**File S2: The alignment of influenza A and B sequences. The quality of the alignment is indicated by different colors.**

T-COFFEE
SCORE=97
\*
 BAD AVG GOOD
\*
AAA43735/B:  94
AAA43743/B:  94
AAA43749/B:  94

AAU94779/B:  94

ABL84344/B:  94
ABO72374/B:  94

ABQ81846/B:  94

ACU12759/B:  94

BAB32609/B:  94

AAA43093/A:  97
AAA43429/A:  97
AAA43449/A:  97
AAA43575/A:  97
AAD49005/A:  97
AAD49007/A:  97
AAF77036/A:  97
AAO46232/A:  97
AAO46822/A:  97
AAO62036/A:  96
AAO62041/A:  97
AAO62044/A:  97
AAO62064/A:  97
AAT08005/A:  97
AAT37407/A:  96
AAT37414/A:  95
AAT65406/A:  96
AAX78821/A:  97
AAY52584/A:  97
AAY87411/A:  97
ABB17695/A:  97
ABB19439/A:  97
ABB19610/A:  97
ABB19747/A:  97
ABB19914/A:  97
ABB20088/A:  97
ABB20104/A:  97
ABB20243/A:  97
ABB20375/A:  97
ABB20475/A:  97
ABB20501/A:  97
ABB21754/A:  97
ABB87198/A:  97
ABB87732/A:  97
ABB87959/A:  97
ABB88058/A:  96
ABB88351/A:  97
ABC02269/A:  97
ABF47958/A:  97
ABG37189/A:  97
ABH04381/A:  96
ABI30359/A:  97
ABI84399/A:  95
ABI84436/A:  97
ABI84475/A:  97
ABI84973/A:  96
ABI84982/A:  97
ABI92217/A:  96
ABJ09099/A:  96
ABK32099/A:  97
ABP49198/A:  97
ABP49253/A:  97
ABQ97208/A:  97
ABR28683/A:  97
ABR37723/A:  97
ABS50124/A:  97
ABS89357/A:  97
ABU95382/A:  97
ABV25648/A:  97
ABV29593/A:  97
ABV82576/A:  97
ABV82587/A:  97
ABW95951/A:  97
ABX88802/A:  97
ABY84687/A:  97
ACA04655/A:  97
ACA04738/A:  97
ACA04739/A:  97
ACA04740/A:  97
ACA14299/A:  97
ACB70583/A:  97
ACD47117/A:  97
ACD65204/A:  97
ACD76864/A:  97
ACD85421/A:  97
ACE73320/A:  97
ACE76594/A:  97
ACE78976/A:  97
ACE78981/A:  97
ACF20219/A:  97
ACF25054/A:  97
ACF25354/A:  97
ACF33655/A:  96
ACF36500/A:  97
ACF93490/A:  97
ACI41114/A:  96
ACI48786/A:  97
ACN65661/A:  97
ACO24985/A:  97
ACP50710/A:  97
ACQ73415/A:  97
ACR66907/A:  96
ACR83968/A:  97
ACS68311/A:  97
ACS92897/A:  97
ACT67761/A:  97
ACT97062/A:  97
ACV41710/A:  97
ADA71169/A:  97
ADK70163/A:  97
ADU17627/A:  97
ADU20276/A:  97
ADU20397/A:  96
ADU53220/A:  97
AEB89856/A:  97
AEB89867/A:  97
AEK50939/A:  96
AEK50961/A:  97
BAA06132/A:  97
BAA06718/A:  97
BAF03532/A:  96
BAF03569/A:  97
BAF34378/A:  97
BAF34925/A:  97
BAF43417/A:  97
BAF43457/A:  97
BAF43461/A:  97
BAF46763/A:  96
BAF46905/A:  97
BAF48640/A:  97
BAF48644/A:  96
BAF48646/A:  97
BAF63047/A:  97
BAG66251/A:  97
BAG66259/A:  92
BAG66279/A:  97
BAH02172/A:  97
BAH70320/A:  97
BAI39637/A:  97
BAI48894/A:  97
BAI50030/A:  96
BAJ07979/A:  97
BAJ10562/A:  97
CAA36475/A:  97
CAC36997/A:  97
CAD57252/A:  97
CAO82694/A:  97
CAP69845/A:  97
cons      :  97

AAA43735/B      85 -------L-----------------SCQGSTFQ   93
AAA43743/B      85 -------L-----------------SCQGSTFQ   93
AAA43749/B      85 -------L-----------------SCQGSTFQ   93

