCGDGGKMEPDVKRVLMSIYRE	1052
BAL78328.1	---GPKTYVQHVLAAQKDKVWVWVWVLDQ----	G---	AIVYVCGDGGKMEPDVKAALVAIHRE	1047
BAC48147.1	---GPKTYVQHVLAAQKDKVWVWVWVLDQ----	G---	AI IYVCGDGGQMEPDVKAALVAIRHE	1048
BAL12135.1	---GPKTYVQHMLAAQKDRVWVWVWVLDQ----	G---	AI IYVCGDGGKMEPDVKAALVAIHRE	1048

CCE00185.1	---GPKTYVQHLLAAQRARVWELLEQ----	S---	AVIFVCGDGSKMEPDVKATLMQIHRD	1051
EIG57609.1	---GPKTYVQHVLAAQKDKVWPLIEQ----	G---	AMVYVCGDGSKMEPDVKAALVAIHRE	1047
EHR02046.1	---GPKTYVQHVLAAQKDKVWPLIEQ----	G---	AIVYVCGDGSKMEPDVKAALVAIHRE	1047
EJN11211.1	-----			670
CCF15606.1	---QPKTYVQHLMKQNEQELIRLLDQ----	G---	ARLYVCGDGSRMADVEATLISSYQT	970
CCF12687.1	-----			898
ABB05850.1	---EGARFVQDKVWLERERISALFSQ----	G---	ATVFVCGDGKNMAPAVRATLGRIYQE	1034
EHP43606.1	---PDQRYVQHLLWRDRQAVWAMLRD----	G---	ATIYVCGDGRQMAPAVRRTLIEIAAQ	1070
ABF10339.1	---DAPRYVQDLLWQRREQVWAQVRD----	G---	ATIYVCGDGRRMAPAVRQTLIEIGMA	1036
CAJ95800.1	---GEPRYVQDLLWQRRAADVWARLNQ----	G---	AIYVCGDGRHMAPAVRQVLIQIGAE	1067
AEI79937.1	---GEPRYVQDLLWQRRAADVWARLNQ----	G---	AIVYVCGDGRHMAPAVRQVLIQIGAE	1067
AFD27790.1	---DGVEFVQHRLWQDRADVVARLFRQ----	G---	AHLYVCGDGRFMAPAVRETLVRIYQE	1029
ABC62112.1	---GSRTYVQDLIAREADRVWELIEQ----	D---	ARIYVCGDGARMEPDVRKALMAIYAE	1041
EAQ27850.1	---EGKCYVQDHIADDADAIWEMLEA----	G---	GRIYVCGDGARMEPDVRAALAKIHSD	1042
EIT84377.1	---TDVKYVQHVMTOHAEELLGLLQQ----	G---	AKLCVCGDGTHMARDVEATLLSLYET	1019
CCG43686.1	---KGKVVYQDRLWEDASTVLSLLEN----	G---	GCLYICGDGSEMATAVIEKIKSYQH	1025
ABX05160.1	---GEVSFVQHRLWQERQYVWSLIEQ----	G---	AVIACVCGDGRSMAPAVRETLARIYAE	1025
BAJ96920.1	---AEAKYVQDRLWIDRKEVMDLMNK----	D---	ARIYVCGEATKMAPAVRSTFIKIYQE	1018
GAB96874.1	GPEGPMRFVQDRLWADRADVADLVRA----	G---	ATLYVCGDGQRMATAVHDTCVRMYAQ	1085
EFH80345.1	---EQKVVYVQHQLWEQRARVWELLEQ----	G---	AIYVCGDASQMAPDVQATFARIYQE	1045
EFH88481.1	---QPRVYVQDKVLEQQDAIWNQLQQ----	G---	AVTYVCGDTTRMVPVAEESYKQIYQA	1050
EAW32450.1	---HPRHYVQDAIAANANRIWELWTR----	G---	ARIYVCGDAQYMLPGVRHALQHIYQD	1033
EIZ82104.1	---GDVRYVQHRVWRDRADVADLFRA----	G---	ATVFVCGDGERMAPAVRATCVRIYQE	1035
AEV70722.1	---DGVRYVQDRIAADADEVWSLLGD----		PAKDHVYVCGDGAKMAPAIRQAFLDIYCT	1024
EFC41452.1	---NVKYVQDKIMECKEEVAKLLE----	E---	AQIYICGEGNHMAPAVKKVLMEIYQQ	1049
ACV78954.1	---GSGRYVQQAVRDHGADVLDLLDR----	D---	AVVYVCGNRHTMAPEVSSTIAALHAD	1069
ACV78964.1	---EGRRYAQHEMLAHQDEIWDLIGQ----	G---	ASIFVCGNARTLAPGVRAALTQISAS	1045
ACV81379.1	---QQRRYAQHEMLAHADEIWSLLEA----	G---	GVVYVCGNARTLAPGVRAALTQIAAD	1041
EIZ78677.1	---GEVAYVQHRVWQDRTRIADLFRC----	G---	ATVFVCGDGERMAPAVRETFVRIYRD	1027
EJW15291.1	---QPKTYVQHLLIKQQQHEVIGLLDQ----	G---	AIFYVCGDGSAMSPDVEATLKQMYQD	1031
EJW16173.1	---EVKTYVQHLLIAQHAEQIIELLDQ----	G---	AHLYICGDGSKMAPDVEATLRQAYQT	1031
EHQ58913.1	---QPKTYVQHLMQQREMEIIGLLDR----	G---	AQFYVCGDGSRMADVEAALRKCYQT	1029
EHQ59900.1	---KPKTYVQDLIKRDAGKLLDLLNR----	G---	AKLYVCGDGSKMAPEVEETFRTAYRE	1029
EHB66924.1	---VEKCYVQHLMKQDGSLLLSLLEA----	G---	AKMYICGDGSRMAPDVEQTLIRSYRD	1030
AFH60445.1	---QEKTYVQDLMKGDASLLIGLLDR----	G---	GKLYICGDGSRMAPDVEATLRRAYSE	1029
AEI42011.1	---QEKTYVQDLMKGDASLLIGLLDR----	G---	GKLYICGDGSRMAPDVEATLRRAYSE	1029
ADO57681.1	---QPKRYVQHVMNEGADTLIHLLDE----	G---	AHLYVCGDGSRMADVENTLCAAYAD	1028
EGG32133.1	---AEKCYVQHLMKQDGMLLLSLLEG----	G---	AQMYICGDGSRMAPEVEQTLIRSYQE	1032

EGL17662.1	---TPKTYVQHLMKENAAELIALLDK----	G---	GRLYVCGDGSRMAPDVVEEQLMEAYAN	1030
ACX65034.1	---AEKCYVQHLMKQDGMLLLSLLEG----	G---	AQMYICGDGSRMAPEVEQTLIQSYQE	1032
ACT11327.1	---GEVTFVQHRVWADRERIKTLFCN----	G---	GSLFVCGDGLRMVPEVRDMLLRITYRE	1030
AEA28016.1	---DNRRYVQQAILDEQEDVRLLDQ----	G---	AHVYVCGNANTMAPAVRAALIEVHQG	1047
EFP68091.1	---HPRRFVQHALWDAREAVWKAFDA----	G---	ATLYVCGDGRAMAPAVRDTLIRMHQA	1051
EGY61507.1	---HPRRFVQHALWDAREAVWKAFDA----	G---	ATLYVCGDGRAMAPAVRDTLIRMHQA	1051
EIE85788.1	--KSPIKYVQHQILANAAQVWNMLYPT-	DNNTKPAAVYICGSGA-	MSRDVRRTFYNLAVS	1179
EIE92534.1	--KSPIRYVQHQILANAAKIWNLLYPAADDNSRPAAIYICGSGA-	MSRDVRRTFYSMAIS	1182	
BAE46296.1	-----			510
BAH31604.1	-----			466
EEN84644.1	-----			466
EEN88978.1	-----			550
ABG96413.1	-----			498
BAH52971.1	-----			465
EHI44575.1	-----			500
EID73168.1	-----			465
EHK83749.1	-----			441
EJI96173.1	-----			465
ABI79384.1	-----			497
CAR47816.1	-----			498
AEK26937.1	-----			473
ABE39056.1	---GPKTYVQHLLIAAQKDRVFTLIEQ----	G---	AIYVCGDGGKMEPDVRAALMAIHRE	1045
ABD08340.1	---GPKTYVQHLLIAAQKDRVFALIEQ----	G---	AIVYVCGDGGRMEPDVKAALCAIHRE	1042
CAM03474.1	---GGQCFVQHRIAAEAGEVWALLES----	G---	ARVLVCGDGRHMAPGVREAFRGIYRE	1031
EJF54063.1	--KEGQTYVQHRLWADRDAFWAAWQE----	G---	ANIYICGDGEGMAPAVRQCLMDIYQE	1038
AFC23737.1	--KEGQTYVQHRLWADRDAFWAAWEA----	G---	AKIYICGDGEGMAPAVRQCLMDIYQE	1026
ADG98903.1	-----			471
EGI54680.1	---NGVAYVQDAIWRDRTEIATLFRA----	G---	ARVLLCGDGEHMAPAVRDAFIRIYEA	1024
AEW97204.1	---GDVRFVQHRIAAEAEDEVWSLLKG----	G---	ARVYVCGDGSRMAPGVREAFATALYAS	1038
CAJ88567.1	-----			516
BAC68285.1	---HPARFVQDAIVGAADTVWQAIQD----	G---	AYVYVCGDGRRMAPAVREALAAIYRK	1045
BAC75137.1	-----			504
EDY51256.1	---DGARYVQHRIAADS AELWDLLRS-----	G---	AHIRVCGDGRRMAPAVRDAFRAIHRE	1041