AAU94779/B      85 -------L-----------------SCPGSTFQ   93

ABL84344/B      85 -------L-----------------SCPGSTFQ   93
ABO72374/B      85 -------L-----------------SCPGSTFQ   93

ABQ81846/B      85 -------L-----------------SCQGSTFQ   93

ACU12759/B      85 -------L-----------------SCPGSTFQ   93

BAB32609/B      85 -------L-----------------SCQGSTFQ   93
AAA43093/A      84 ----LNKS--------------L---CNVEGWV   95
AAA43429/A      87 ------EP-----------------LCEAQGFA   96
AAA43449/A      89 ------SS-----------------LCPIRGWA   98
AAA43575/A      90 ------KG--------------L---CTINSWH   99
AAD49005/A      89 ------KP-----------------QCQIKGFA   98
AAD49007/A      89 ------KP-----------------QCQITGFA   98
AAF77036/A      89 ------SS-----------------LCPISGWA   98
AAO46232/A      89 ------KP-----------------QCQITGFA   98
AAO46822/A      89 ------SS-----------------LCPISGWA   98
AAO62036/A      87 ----PSLP--------------L---CPFRGFF   98
AAO62041/A      89 ------SS-----------------LCPVSGWA   98
AAO62044/A      88 ------KD-----------------LCPVKGWA   97
AAO62064/A      89 ------KP--------------L---CEVNSWH   98
AAT08005/A      87 ------EP-----------------LCDAKGFA   96
AAT37407/A      87 ----PPLP--------------L---CPFRGFF   98
AAT37414/A      83 THFRLPLP--------------L---CPFKGFF   98
AAT65406/A      89 ------KP--------------L---CEVNSWH   98
AAX78821/A      89 ------KP-----------------QCQITGFA   98
AAY52584/A      89 ------KP-----------------QCQITGFA   98
AAY87411/A      89 ------KP-----------------QCQITGFA   98
ABB17695/A      86 ------EP-----------------LCNVSGFA   95
ABB19439/A      89 ------KP--------------L---CEVNSWH   98
ABB19610/A      89 ------SS-----------------LCPISGWA   98
ABB19747/A      86 ------EP-----------------LCNVSGFA   95
ABB19914/A      88 ------RD-----------------LCPIKGWA   97
ABB20088/A      88 ------RD-----------------LCPIRGWA   97
ABB20104/A      87 ------KS--------------L---CKVEGWV   96
ABB20243/A      90 ------KG--------------L---CTINSWH   99
ABB20375/A      89 ------KP--------------L---CEVNSWH   98
ABB20475/A      89 ------KP-----------------QCQITGFA   98
ABB20501/A      84 ----LNKS--------------L---CNVEGWV   95
ABB21754/A      90 ------KG--------------L---CTINSWH   99
ABB87198/A      86 ------EP-----------------LCNVSGFA   95
ABB87732/A      88 ------RN-----------------LCPIKGWA   97
ABB87959/A      87 ------KS--------------L---CKVEGWV   96
ABB88058/A      83 RIFKPSLP--------------L---CPFRGFF   98
ABB88351/A      89 ------KP--------------L---CEANSWH   98
ABC02269/A      89 ------KP-----------------QCKITGFA   98
ABF47958/A      73 ------SS-----------------LCPIRGWA   82
ABG37189/A      89 ------KP-----------------QCKITGFA   98
ABH04381/A      83 RLF---KP--------------PLPLCPFRGFF   98
ABI30359/A      89 ------KP-----------------QCQITGFA   98
ABI84399/A      85 --FRLPLP--------------L---CPFRGFF   98
ABI84436/A      86 ------EP-----------------LCNVSGFA   95
ABI84475/A      88 ------RD-----------------LCPVKGWA   97
ABI84973/A      87 ----PSLP--------------L---CPFRGFF   98
ABI84982/A      72 ----INKGTNLKAPNYLLLNKSL---CSVEGWV   97
ABI92217/A      89 ------KP--------------L---CEVNSWH   98
ABJ09099/A      87 ------EP-----------------LCDAKGFA   96
ABK32099/A      88 ------KD-----------------LCPVKGWA   97
ABP49198/A      90 ------KG--------------L---CTINSWH   99
ABP49253/A      90 ------KG--------------L---CTINSWH   99
ABQ97208/A      89 ------KP-----------------QCKITGFA   98
ABR28683/A      89 ------SS-----------------LCPISGWA   98
ABR37723/A      90 ------KG--------------L---CTINSWH   99
ABS50124/A      89 ------SS-----------------LCPISGWA   98
ABS89357/A      86 ----LNKS--------------L---CNVEGWV   97
ABU95382/A      89 ------SS-----------------LCPISGWA   98
ABV25648/A      89 ------SS-----------------LCPISGWA   98
ABV29593/A      89 ------SS-----------------LCPISGWA   98
ABV82576/A      89 ------SS-----------------LCPISGWA   98
ABV82587/A      89 ------SP-----------------LCPISGWA   98
ABW95951/A      69 ------SS-----------------LCPISGWA   78
ABX88802/A      89 ------KP-----------------QCQITGFA   98
ABY84687/A      89 ------SS-----------------LCPISGWA   98
ACA04655/A      89 ------KP--------------L---CEVSSWH   98
ACA04738/A      86 ----LNKS--------------L---CSVEGWV   97
ACA04739/A      87 ------EA-----------------ICDVKGFA   96
ACA04740/A      90 ------RG--------------L---CTINSWH   99
ACA14299/A      89 ------KP-----------------QCQITGFA   98
ACB70583/A      69 ------SS-----------------LCPINGWA   78
ACD47117/A      89 ------KP-----------------QCQITGFA   98
ACD65204/A      89 ------SS-----------------LCPISGWA   98
ACD76864/A      89 ------KP-----------------QCQITGFA   98
ACD85421/A      87 ------EP-----------------LCEAQGFA   96
ACE73320/A      88 ------RD-----------------LCPIRGWA   97
ACE76594/A      89 ------KP-----------------QCQITGFA   98
ACE78976/A      88 ------KP--------------L---CEVNSWH   97
ACE78981/A      88 ------KP--------------L---CEVNSWH   97
ACF20219/A      85 ----LNKS--------------L---CKVEGWV   96
ACF25054/A      89 ------KP-----------------QCQITGFA   98
ACF25354/A      85 ----LNKS--------------L---CKVEGWV   96
ACF33655/A      83 RPFKSPLP--------------L---CPFRGFF   98
ACF36500/A      89 ------KP-----------------QCNITGFA   98
ACF93490/A      87 ------EP-----------------LCEAQGFA   96
ACI41114/A      83 RPFKSPLP--------------L---CPFRGFF   98
ACI48786/A      87 ------EP-----------------LCEAQGFA   96
ACN65661/A      86 ----LNKS--------------L---CNVEGWV   97
ACO24985/A      88 ------SS-----------------LCPISGWA   97
ACP50710/A      89 ------KP-----------------QCQITGFV   98
ACQ73415/A      84 ----LNKS--------------L---CNVEGWV   95
ACR66907/A      87 ----SSLP--------------L---CPFRGFF   98
ACR83968/A      89 ------TS-----------------LCPVSGWA   98
ACS68311/A      90 ------KG--------------L---CTINSWH   99
ACS92897/A      89 ------KP-----------------QCNITGFA   98
ACT67761/A      89 ------KP-----------------QCDITGFA   98
ACT97062/A      87 ------EA-----------------ICDVRGFA   96
ACV41710/A      87 ------EA-----------------LCDAKGFA   96
ADA71169/A      89 ------SS-----------------LCSISGWA   98
ADK70163/A      88 ------KD-----------------LCPVKGWA   97
ADU17627/A      90 ------KG--------------L---CTINSWH   99
ADU20276/A      86 ------EP-----------------LCNVSGFA   95
ADU20397/A      83 RPFKSPLP--------------L---CPFRGFF   98
ADU53220/A      88 ------RD-----------------LCPIRGWA   97
AEB89856/A      90 ------KG--------------L---CIINSWH   99
AEB89867/A      87 ------EA-----------------ICDVKGFA   96
AEK50939/A      89 ------KP--------------L---CEVNSWH   98
AEK50961/A      85 ----LNKS--------------L---CKVEGWV   96
BAA06132/A      89 ------KP-----------------QCKITGFA   98
BAA06718/A      89 ------SS-----------------LCPISGWA   98
BAF03532/A      85 ------EP-----------------LCEVSGFA   94
BAF03569/A      85 ------EP-----------------LCEVSGFA   94
BAF34378/A      89 ------KP-----------------QCQITGFA   98
BAF34925/A      89 ------KP-----------------QCQITGFA   98
BAF43417/A      86 ------EP-----------------LCNVSGFA   95
BAF43457/A      87 ------EA-----------------ICDVKGFA   96
BAF43461/A      85 ------EP-----------------LCEVSGFA   94
BAF46763/A      87 ----PSLP--------------L---CPFRGFF   98
BAF46905/A      89 ------KP--------------L---CEVNSWH   98
BAF48640/A      89 ------KP-----------------QCQITGFA   98
BAF48644/A      87 ----PSLP--------------L---CSFRGFF   98
BAF48646/A      86 ----LNKS--------------L---CNVEGWV   97
BAF63047/A      89 ------SS-----------------LCSISGWA   98
BAG66251/A      87 ------EP-----------------LCDAKGFA   96
BAG66259/A      83 RPFKPPLP--------------L---CPFRGFF   98
BAG66279/A      87 ------EA-----------------ICDVKGFA   96
BAH02172/A      89 ------KP-----------------QCKITGFA   98
BAH70320/A      86 ----LNKS--------------L---CNVEGWV   97
BAI39637/A      69 ------SS-----------------LCPIRGWA   78
BAI48894/A      89 ------SS-----------------LCPISGWA   98
BAI50030/A      87 ----SSLP--------------L---CPFRGFF   98
BAJ07979/A      85 ------EP-----------------LCEISGFA   94
BAJ10562/A      89 ------KP--------------L---CEVNSWH   98
CAA36475/A      67 ------SS-----------------LCPISGWA   76
CAC36997/A      89 ------KP-----------------QCKITGFA   98
CAD57252/A      89 ------SS-----------------LCSISGWA   98
CAO82694/A     100 ------SS-----------------LCPVSGWA  109
CAP69845/A      88 ------KD-----------------LCPVKGWA   97

cons          595                           \*    :   627

AAA43735/B      94 KALLISPHRFGETRGNSAPLIIREPFVACGPKE  126
AAA43743/B      94 KALLISPHRFGEARGNSAPLIIREPFIACGPKE  126
AAA43749/B      94 KALLISPHRFGEIKGNSAPLIIREPFVACGPKE  126

AAU94779/B      94 KALLISPHRFGETKGNSAPLIIREPFIACGPKE  126

ABL84344/B      94 KALLISPHRFGETKGNSAPLIIREPFIACGPKE  126

ABO72374/B      94 KALLISPHRFGETKGNSAPLIIREPFIACGPKE  126

ABQ81846/B      94 KALLISPHRFGETRGNSAPLIIREPFVACGPKE  126

ACU12759/B      94 KALLISPHRFGETKGNSAPLIIREPFIACGPKE  126

BAB32609/B      94 KALLISPHRFGEAKGNSAPLIIREPFIACGPKE  126
AAA43093/A      96 VIAKDNAIRFGE---SEQIIVTREPYVSCDPLS  125
AAA43429/A      97 PFSKDNGIRIGS---KGHVFVIREPFVSCSPLE  126
AAA43449/A      99 IYSKDNSIRIGS---KGDVFVIREPFISCSHLE  128
AAA43575/A     100 IYGKDNAVRIGE---DSDVLVTREPYVSCDPDE  129
AAD49005/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCGPSK  128
AAD49007/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCGLGK  128
AAF77036/A      99 IYSKDNGIRIGS---KGDVFVIREPFISCSHLE  128
AAO46232/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCDPGK  128
AAO46822/A      99 VHSKDNGIRIGS---KGDVFVIREPFISCSHLE  128
AAO62036/A      99 PFHKDNAIRLGE---NKDVIVTREPYVSCDNNN  128
AAO62041/A      99 IYSKDNGIRIGS---KGDVFVIREPFISCSHLE  128
AAO62044/A      98 PLSKDNGIRIGS---RGEVFVIREPFISCSINE  127
AAO62064/A      99 ILSKDNAIRIGE---DAHILVTREPYLSCGPQG  128
AAT08005/A      97 PFSKDNGIRIGS---RGHVFVIREPFVSCSPTE  126
AAT37407/A      99 PFHKDNAIRLGE---NKDVIVTREPYVSCDNDD  128
AAT37414/A      99 PFHKDNALRLAE---NKDVLVTREPYISCDNVG  128
AAT65406/A      99 ILSKDNAIRIGE---DAHILVTREPYLSCGPHE  128
AAX78821/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCDPGK  128
AAY52584/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCGLGK  128
AAY87411/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCDPGK  128
ABB17695/A      96 IVSKDNGIRIGS---RGHVFVIREPFVACGPTE  125
ABB19439/A      99 ILSKDNAIRIGE---DAHILVTREPYLSCGPNE  128
ABB19610/A      99 IYSKDNGIRIGS---KGDVFVIREPFISCSHLE  128
ABB19747/A      96 IVSKDNGIRIGS---RGHVFVIREPFVACGPAE  125
ABB19914/A      98 PLSKDNGIRIGS---RGEVFVIREPFISCSISE  127
ABB20088/A      98 PLSKDNGIRIGS---RGEVFVIREPFISCSISE  127
ABB20104/A      97 VVAKDNAIRFGE---SEQIIVTREPYVSCDPSG  126
ABB20243/A     100 IFGKDNAIRIGE---NSDVLVTREPYVSCDPDE  129
ABB20375/A      99 ILSKDNAIRIGE---DAHILVTREPYLSCDPQG  128
ABB20475/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCDPGK  128
ABB20501/A      96 VIAKDNAIRFGE---SEQIIVTREPYVSCDPLS  125
ABB21754/A     100 IFGKDNAIRIGE---NSDVLVTREPYVSCDPDE  129
ABB87198/A      96 IVSKDNGIRIGS---RGHVFVIREPFVACGPTE  125
ABB87732/A      98 PLSKDNGIRIGS---RGEVFVIREPFISCSISE  127
ABB87959/A      97 VVAKDNAIRFGE---SEQVIVTREPYVSCDPLG  126
ABB88058/A      99 PFHKDNAIRLGE---NKDVIVTREPYVSCDNDN  128
ABB88351/A      99 ILSKDNAIRIGE---DAHILVTREPYLSCDPQG  128
ABC02269/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCDPGK  128
ABF47958/A      83 IHSKDNGIRIGS---KGDVFVIREPFISCSHLE  112
ABG37189/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCDPGK  128
ABH04381/A      99 PFHKDNAIRLGE---NKDVIVTREPYVSCDNDN  128
ABI30359/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCDTSK  128
ABI84399/A      99 PFHKDNALRLAE---NKDVLVTREPYISCDNRG  128
ABI84436/A      96 IVSKDNGIRIGS---RGHVFVIREPFVACGPTE  125
ABI84475/A      98 PLSKDNGIRIGS---RGEVFVIREPFISCSINE  127
ABI84973/A      99 PFHKDNAIRLGE---NKDVIVTREPYVSCDNDN  128
ABI84982/A      98 VIAKDNAIRFGE---SEQIIVTREPYVSCDPSG  127
ABI92217/A      99 ILSKDNAIRIGE---DAHILVTREPYLSCGPHE  128
ABJ09099/A      97 PFSKDNGIRIGS---RGHVFVIREPFVSCSPTE  126
ABK32099/A      98 PLSKDNGIRIGS---RGEVSVIREPFISCSIHE  127
ABP49198/A     100 IYGKDNAVRIGE---DSDVLVTREPYVSCDPDE  129
ABP49253/A     100 IYGKDNAVRIGE---DSDVLVTREPYVSCEPDE  129
ABQ97208/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCDPGK  128
ABR28683/A      99 IYSKDNSIRIGS---KGDIFVMREPFISCSHLE  128
ABR37723/A     100 IFGKDNAIRIGE---NSDVLVTREPYVSCDPDE  129
ABS50124/A      99 IYSKDNSIRIGS---KGDIFVIREPFISCSHLE  128
ABS89357/A      98 VVAKDNAIRFGE---SEQIIVTREPYVSCDPSG  127
ABU95382/A      99 IYSKDNSIRIGS---KGDVFVIREPFISCSHLE  128
ABV25648/A      99 IYSKDNSIRIGS---KGDIFVIREPFISCSHLE  128
ABV29593/A      99 IYSKDNGVRIGS---KGDVFVIREPFISCSHLE  128
ABV82576/A      99 IYSKDNSIRIGS---KGDIFVIREPFISCSHLE  128
ABV82587/A      99 IYSKDNSIRIGS---KGDIFVMREPFISCSHLE  128
ABW95951/A      79 VHSKDNGIRIGS---KGDVFVIREPFISCSHLE  108
ABX88802/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCSPGK  128
ABY84687/A      99 IYSKDNSIRIGS---KGDIFVIREPFISCSHLE  128
ACA04655/A      99 ILSKDNAIRIGE---DAHILVTREPYLSCDPQG  128