EFG07822.1	---DGARYVQHRIAADS AELWDLLRS-----	G---	AHIRVCGDGRRMAPAVRDAFRAIHRE	1073
EHN78335.1	-----			525
CAB66201.1	-----			527
EGG48117.1	-----			517
EFL20831.1	---DGARFVQDRIAKESDEVWAALEA----	G---	GRVYICGDGRRMAPAVREAFMAIYRK	1045

EFL28515.1	---DGHRFVQHRIAADAAEIWRLLEA----	G---	AAVYVCGDGARMAPGVREAFRSVYAA	1030
AEY93311.1	-----			542
AEY93321.1	---NGAAFVQHRIAAGEVWELLGA----	G---	ARVYVCGDGARMAPGVRAAFRTLYRE	1040
EFD71156.1	-----			529
CBG67789.1	---DGVRFVQDRIGKESDEVWAALEA----	G---	ARVHVCGDGRRMAPAVREAFRALYRE	1041
CBG68112.1	-----			513
EFL10082.1	-----			501
EFF88741.1	---NGARFVQDRIARESDEVRAALEA----	G---	GRVYVCGDGRRMAPAVREAFMAIHRE	1042
EDY58112.1	-----			506
EFL36674.1	-----			510
EFL36680.1	-----			994
EFE65335.1	-----			526
EGX54696.1	-----			491
ACZ89135.1	---GEVTFVQHRVWRERDRVRLFRQ----	G---	ATVYVCGDGRHMAPAVRENLVRIYQD	1027
ABD83817.1	---GPKTYVQHLLATQKARVWDLIEQ----	G---	AVIFVCGDGSKMEPDVKATLVQIYRD	1049
ADU39615.1	---ERKVYVQDLIREQAAAVWKLLEA----	G---	GVIYVCGDGSRMEPDVRRTLTDIARE	1046
EJL72014.1	---ERKVYVQDLIREQAADVWKLLEA----	G---	AVVYVCGDGSRMEPDVRRTLSDLARE	1046

sp P14779.2 CPXB_PRIM2	VHQ-V-----SEADARLWLQQLEE-KGRYAKDVWAG-----	1049
ADF40088.1	VHQ-V-----SEADARLWLQQLEE-KGRYAKDVWAG-----	1049
ADE70259.1	VHQ-V-----SEADARLWLQQLEE-KGRYAKDVWAG-----	1049
AEN88827.1	VHE-V-----SEADARLWLQQLEE-KGRYAKDVWAG-----	1049
KFN05180.1	VHQ-V-----SEADARLWLQQLEE-KGRYAKDVWAG-----	1049
ACZ37122.1	VHQ-V-----SEADARLWLQQLEE-KGRYAKDVWAG-----	1049
ADA57055.1	VYE-V-----SEADARLWLQQLEE-KGRYAKDVWAG-----	1049
ADA57058.1	VHQ-V-----SEADARLWLQQLEE-KGRYAKDVWAG-----	1049
ADA57059.1	VYE-V-----SEADARLWLQQLEE-KGRYAKDVWAG-----	1049
ADA57061.1	VHQ-V-----SEADARLWLQQLEE-KGRYAKDVWAG-----	1049
ADA57062.1	VYE-V-----SEADARLWLQQLEE-KGRYAKDVWAG-----	1049
ADA57068.1	VHQ-V-----SEADARLWLQQLEE-KGRYAKDVWAG-----	1049
AAT62301.1	IHE-V-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1065
AAM54108.1	-----GAGWLDALR-AGGRYATDVF-----	1005
EFQ83738.1	-----	505
EFL88452.1	EKD-V-----SGDEADAWFADMIA-KQDYVMDVWVSN-----	1066
BAF89518.1	GA-----VAELE-AGGRYLQDVWASS-----	1158
CBI43648.1	VHN-T-----DSKVSLNWLEQLQA-EGRYAKDVWAGV-----	1053
AEB22839.1	AHG-T-----DERQAQEWLLDLQT-KGIYAKDVWAGI-----	1061
EDT22025.1	IHE-V-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1065
AFH84458.1	IHE-V-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1073
ADP31197.1	VHG-V-----GEQEAQKWLGNLQT-NGMYAKDVWAGI-----	1061
ACP19384.1	IHE-V-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1065