ACA04738/A      98 VIAKDNAIRFGE---SEQIIVTREPYVSCDPSG  127
ACA04739/A      97 PFSKDNGIRIGS---RGHIFVIREPFVSCSPIE  126
ACA04740/A     100 IFGKDNAVRIGE---DSDVLVTRESYVSCDPDE  129
ACA14299/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCDPSK  128
ACB70583/A      79 VYSKDNSIRIGS---KGDVFVIREPFISCSHLE  108
ACD47117/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCGLGK  128
ACD65204/A      99 IYSKDNSIRIGS---KGDIFVIREPFISCSHLE  128
ACD76864/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCDTSK  128
ACD85421/A      97 PFSKDNGIRIGS---RGHVFVIREPFVSCSPLE  126
ACE73320/A      98 PLSKDNGIRIGS---RGEVFVIREPFISCSINE  127
ACE76594/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCSPGK  128
ACE78976/A      98 ILTKDNAIRIGE---EAHILVTREPYLSCDPQG  127
ACE78981/A      98 ILSKDNAIRIGE---DAHVLVTREPYLSCDPQG  127
ACF20219/A      97 VVAKDNAIRXGE---SEQIIVIREPYVSCDPLG  126
ACF25054/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCDPSK  128
ACF25354/A      97 VVAKDNAIRFGE---SEQIIVTREPYVSCDPLG  126
ACF33655/A      99 PFHKDNAIRLGE---NKDVIVTREPYVSCDNDN  128
ACF36500/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCDPDK  128
ACF93490/A      97 PFSKDNGIRIGS---RGHVFVIREPFVSCSPSE  126
ACI41114/A      99 PFHKDNAIRLGE---NKDVIVTREPYVSCDNDN  128
ACI48786/A      97 PFSKDNGIRIGS---RGHVFVIREPFVSCSPSE  126
ACN65661/A      98 VIEKDNAVRFGE---SEQIIVTREPYVSCDPTG  127
ACO24985/A      98 IYSKDNGVRIGS---KGDVFVIREPFISCSHLE  127
ACP50710/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCGLSK  128
ACQ73415/A      96 VIAKDNAIRFGE---SEQIIVTREPYVSCDPLS  125
ACR66907/A      99 PFHKDNAIRLGE---NKDVIVTREPYVSCDNDD  128
ACR83968/A      99 IYSKDNSVRIGS---KGDVFVIREPFISCSHLE  128
ACS68311/A     100 IYGKDNAVRIGE---DSDVLVTREPYVSCDPDE  129
ACS92897/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCDPDK  128
ACT67761/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCDPDK  128
ACT97062/A      97 PFSKDNGIRIGS---RGHVFVIREPFVSCSPIE  126
ACV41710/A      97 PFSKDNGIRIGS---RGHVFVIREPFVSCSPIE  126
ADA71169/A      99 IYTKDNSIRIGS---KGDVFVIREPFISCSHLE  128
ADK70163/A      98 PLSKDNGIRIGS---RGEVFVIREPFISCSINE  127
ADU17627/A     100 IYGKDNAVRIGE---NSDVLVTREPYVSCDPDE  129
ADU20276/A      96 IVSKDNGIRIGS---RGHVFVIREPFVACGPTE  125
ADU20397/A      99 PFHKDNAIRLGE---NKDVIVTREPYVSCDNDN  128
ADU53220/A      98 PLSKDNGIRIGS---RGEVFVIREPFISCSISE  127
AEB89856/A     100 IYGKDNAVRIGE---SSDVLVTREPYVSCDPDE  129
AEB89867/A      97 PFSKDNGIRIGS---RGHVFVIREPFVSCSPIE  126
AEK50939/A      99 ILSKDNAIRIGE---DAHILVTREPYLSCGPHE  128
AEK50961/A      97 VVAKDNAIRFGE---GEQIIVTREPYVSCDPLG  126
BAA06132/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCDPGK  128
BAA06718/A      99 IYSKDNSIRIGS---KGDVFVIREPFISCSHLE  128
BAF03532/A      95 IVSKDNGIRIGS---RGHVFVIREPFVSCGPSE  124
BAF03569/A      95 IVSKDNGIRIGS---RGHVFVIREPFVACGPSE  124
BAF34378/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCGPSK  128
BAF34925/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCGPGK  128
BAF43417/A      96 IVSKDNGIRIGS---RGHVFVIREPFVACGPTE  125
BAF43457/A      97 PFSKDNGIRIGS---RGHVFVIREPFISCSPAE  126
BAF43461/A      95 IVSKDNGIRIGS---RGHVFVIREPFVACGPSE  124
BAF46763/A      99 PFHKDNAIRLGE---NKDVIVTREPYVSCDNDN  128
BAF46905/A      99 ILSKDNAIRIGE---DAHILVTREPYLSCDPQG  128
BAF48640/A      99 PFSKDNSIRLSA---GGNIWVTREPYVSCDPGK  128
BAF48644/A      99 PFHKDNAIRLGE---NKDVIVTREPYVSCDNYN  128
BAF48646/A      98 VIAKDNAVRFGE---SEQIIVTREPYVSCDPTG  127
BAF63047/A      99 IYTKDNSIRIGS---KGDVFVIREPFISCSHLE  128
BAG66251/A      97 PFSKDNGIRIGS---RGHVFVIREPFVSCSPTE  126
BAG66259/A      99 PFHKDNAIRLGE---NKDVIVTREPYVSCDNDN  128
BAG66279/A      97 PFSKDNGIRIGS---RGHVFAIREPFVSCSPTE  126
BAH02172/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCDPGK  128
BAH70320/A      98 VIAKDNAVRFGE---SEQIIVTREPYVSCDPTG  127
BAI39637/A      79 IHSKDNSIRIGS---KGDVFVIREPFISCSHLE  108
BAI48894/A      99 IYSKDNGIRIGS---KGDVFVIREPFISCSHLE  128
BAI50030/A      99 PFHKDNAIRLGE---NKDVIVTREPYVSCDNDN  128
BAJ07979/A      95 IVSKDNGIRIGS---RGHVFVIREPFVACGPSE  124
BAJ10562/A      99 ILSKDNAIRIGE---DAHILVTREPYLSCDPQG  128
CAA36475/A      77 IYSKDNGIRIGS---KGDVFVIREPFISCSHLE  106
CAC36997/A      99 PFSKDNSIRLSA---GGDIWVTREPYVSCDPGK  128
CAD57252/A      99 IYTKDNSIRIGS---KGDVFVIREPFISCSHLE  128
CAO82694/A     110 IYSKDNSIRIGS---KGDVFVIREPFISCSHLE  139
CAP69845/A      98 PLSKDNGIRIGS---RGEVFVIREPFISCSINE  127

cons           628      .  \* .           \*\*.:::\*      660

AAA43735/B     127 CRHFALTHYAAQPGGYYNGTRKDRNKLRHLISV  159
AAA43743/B     127 CKHFALTHYAAQPGGYYNGTRKDRNKLRHLISV  159
AAA43749/B     127 CRHFALTHYAAQPGGYYNGTRKDRNKLRHLVSV  159

AAU94779/B     127 CKHFALTHYAAQPGGYYNGTREDRNKLRHLISV  159

ABL84344/B     127 CKHFALTHYAAQPGGYYNGTREDRNKLRHLISV  159
ABO72374/B     127 CKHFALTHYAAQPGGYYNGTREDRNKLRHLISV  159

ABQ81846/B     127 CRHFALTHYAAQPGGYYNGTRKDRNKLRHLISV  159

ACU12759/B     127 CKHFALTHYAAQPGGYYNGTRGDRNKLRHLISV  159

BAB32609/B     127 CKHFALTHYAAQPGGYYNGTREDRNKLRHLISV  159

AAA43093/A     126 CKMYALHQGTTIRNKHSNSTTHDRTAFRGLIST  158
AAA43429/A     127 CRTFFLTQGSLLNDKHSNGTVKDRSPYRTLMSV  159
AAA43449/A     129 CRTFFLTQGALLNDKHSNGTVKDRSPYRALMSC  161
AAA43575/A     130 CRFYALSQGTTIRGKHSNGTIHDRSQYRDLISW  162
AAD49005/A     129 CYQFALGQGATLDNKHSNGTIHDRTLNRTLLRN  161
AAD49007/A     129 CYQFALGQGTTLNNKHSNGTTHDRIPHRTLLMN  161
AAF77036/A     129 CRTFFLTQGALLNDKHSNGTVKDRSPYRTLMSC  161
AAO46232/A     129 CYQFALGQGTTLDNKHSNDTIHDRIPHRTLLMN  161
AAO46822/A     129 CRTFFLTQGALLNDKHSNGTVKDRSPHRTLMSC  161
AAO62036/A     129 CWSFALAQGALLGTQHSNGTIKDRTPYRSLIRF  161
AAO62041/A     129 CRTFFLTQGALLNDKHSNGTVKDRSPYRTLMSC  161
AAO62044/A     128 CRTFFLTQGALLNDKHSNGTVKDRSPFRTLMSC  160
AAO62064/A     129 CRMFALSQGTTLRGRHANGTIHDRSPYRALISW  161
AAT08005/A     127 CRTFFLTQGSLLNDKHSNGTVKDRSPYRTLMSV  159
AAT37407/A     129 CWSFALAQGALLGTKHSNGTIKDRTPYRSLIRF  161
AAT37414/A     129 CWSFALAQGALLGTKHSNGTNKDRTPYRSLIKF  161
AAT65406/A     129 CRMFALSQGTTLRGRHANGTIHDRSPFRALISW  161
AAX78821/A     129 CYQFALGQGTTLDNKHSNGTIHDRIPHRTLLMN  161
AAY52584/A     129 CYQFALGQGTTLENKHSNGTALDRTPHRTLLMN  161
AAY87411/A     129 CYQFALGQGTTLDNKHSNGTIHDRIPHRTLLMN  161
ABB17695/A     126 CRTFFLTQGALLNDKHSNNTVKDRSPYRALMSV  158
ABB19439/A     129 CRMFALSQGTTLRGRHANGTIHDRSPFRALISW  161
ABB19610/A     129 CRTFFLTQGALLNDKHSNGTVKDRSPYRTLMSC  161
ABB19747/A     126 CRTFFLTQGALLNDKHSNNTVKDRSPYRALMSV  158
ABB19914/A     128 CRTFFLTQGALLNDKHSNGTVKDRSPFRTLMSC  160
ABB20088/A     128 CRTFFLTQGALLNDKHSNGTVKDRSPFRTLMSC  160
ABB20104/A     127 CRMYALHQGTTIRNKHSNGTIHDRTAFRGLIST  159
ABB20243/A     130 CRFYALSQGTTIRGKHSNGTIHDRSQYRALVSW  162
ABB20375/A     129 CRMFALSQGTTLRGRHANGTIHDRSPYRALISW  161
ABB20475/A     129 CYQFALGQGTTLDNKHSNGTIHDRIPHRTLLMN  161
ABB20501/A     126 CKMYALHQGTTIRNKHSNGTTHDRTAFRGLIST  158
ABB21754/A     130 CRFYALSQGTTIRGKHSNGTIHDRSQYRALVSW  162
ABB87198/A     126 CRTFFLTQGALLNDKHSNNTVKDRSPYRALMSV  158
ABB87732/A     128 CRTFFLTQGALLNDKHSNGTVKDRSPFRTLMSC  160
ABB87959/A     127 CRMYALHQGTTIRNKHSNGTIHDRTAFRGLIST  159
ABB88058/A     129 CWSFALAQGALLGTKHSNGTIKDRTPYRSLIRF  161
ABB88351/A     129 CRMFALSQGTTLRGRHANGTIHDRSPFRALISW  161
ABC02269/A     129 CYQFALGQGTTLDNKHSNDTIHDRTPHRTLLMN  161
ABF47958/A     113 CRTFFLTQGALLNDKHSRGTFKDRSPYRALMSC  145
ABG37189/A     129 CYQFALGQGTTLNNRHSNDTVHDRTPYRTLLMN  161
ABH04381/A     129 CWSFALAQGALLGTKHSNGTIKDRTPYRSLIRF  161
ABI30359/A     129 CYQFALGQGTTLDNKHSNGTIHDRIPHRTLLMN  161
ABI84399/A     129 CWSFALAQGALLGTKHSNGTNKDRTPYRSLIRF  161
ABI84436/A     126 CRTFFLTQGALLNDKHSNNTVKDRSPYRALMSV  158
ABI84475/A     128 CRTFFLTQGALLNDKHSNGTVKDRSPFRTLMSC  160
ABI84973/A     129 CWSFALAQGALLGTKHSNGTIKDRTPYRSLIRF  161
ABI84982/A     128 CKMYALHQGTTIRNKHSNGTIHDRTTFRGLLST  160
ABI92217/A     129 CRMFALSQGTTLRGRHANGTIHDRSPFRALISW  161
ABJ09099/A     127 CRTFFLTQGSLLNDKHSNGTVKDRSPYRTLMSV  159
ABK32099/A     128 CRTFFLTQGALLNDKHSNGTVKDRSPFRTLMSC  160
ABP49198/A     130 CRFYALSQGTTIRGKHSNGTIHDRSQYRALISW  162
ABP49253/A     130 CRFYALSQGTTIRGKHSNGTIHDRSQYRALISW  162
ABQ97208/A     129 CYQFALGQGTTLNNKHSNDTIHDRTPYRTLLMN  161
ABR28683/A     129 CRTFFLTQGALLNDRHSNGTVKDRSPYRTLMSC  161
ABR37723/A     130 CRFYALSQGTTIRGKHSNGTIHDRSQYRALVSW  162
ABS50124/A     129 CRTFFLTQGALLNDRHSNGTVKDRSPYRTLMSC  161
ABS89357/A     128 CKMYALHQGTTIRNKHSNGTIHDRTAFRGLIST  160
ABU95382/A     129 CRTFFLTQGALLNDKHSNGTVKDRSPYRTLMSC  161
ABV25648/A     129 CRTFFLTQGALLNDRHSNGTVKDRSPYRTLMSC  161
ABV29593/A     129 CRTFFLTQGALLNDKHSNGTVKDRSPYRTLMSC  161
ABV82576/A     129 CRTFFLTQGALLNDRHSNGTVKDRSPYRTLMSC  161
ABV82587/A     129 CRTFFLTQGALLNDKHSNGTVKDRSPYRTLMSC  161
ABW95951/A     109 CRTFFLTQGALLNDKHSNGTVKDRSPHRTLMSC  141
ABX88802/A     129 CYQFALGQGTTLNNKHSNGTIHDRIPHRTLLMN  161