ADL27534.1	-----	1034
ACO29732.1	IHQ-A-----SEQEARNWLDRLQD-EGRYGKDVWAGI-----	1065
EDX65100.1	IHQ-A-----SEQEARNWLDRLQD-EGRYGKDVWAGI-----	1065
EEK61456.1	IHE-V-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1065
EEL16232.1	IHE-V-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1073
EDZ53094.1	IHE-V-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1065
EEL81346.1	-----	663
EEL87105.1	IHE-V-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1079
EEL75761.1	IHE-V-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1006
ACK88541.1	IHE-V-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1065
EJQ05303.1	IHE-V-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1065
EEK50040.1	IHE-V-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1065
AAS42149.1	IHE-V-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1065
AAP10153.1	IHE-V-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1065
EEK83466.1	IHE-V-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1073

ACK63698.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1006
EJS57156.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EJS56605.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EJS68951.1	NHG-V-----SEQEARNWLDQLQR-EGRYGKDVWAGI-----	1064
EJQ10567.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EJQ13433.1	IHE-V-----SEQEARDWLERVQD-EGRYGKDVWAGI-----	1065
EJQ20399.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EJQ30236.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EJQ51278.1	NHG-V-----SEQEARNWLDQLQR-EGRYGKDVWAGI-----	1064
EEL10858.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EEL05393.1	IHE-V-----SEQEARNWLDREVQE-EGRYGKDVWAGI-----	1079
EEK94080.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1068
EEK99882.1	IHE-V-----SEQEARNWLDRLQD-EGRYGKDVWAGI-----	1068
EEK55784.1	IHQ-A-----SEQEARNWLDRLQD-EGRYGKDVWAGI-----	1073
ADK05784.1	IHQ-A-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1065
AAU17340.1	IHE-V-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1065
EEL64394.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
AEW56259.1	IHQ-A-----SEQEARNWLDRLQD-EGRYGKDVWAGI-----	1065
AFQ11690.1	IHE-V-----SEQEARNWLDRLQD-EGRYGKDVWAGI-----	1065
EAL16831.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
ACK94296.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EDZ58760.1	IHE-V-----SEQEARNWLDRLQD-EGRYGKDVWAGI-----	1065
EJV84218.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EJQ69212.1	IHE-V-----SEQEARNWLDREVQE-EGRYGKDVWAGI-----	1065
EJQ80339.1	IHE-V-----SEKEARNWLDHLQH-EGRYGKDVWTGI-----	1065
EJV81602.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EJQ95474.1	IHQ-A-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1065
EEK44229.1	IHE-V-----SEQEARNWLDRLQD-EGRYGKDVWAGI-----	1073
EEK88560.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EJR07451.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1062
EJR16542.1	FHE-V-----SEQEARNWLDRLQD-EGRYGKDVWAGI-----	1065
BAL18840.1	IHE-V-----SEQEARNWLDRLQD-EGRYGKDVWAGI-----	1065
EDX69960.1	IHE-V-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1065
ACM13462.1	IHE-V-----SEQEARNWLDRLQD-EGRYGKDVWAGI-----	1065
EEK75631.1	IHE-V-----SEQEARNWLERVQD-EGRYGKDVWAGI-----	1065
EEL25491.1	IHE-V-----SEQEARNWLNREVQD-EGRYGKDVWAGI-----	1006
EEL21990.1	IHE-V-----SEQEARNWLDYQLQH-EGRYGKDVWTGI-----	1073
EEL33825.1	IHE-V-----SEQEARNWLDHLQH-EGRYGKDVWTGI-----	1073

EEL44933.1	IHE-V-----SEQEARNWLDRLQE-EGRYGKDVWAGI-----	1073
EEL50167.1	NHG-I-----SEQEAKSWLDQLQR-EGRYGKDVWAGI-----	1143
EJR22930.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EJP91231.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EJR37623.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EJR50635.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EJR64551.1	IHE-V-----SEQEARNWLDHLQH-EGRYGKDVWTGI-----	1065
EJR75620.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EJR82049.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EJR83659.1	IHE-V-----SEQEARNWLNREVQD-EGRYGKDVWAGI-----	1065
EJR91135.1	-----	841
EJR97241.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EJS05852.1	IHE-V-----SEQEARNWLERVQD-EGRYGKDVWAGI-----	1065
EDX58768.1	IHE-V-----SEQEARNWLDREVQE-EGRYGKDVWAGI-----	1065
AAU24352.1	VQG-A-----SREESQSWLSALLE-EGRYAKDVWDGGVSOHNVKADCIART	1074
ABY44122.1	IHE-V-----SEQEARNWLDREVQE-EGRYGKDVWAGI-----	1065
EDW23201.1	EKQ-C-----SKEAAENWLTTLAN-NNRYVKDVWS-----	1047
ABV62358.1	EKQ-C-----SKEDAENWLTTLAN-NNRYVKDVWS-----	1047
EIF12263.1	VHE-T-----DERQAQEWLLDLQT-KGIYAKDVWAGI-----	1060
EIF14027.1	VHN-I-----DSKVSLEWLEQLQA-EGRYAKDVWAGM-----	1053
EHL75405.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EJD67577.1	VHE-T-----DERQAQEWLLDLQT-KGIYAKDVWAGI-----	1060
EJD68347.1	VHN-T-----DSKVSLEWLEQLQA-EGRYAKDVWAGM-----	1053
EFV73436.1	VQG-A-----SREESQSWLSALLE-EGRYAKDVWDGGVSOHNVKADCIART	1088
CBY93692.1	IHE-V-----SEQEARNWLERVQD-EGRYGKDVWAGI-----	1065
AFI27355.1	VHG-T-----GEQEAQNWLRHLQD-TGMYAKDVWAGI-----	1061