ABY84687/A     129 CRTFFLTQGALLNDRHSNGTVKDRSPYRTLMSC  161
ACA04655/A     129 CRMFALSQGTTLRGRHVNGTIHDRSPFRALISW  161
ACA04738/A     128 CKMYALHQGTTIRNKHSNGTIHDRTAFRGLIST  160
ACA04739/A     127 CRTFFLTQGSLLNDKHSNGTVKDRSPFRTLMSV  159
ACA04740/A     130 CRFYALSQGTTIRGKHSNGTIHDRSQYRALISW  162
ACA14299/A     129 CYQFALGQGTTLDNKHSNGTIHDRIPHRTLLMN  161
ACB70583/A     109 CRTFFLTQGALLNDKHSNGTVKDRSPHRTLMSC  141
ACD47117/A     129 CYQFALGQGTTLNNKHSNGTTHDRSPHRTLLMN  161
ACD65204/A     129 CRTFFLTQGALLNDRHSNGTVKDRSPYRTLMSC  161
ACD76864/A     129 CYQFALGQGTTLDNKHSNGTIHDRIPHRTLLMN  161
ACD85421/A     127 CRTFFLTQGSLLNDKHSNGTVKDRSPYRTLMSV  159
ACE73320/A     128 CRTFFLTQGALLNDKHSNGTVKDRSPFRTLMSC  160
ACE76594/A     129 CYQFALGQGTTLNNKHSNGTIHDRIPHRTLLMN  161
ACE78976/A     128 CRMFALSQGTTLRGRHANGTIHDRSPFRALISW  160
ACE78981/A     128 CRMFALSQGTTLRGRHANGTIHDRSPFRALISW  160
ACF20219/A     127 CKMYALHQGTTIRNRHSNGTIXDRTAFRGLIST  159
ACF25054/A     129 CYQFALGQGTTLDNKHSNGTIHDRIPHRTLLMN  161
ACF25354/A     127 CKMYALHQGTTIRNKHSNGTIHDRTAFRGLIST  159
ACF33655/A     129 CWSFALAQGALLGTKHSNGTIKDRTPYRSLIRF  161
ACF36500/A     129 CYQFALGQGTTLNNVHSNDTVHDRTPYRTLLMN  161
ACF93490/A     127 CRTFFLTQGSLLNDKHSNGTVKDRSPYRTLMSV  159
ACI41114/A     129 CWSFALAQGALLGTKHSNGTIKDRTPYRSLIRF  161
ACI48786/A     127 CRTFFLTQGSLLNDKHSNGTVKDRSPYRTLMSV  159
ACN65661/A     128 CKMYALHQGTTIRNKHSNGTIHDRTAFRGLIST  160
ACO24985/A     128 CRTFFLTQGALLNDKHSNGTVKDRSPYRTLMSC  160
ACP50710/A     129 CYQFALGQGTTLNNKHSNGTTHDRSPYRTLLMS  161
ACQ73415/A     126 CKMYALHQGTTIRNKHSNSTTHDRTAFRGLIST  158
ACR66907/A     129 CWSFALAQGALLGTKHSNGTIKDRTPYRSLIRF  161
ACR83968/A     129 CRTFFLTQGALLNDKHSNGTIKDRSPYRTLMSC  161
ACS68311/A     130 CRFYALSQGTTIRGKHSNGTIHDRSQYRALISW  162
ACS92897/A     129 CYQFALGQGTTLNNGHSNDTVHDRTPYRTLLMN  161
ACT67761/A     129 CYQFALGQGTTLNNVHSNNTVRBRTPYRTLLMN  161
ACT97062/A     127 CRTFFLTQGSLLNDKHSNGTVKDRSPFRTLMSV  159
ACV41710/A     127 CRTFFLTQGSLLNDKHSNGTVKDRSPYRTLMSV  159
ADA71169/A     129 CKTFFLTQGALLNDKHSNGTVKDRSPYRALMSC  161
ADK70163/A     128 CRTFFLTQGALLNDKHSNGTVKDRSPFRTLMSC  160
ADU17627/A     130 CRFYALSQGTTIRGKHSNGTIHDRSQYRALISW  162
ADU20276/A     126 CRTFFLTQGALLNDKHSNNTVKDRSPYRALMSV  158
ADU20397/A     129 CWSFALAQGALLGTKHSNGTIKDRTPYRSLIRF  161
ADU53220/A     128 CRTFFLTQGALLNDKHSNGTVKDRSPFRTLMSC  160
AEB89856/A     130 CRFYALSQGTTIRGKHSNGTIHDRSQYRALISW  162
AEB89867/A     127 CRTFFLTQGSLLNDKHSNGTVKDRSPFRTLMSV  159
AEK50939/A     129 CRMFALSQGTTLKGRHANGTIHDRSPFRALISW  161
AEK50961/A     127 CKMYALHQGTTIRNKHSNGTIHDRTAFRGLIST  159
BAA06132/A     129 CYQFALGQGTTLNNKHSNDTIHDRTPHRTLLMN  161
BAA06718/A     129 CRTFFLTQGALLNDKHSNGTVKDRSPYRRLMSC  161
BAF03532/A     125 CRTFFLTQGALLNDKHSNNTVKDRSPYRALMSV  157
BAF03569/A     125 CRTFFLTQGALLNDKHSNNTVKDRSPYRALMSV  157
BAF34378/A     129 CYQFALGQGTTLDNKHSNGTIHDRTPHRTLLMN  161
BAF34925/A     129 CYQFALGQGTTLDNKHSNGTIHDRIPHRTLLMN  161
BAF43417/A     126 CRTFFLTQGALLNDKHSNNTVKDRSPYRALMSV  158
BAF43457/A     127 CRTFFLTQGSLLNDKHSNGTVKDRSPFRTLMSV  159
BAF43461/A     125 CRTFFLTQGALLNDKHSNNTVKDRSPYRALMSV  157
BAF46763/A     129 CWSFALAQGALLGTKHSNGTIKDRTPYRSLIRF  161
BAF46905/A     129 CRMFALSQGTTLRGRHANGTIHDRSPFRALISW  161
BAF48640/A     129 CYQFALGQGTTLDNKHSNGTIHDRIPHRTLLMN  161
BAF48644/A     129 CWSFALAQGALLGTKHSNGTIKDRTPYRSLIRF  161
BAF48646/A     128 CKMYALHQGTTIRNKHSNGTIHDRTAFRGLMST  160
BAF63047/A     129 CRTFFLTQGALLNDKHSNGTVKDRSPYRALMSC  161
BAG66251/A     127 CRTFFLTQGSLLNDKHSNGTVKDRSPYRTLMSV  159
BAG66259/A     129 CWSFALAQGALLGTKHSNGTIKDRTPYRSLIRF  161
BAG66279/A     127 CRTFFLTQGSLLNDKHSNGTVKDRSPFRTLMSV  159
BAH02172/A     129 CYQFALGQGTTLDNKHSNDTIHDRIPHRTLLMN  161
BAH70320/A     128 CKMYALHQGTTIRNKHSNGTIHDRTAFRGLIST  160
BAI39637/A     109 CRTFFLTQGALLNDKHSNGTVKDRSPHRTLMSC  141
BAI48894/A     129 CRTFFLTQGALLNDKHSNGTVKDRSPYRTLMSC  161
BAI50030/A     129 CWSFALAQGALLGTKHSNGTIKDRTPYRSLIRF  161
BAJ07979/A     125 CRTFFLTQGALLNDKHSNNTVKDRSPYRALMSV  157
BAJ10562/A     129 CRMFALSQGTTLRGRHANGTIHDRSPFRALISW  161
CAA36475/A     107 CRTFFLTQGALLNDKHSNGTVKDRSPYRTLMSC  139
CAC36997/A     129 CYQFALGQGTTLDNKHSNDTIHDRIPHRTLLMN  161
CAD57252/A     129 CRTFFLTQGALLNDKHSNGTVKDRSPYRALMSC  161
CAO82694/A     140 CRTFFLTQGALLNDKHSNGTIKDRSPYRTLMSC  172
CAP69845/A     128 CRTFFLTQGALLNDKHSNGTVKDRSPFRTLMSC  160