AFI29229.1	EKG-A-----SQEESADWLQKLQD-QKRYVKDVWTGN-----	1054
EIL85422.1	EKQ-C-----AKETAEQWLTSLAN-DNRYVKDVWS-----	1047
ADV93500.1	EKG-A-----SQEESADWLQKLQD-QKRYIKDVWTGN-----	1054
ADV95715.1	VHG-T-----GEQEAQNWLRHLQD-TGMYAKDVWAGI-----	1061
BAI84248.1	VHG-T-----GEQEAQNWLRHLQD-TGMYAKDVWAGI-----	1061
EFG90288.1	EKG-A-----SEESADWLQKLQD-QKRYVKDVWTGM-----	1054
EFG91781.1	VHG-T-----GEEEAQNWLKHLQD-TGIYAKDVWSGV-----	1061
AEP85668.1	VHG-T-----GEQEAQNWLKHLQD-TGIYAKDVWSGI-----	1061
AEP87558.1	EKG-A-----SQEESADWLEKLQD-QKRYVKDVWTGM-----	1054
sp 008336.1 CYPB_BACSU	EKA-A-----SQEESAVWLQKLQD-QRRYVKDVWTGM-----	1054
sp 008394.1 CYPD_BACSU	VHG-T-----GEQEAQNWLRHLQD-TGMYAKDVWAGI-----	1061
AEP89812.1	VHG-T-----GEQEAQNWLRHLQD-TGMYAKDVWAGI-----	1061

AEP91702.1	EKG-A-----SQEESAEWLQKLQD-QRRYVKDVWTGM-----	1054
EHA31094.1	EKG-A-----SQEESADWLQKLQD-QKRYIKDVWTGN-----	1056
ADH07708.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EEM28177.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
AFQ14162.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EEM95517.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EEN02344.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
AFU13781.1	IHE-V-----SEQEARNWLDHLQH-EGRYGKDVWTGI-----	1073
EEM70897.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1073
ADY22413.1	IHE-V-----SEQEARNWLERVQD-EGRYGKDVWAGI-----	1065
EEM82895.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EEM52818.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EEM59126.1	IHE-V-----SEQEARNWLDREVQE-EGRYGKDVWAGI-----	1073
EEM47193.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1006
EEM76899.1	IHE-V-----SEQEARNWLDREVQE-EGRYGKDVWAGI-----	1073
EEM88909.1	IHQ-A-----SEQEARNWLDRLQD-EGRYGKDVWAGI-----	1073
EEM38196.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EEM21858.1	IHE-V-----SEQEARNWLDRLQD-EGRYGKDVWAGI-----	1068
ABK86139.1	IHQ-A-----SEQEARNWLDRLQD-EGRYGKDVWAGI-----	1073
EJQ37805.1	IHE-V-----SEQEARNWLDYLQH-EGRYGKDVWTGI-----	1065
CCF04242.1	VRE-T-----DERQAQEWLLDLQT-KGIYAKDVWAGI-----	1060
CCF05972.1	VHN-T-----DSKVSSNWLEQLQA-EGRYAKDVWAGV-----	1053
ABS73124.1	VRE-T-----DERQAQEWLLDLQT-KGIYAKDVWAGI-----	1060
ABS74786.1	VHN-T-----DSKVSLNWLEQLQA-EGRYAKDVWAGM-----	1053
EKE46398.1	VRE-T-----DERQAQEWLLDLQT-KGIYAKDVWAGI-----	1060
EKE48022.1	VHN-T-----DSKVSSNWLEQLQA-EGRYAKDVWAGV-----	1053
CCG48683.1	VHE-T-----DERQAQEWLLDLQT-KGIYAKDVWAGI-----	1060
AFJ60789.1	VHE-T-----DERQAQEWLLDLQT-KGIYAKDVWAGI-----	1067
AFJ62808.1	VHN-T-----DSKVSLNWLEQLQA-EGRYAKDVWAGM-----	1053
EEK66903.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1079
EJQ52935.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EJS69574.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EJV63294.1	IHE-V-----SEQEARNWLDREVQD-EGRYGKDVWAGI-----	1065
EKF35778.1	VKQ-C-----EKDTAEQWLTSLEK-DNRYVKDVWS-----	1047
EGP08506.1	KTG-A-----DEAAAAAWIDSMGT-QNRYVLDVWAGS-----	1082
BAL78328.1	KSG-S-----DAVASARWIEEMGA-KNRYVLDVWAGG-----	1077
BAC48147.1	KSG-S-----DTATAARWIEEMGA-TNRYVLDVWAGG-----	1078
BAL12135.1	KSG-S-----DAAAAARWIEEMGA-KNRYVLDVWAGG-----	1078

CCE00185.1	CTG-S-----DAEAAANWIADLGA-TNRYVLDVWAGG-----	1081
EIG57609.1	KSG-S-----DAATAARWIEEMGA-KNRYVLDVWAGG-----	1077
EHR02046.1	KSG-G-----DAATAARWIEEMGA-KNRYVLDVWAGG-----	1077
EJN11211.1	-----	670
CCF15606.1	IHS-V-----SKEEAQAWLDKLR-DEQYVKDVWTGA-----	1000
CCF12687.1	-----	898
ABB05850.1	TTG-E-----NDESASAWIDTMEREHGRYVADVFA-----	1063
EHP43606.1	QGG-M-----SEAAASDWLAGMVA-RGHYRQDVFN-----	1098
ABF10339.1	QGG-M-----TDKAASDWFGGLVA-QGRYRQDVFN-----	1064
CAJ95800.1	QGG-M-----TPEAASDWLADLVS-AGRYRQDVFN-----	1095
AEI79937.1	QGG-M-----TPEAASDWLAELVS-TGRYRQDVFN-----	1095
AFD27790.1	ETG-V-----TEADAQAWAEAFGRDSGRYAADVFA-----	1058
ABC62112.1	KKS-S-----DEASAKAWIDDLVA-QDRYLLDVWVG-----	1070
EAQ27850.1	KTG-S-----TPAEAQSWVGD LIT-NERYSLDVWVG-----	1071
EIT84377.1	QYQ-T-----SHEEAQQWLTSLQQ-AERYVKDVWSN-----	1048
CCG43686.1	KYE-T-----TYEKAVEWLENLEL-EGRLAKDVWAGA-----	1055
ABX05160.1	ATG-S-----EQTAGMAWIAEIEQ-AGRYVADVFG-----	1053
BAJ96920.1	QSK-C-----TDEEGEEMNLERLSVRYVSDVFT-----	1047
GAB96874.1	ATG-A-----SEQDAVAWVEQQEREHGRYVSDVFA-----	1114
EFH80345.1	QTG-K-----DASEAQQWHQVLVD-RNRYLVDVWGN-----	1074
EFH88481.1	KTG-K-----SSQEADQWLQEMST-QNRYLVDIWGTS-----	1080
EAW32450.1	AYK-KEGETISDKQAQVWLQEMEV-AGRFLVDAWA-----	1066
EIZ82104.1	ARA-V-----TPEEAEAWADTVERETGRYVADVFA-----	1064
AEV70722.1	RTG-S-----DESRARDWLI GLVE-SDRYVEDVWAG-----	1053
EFC41452.1	VTN-C-----TKEEA EKRMSSM---DKRFAVDVFA-----	1075
ACV78954.1	RTG-----EAGEPWISELAA-AGRYVEDNWGAG-----	1096
ACV78964.1	KTG-Q-----SADDADTWLAGLRS-EKRFL EDIWGAG-----	1075
ACV81379.1	KLK-L-----GGAAAEDWLTDLRR-QHRYLEDIWGAR-----	1071
EIZ78677.1	AMQ-V-----SDDAANAWADQIEREHGRYVADVFA-----	1056
EJW15291.1	VHG-V-----GETKANRWLEQLGA-DGRYVKDVWAGRKA-----	1063
EJW16173.1	VHR-V-----HEQEAKQWLERLQA-EGKFAKDVWSGL-----	1061
EHQ58913.1	VHG-V-----SEAEAVAWLSRLEA-EGRYVKDVWAGGKA-----	1061
EHQ59900.1	AHG-T-----TEESAQNWLES LQN-DGQYVKDVWAGL-----	1059