cons           661 \*  : \* : :     : ..\*   \*   \* \*:    693

AAA43735/B     160 KLGK-IPTVENS-IFH-MAAWSGSACHDGREWT  189
AAA43743/B     160 KLGK-IPTVENS-IFH-MAAWSGSACHDGREWT  189
AAA43749/B     160 KLGK-IPTVENS-IFH-MAAWSGSACHDGREWT  189

AAU94779/B     160 KLGK-IPTVENS-IFH-MAAWSGSACHDGREWT  189

ABL84344/B     160 KLGK-IPTVENS-IFH-MAAWSGSACHDGREWT  189
ABO72374/B     160 KLGK-IPTVENS-IFH-MAAWSGSACHDGKEWT  189

ABQ81846/B     160 KLGK-IPTVENS-IFH-MAAWSGSACHDGREWT  189

ACU12759/B     160 KLGK-IPTVENS-IFH-MAAWSGSACHDGKEWT  189

BAB32609/B     160 NLGK-IPTVENS-IFH-MAAWSGSACHDGREWT  189

AAA43093/A     159 PLGS-PPTVSNS-EFI-CVGWSSTSCHDGVNRM  188
AAA43429/A     160 EVGQ-SPNVYQA-RFE-AVAWSATACHDGKKWM  189
AAA43449/A     162 PIGE-APSPYNS-RFE-SVAWSASACYDGMGCL  191
AAA43575/A     163 PLSS-PPTVYNS-RVE-CIGWSSTSCHDGRARM  192
AAD49005/A     162 ELGV-PFNLG-T-KQV-CIAWSSSSCHDGKAWL  190
AAD49007/A     162 ELGV-PFHLG-T-KQV-CIAWSSSSCHDGKAWL  190
AAF77036/A     162 PVGE-APSPYNS-RFE-SVAWSASACHDGMGWL  191
AAO46232/A     162 ELGV-PFHLG-T-RQV-CIAWSSSSCHDGKAWL  190
AAO46822/A     162 PVGE-APSPYNS-RFE-SVAWSASACHDGTSWL  191
AAO62036/A     162 PIGTAPV-LG-NYKEI-CIAWSSSSCFDGKEWM  191
AAO62041/A     162 PVGE-APSPYNS-RFE-SVAWSASACHDGISWL  191
AAO62044/A     161 PIGV-APSPSNS-RFE-SVAWSATACSDGPGWL  190
AAO62064/A     162 EMGQ-APSPYNT-RVE-CIGWSSTSCHDGKSRM  191
AAT08005/A     160 EIGQ-SPNVYQA-RFE-AVAWSATACHDGKKWM  189
AAT37407/A     162 PIGTAPV-LG-NYKEI-CIAWSSSSCFDGKEWM  191
AAT37414/A     162 PIGTAPV-LG-NYKEM-CAAWSSSSCFDGKEWL  191
AAT65406/A     162 EMGQ-APSPYNI-RVE-CVGWSSTSCHDGISRM  191
AAX78821/A     162 ELGV-PFHLG-T-KQV-CIAWSSSSCHDGRAWL  190
AAY52584/A     162 ELGV-PFHLA-T-KQV-CIAWSSSSCHDGKAWL  190
AAY87411/A     162 ELGV-PFHLG-T-KQV-CIAWSSSSCHDGRAWL  190
ABB17695/A     159 PLGS-SPNAYQA-KFE-SVAWSATACHDGKKWL  188
ABB19439/A     162 EMGQ-APSPYNV-RVE-CVGWSSTSCHDGISRM  191
ABB19610/A     162 PVGE-APSPYNS-RFE-SVAWSASACHDGISWL  191
ABB19747/A     159 PLGS-SPNAYQA-KFE-SVAWSATACHDGKEWL  188
ABB19914/A     161 PIGV-APSPSNS-RFE-SVAWSATACSDGSGWL  190
ABB20088/A     161 PIGV-APSPSNS-RFE-SVAWSATACSDGPGWL  190
ABB20104/A     160 PLGS-PPIVSNS-DFL-CVGWSSTSCHDGIGRM  189
ABB20243/A     163 PLSS-PPTVYNT-RVE-CIGWSSTSCHDGKARM  192
ABB20375/A     162 EMGQ-APSPYNA-RVE-CIGWSSTSCHDGKSRM  191
ABB20475/A     162 ELGV-PFHLG-T-KQV-CIAWSSSSCHDGRAWL  190
ABB20501/A     159 PLGN-PPTVSNS-EFI-CVGWSSTSCHDGVSRM  188
ABB21754/A     163 PLSS-PPTVYNT-KIE-CIGWSSTSCHDGKARM  192
ABB87198/A     159 PLGS-SPNAYQA-KFE-SVAWSATACHDGKEWL  188
ABB87732/A     161 PIGV-APSPSNS-RFE-SVAWSATACSDGPGWL  190
ABB87959/A     160 PLGS-PPVVSNS-DFL-CVGWSSTSCHDGIGRM  189
ABB88058/A     162 PIGTAPV-LG-NYKEI-CIAWSSSSCFDGKEWM  191
ABB88351/A     162 EMGQ-APSPYNA-RVE-CIGWSSTSCHDGISRM  191
ABC02269/A     162 ELGV-PFHLG-T-RQV-CIAWSSSSCHDGKAWL  190
ABF47958/A     146 PVGE-APSPYNS-RFE-SVAWSASACHDGMGWL  175
ABG37189/A     162 ELGV-PFHLG-T-KQV-CIAWSSSSCHDGKAWL  190
ABH04381/A     162 PIGTAPV-LG-NYKEI-CIAWSSSSCFDGKEWM  191
ABI30359/A     162 ELGV-PFHLG-T-KQV-CIAWSSSSCHDGKAWL  190
ABI84399/A     162 PIGTAPV-LG-NYEEM-CAAWSSSSCFDGKEWM  191
ABI84436/A     159 PLGS-SPNAYQA-KFE-SVAWSATACHDGKKWL  188
ABI84475/A     161 PIGV-APSPSNS-RFE-SVAWSATACSDGPGWL  190
ABI84973/A     162 PIGTAPV-LG-NYKEI-CVAWSSSSCFDGKEWM  191
ABI84982/A     161 PLGT-PPTVSNS-DFI-CVGWSSTSCHDGVGRM  190
ABI92217/A     162 EMGQ-APSPYNI-RVE-CVGWSSTSCHDGISRM  191
ABJ09099/A     160 EIGQ-SPNVYQA-RFE-AVAWSATACHDGKKWM  189
ABK32099/A     161 HIGV-APSPSNS-RFE-SVAWSATACSDGPGWL  190
ABP49198/A     163 PLSS-PPTVYNS-RVE-CIGWSSTSCHDGRARM  192
ABP49253/A     163 PLSS-PPTVYNS-RVE-CIGWSSTSCHDGRARM  192
ABQ97208/A     162 ELGV-PFHLG-T-KQV-CIAWSSSSCHDGKAWL  190
ABR28683/A     162 PIGE-APSPYNS-RFE-SVAWSASACHDGMGWL  191
ABR37723/A     163 PLSS-PPTVYNT-RIE-CIGWSSTSCHDGKARM  192
ABS50124/A     162 PIGE-APSPYNS-RFE-SVAWSASACHDGMGWL  191
ABS89357/A     161 HLGT-PPTVSNS-DFI-CVGWSSTSCHDGIGRM  190
ABU95382/A     162 PVGE-APSPYNS-RFE-SVAWSASACHDGIGWL  191
ABV25648/A     162 PIGE-APSPYNS-RFE-SVAWSASACHDGMGWL  191
ABV29593/A     162 PIGE-VPSPYNS-RFE-SVAWSASACHDGISWL  191
ABV82576/A     162 PIGE-APSPYNS-RFE-SVAWSASACHDGMGWL  191
ABV82587/A     162 PIGE-APSPYNS-RFE-SVAWSASACHDGMGWL  191
ABW95951/A     142 PVGE-APSPYNS-RFE-SVAWSASACHDGTSWL  171