EHB66924.1	QHG-V-----SEEEAAVWLSGLES-SGRYVKDVWAG-----	1059
AFH60445.1	IHG-V-----SGQEADWLDGLAR-ENRYAKDVWAGTAG-----	1061
AEI42011.1	IHG-V-----SGQEADWLDGLAR-ENRYAKDVWAGTAG-----	1061
ADO57681.1	IHH-T-----SKEEAQQWLDHLQQ-EKRYAKDVWTGI-----	1058
EGG32133.1	RHG-V-----NAEDAAAWLSGLES-SGQYVKDVWAG-----	1061

EGL17662.1	IHQ-V-----SPDEARKWLDGLQT-DGRYAKDVWAGI-----	1060
ACX65034.1	RHG-V-----NAEDAAAWLSGLES-TGQYVKDVWAG-----	1061
ACT11327.1	ATG-S-----NETDAMLWADKLEREQGRYVDMFI-----	1059
AEA28016.1	GDG-T-----ADTDGDAWLAGLRA-AQRYLEDIWGESAVG-----	1080
EFP68091.1	RHG-S-----DLPTASDWLTAQMQ-SGRYRQDVFN-----	1079
EGY61507.1	RHG-S-----DLPTASDWLTAQMQ-SGRYRQDVFN-----	1079
EIE85788.1	FGVAA-----TEEEAEALILKLID-EKRYNEDVWG-----	1208
EIE92534.1	FGAAT-----NDKEAEALIKLMD-EKRYNEDVWG-----	1211
BAE46296.1	-----	510
BAH31604.1	-----	466
EEN84644.1	-----	466
EEN88978.1	-----	550
ABG96413.1	-----	498
BAH52971.1	-----	465
EHI44575.1	-----	500
EID73168.1	-----	465
EHK83749.1	-----	441
EJI96173.1	-----	465
ABI79384.1	-----	497
CAR47816.1	-----	498
AEK26937.1	-----	473
ABE39056.1	RSG-A-----DAAAASWIDDLGA-CNRYVLDVWASA-----	1075
ABD08340.1	RSG-A-----DATAAAWIADLGA-RDRYVLDVWASV-----	1072
CAM03474.1	RTPGA-----DDASAHEWLQAMIA-GGCYVEDVYAG-----	1061
EJF54063.1	KAQ-A-----TEAQALDWLMQIAGKDKRYFTDIFS-----	1067
AFC23737.1	KAQ-A-----TEAQALDWLMQIAGKDKRYFTDIFS-----	1055
ADG98903.1	-----	471
EGI54680.1	ETD-T-----SHAEALAWAERI EREGVRYVADIYA-----	1053
AEW97204.1	RTG-A-----TAEQAAGWLADLVA-RGRYVEDVYAAG-----	1068
CAJ88567.1	-----	516
BAC68285.1	HTG-S-----DDEAAQQWLAQLEA-DERYQQDVFA-----	1073
BAC75137.1	-----	504
EDY51256.1	HTG-G-----DEESADAWLSALMA-EDRYVEDVWAG-----	1070
EFG07822.1	HTG-G-----DEESADAWLSALMA-EDRYVEDVWAG-----	1102
EHN78335.1	-----	525
CAB66201.1	-----	527
EGG48117.1	-----	517
EFL20831.1	YTG-A-----DDEEAAAWLAVLIE-SGTYVEDVWAG-----	1074

EFL28515.1	HTPGA-----DDAAAQRWLDALMA-EGRFVEDVYAG-----	1060
AEY93311.1	-----	542
AEY93321.1	RTPGA-----DEAAADRWLDTLVA-DGRYVEDVYAAG-----	1071
EFD71156.1	-----	529
CBG67789.1	NTG-A-----DDAEATAWLDALTE-SGHYVEDVWAG-----	1070
CBG68112.1	-----	513
EFL10082.1	-----	501
EFF88741.1	HTG-A-----GDEEAAAWLTGMIE-SGRYNEDVWAG-----	1071
EDY58112.1	-----	506
EFL36674.1	-----	510
EFL36680.1	-----	994
EFE65335.1	-----	526
EGX54696.1	-----	491
ACZ89135.1	ATG-S-----TGEDATAWAAEVER-NGRYVSDVFG-----	1055
ABD83817.1	CTG-A-----DANGGAKWIADLGA-QNRYVLDVWAGG-----	1079
ADU39615.1	HG-----HDSNAWMDKMIA-DQRYVLDVWAGT-----	1072
EJL72014.1	HG-----HDSKAWMDKMIA-DQRYVLDVWAGS-----	1072