ABX88802/A     162 ELGV-PFHLG-T-KQV-CIAWSSSSCHDGKAWL  190
ABY84687/A     162 PIGE-APSPYNS-RFE-SVAWSASACHDGMGWL  191
ACA04655/A     162 EMGQ-APSPYNV-RVE-CIGWSSTSCHDGISRM  191
ACA04738/A     161 PLGT-PPTVSNS-DFI-CVGWSSTSCHDGVGRM  190
ACA04739/A     160 KVGQ-SPNVYQA-RFE-AVAWSATACHDGKKWM  189
ACA04740/A     163 PLSS-PPTVYNS-RVE-CIGWSSTSCHDGKARM  192
ACA14299/A     162 ELGV-PFHLG-T-KQV-CIAWSSSSCHDGKAWL  190
ACB70583/A     142 PVGE-APSPYNS-RFE-SVAWSASACHDGTSWL  171
ACD47117/A     162 ELGV-PFHLG-T-KQV-CIAWSSSSCHDGKAWL  190
ACD65204/A     162 PIGE-APSPYNS-RFE-SVAWSASACHDGMGWL  191
ACD76864/A     162 ELGV-PFHLG-T-KQV-CIAWSSSSCHDGKAWL  190
ACD85421/A     160 EVGQ-SPNVYQA-RFE-AVAWSATACHDGKKWM  189
ACE73320/A     161 PIGV-APSPSNS-RFE-SVAWSATACSDGPGWL  190
ACE76594/A     162 ELGV-PFHLG-T-KQV-CIAWSSSSCHDGKAWL  190
ACE78976/A     161 GMGQ-APSPYNI-KIE-CIGWSSTSCHDGISRM  190
ACE78981/A     161 EMGQ-APSPYNV-RVE-CIGWSSTSCHDGISRM  190
ACF20219/A     160 PLGS-PPIVSNS-DFL-CVGWSSTSCHDGIGRM  189
ACF25054/A     162 ELGV-PFHLG-T-KQV-CIAWSSSSCHDGKAWL  190
ACF25354/A     160 PLGS-PPIVSNS-DFL-CVGWSSTSCHDGIGRM  189
ACF33655/A     162 PIGTAPV-LG-NYKEI-CIAWSSSSCFDGKEWM  191
ACF36500/A     162 ELGV-PFHLG-T-KQV-CIAWSSSSCHDGKAWL  190
ACF93490/A     160 KIGQ-SPNVYQA-RFE-SVAWSATACHDGKKWM  189
ACI41114/A     162 PIGTAPV-LG-NYKEI-CIAWSSSSCFDGKEWM  191
ACI48786/A     160 KIGQ-SPNVYQA-RFE-SVAWSATACHDGKKWM  189
ACN65661/A     161 PLGT-PPTVSNS-DFI-CVGWSSTTCHDGVGRM  190
ACO24985/A     161 PVGE-VPSPYNS-RFE-SVAWSASACHDGISWL  190
ACP50710/A     162 ELGV-PFNLG-T-KQV-CIAWSSSSCHDGRAWL  190
ACQ73415/A     159 PLGS-PPTVSNS-EFI-CVGWSSTSCHDGVSRM  188
ACR66907/A     162 PIGTAPV-LG-NYKEI-CVAWSSSSCFDGKEWM  191
ACR83968/A     162 PIGE-VPSPYNS-RFE-SVAWSASACHDGTSWL  191
ACS68311/A     163 PLSS-PPTVYNS-RVE-CIGWSSTSCHDGKARM  192
ACS92897/A     162 ELGV-PFHLG-T-RQV-CIAWSSSSCHDGKAWL  190
ACT67761/A     162 ELGV-PFHLG-T-KQV-CIAWSSSSCHDGKAWL  190
ACT97062/A     160 EVGQ-SPNVYQA-RFE-AVAWSATACHDGKKWM  189
ACV41710/A     160 EIGQ-SPNVYQA-RFE-AVAWSATACHDGKKWM  189
ADA71169/A     162 PLGE-APSPYNS-KFE-SVAWSASACHDGIGWL  191
ADK70163/A     161 PIGV-APSPSNS-RFE-SVAWSATACSDGPGWL  190
ADU17627/A     163 PLSS-PPTVYNS-RVE-CIGWSSTSCHDGRARM  192
ADU20276/A     159 PLGS-SPNAYQA-RFE-SVAWSATACHDGKEWL  188
ADU20397/A     162 PIGTAPV-LG-NYKEI-CIAWSSSSCFDGKEWM  191
ADU53220/A     161 PIGV-APSPSNS-RFE-SVAWSATACSDGPGWL  190
AEB89856/A     163 PLSS-PPTVYNS-RVE-CIGWSSTSCHDGKSRM  192
AEB89867/A     160 EVGQ-SPNVYQA-RFE-AVAWSATACHDGKKWM  189
AEK50939/A     162 EMGQ-APSPYNV-RVE-CIGWSSTSCHDGISRM  191
AEK50961/A     160 PLGS-PPVVSNS-DFL-CVGWSSTSCHDGIGRM  189
BAA06132/A     162 ELGV-PFHLG-T-RQV-CIAWSSSSCHDGKAWL  190
BAA06718/A     162 PIGE-APSPYNS-RFE-SVAWSASACHDGMGWL  191
BAF03532/A     158 PLGS-SPNAYQA-KFE-SVGWSATACHDGKEWM  187
BAF03569/A     158 PLGS-SPNAYQA-KFE-SVGWSATACHDGKEWM  187
BAF34378/A     162 ELGV-PFHLG-T-KQV-CIAWSSSSCHDGKAWL  190
BAF34925/A     162 ELGV-PFHLG-T-KQV-CIAWSSSSCHDGKAWL  190
BAF43417/A     159 PLGS-SPNAYQA-KFE-SVAWSATACHDGKKWL  188
BAF43457/A     160 EVGQ-SPNVYQA-RFE-AVAWSATACHDGKKWM  189
BAF43461/A     158 PLGS-SPNAYQA-KFE-SVGWSATACHDGKEWM  187
BAF46763/A     162 PIGTAPV-LG-NYKEI-CVAWSSSSCFDGKGWM  191
BAF46905/A     162 EMGQ-APSPYNV-RVE-CIGWSSTSCHDGISRM  191
BAF48640/A     162 ELGV-PFHLG-T-KQV-CIAWSSSSCHDGKAWL  190
BAF48644/A     162 PIGTAPV-LG-NYKEI-CVAWSSSSCFDGKEWM  191
BAF48646/A     161 PLGT-PPTVSNS-DFI-CVGWSSTTCHDGIGRM  190
BAF63047/A     162 PLGE-APSPYNS-KFE-SVAWSASACHDGMGWL  191
BAG66251/A     160 GIGQ-SPNVYQA-RFE-AVAWSATACHDGKKWM  189
BAG66259/A     162 PIGT-APVLG-N-YKEICIAWSSSSCFDGKEWM  191
BAG66279/A     160 EVGQ-SPNVYQA-RFE-AVAWSATACHDGKKWM  189
BAH02172/A     162 ELGV-PFHLG-T-RQV-CIAWSSSSCHDGKAWL  190
BAH70320/A     161 PLGT-PPTVSNS-DFM-CVGWSSTTCHDGVGRM  190
BAI39637/A     142 PVGE-APSPYNS-RFE-SVAWSASACHDGTSWL  171
BAI48894/A     162 PVGE-APSPYNS-RFE-SVAWSASACHDGISWL  191
BAI50030/A     162 PIGTAPV-LG-NYKEI-CVAWSSSSCFDGKEWM  191
BAJ07979/A     158 PLGS-SPNAYQA-KFE-SVGWSATACHDGKEWM  187
BAJ10562/A     162 EMSQ-APSPYNT-KVE-CIGWSSTSCHDGISRM  191
CAA36475/A     140 PVGE-APSPYNS-RFV-SVAWSASACHDGMGWL  169
CAC36997/A     162 ELGV-PFHLG-T-RQV-CIAWSSSSCHDGKAWL  190
CAD57252/A     162 PLGE-APSPYNS-KFE-SVAWSASACHDGMGWL  191
CAO82694/A     173 PIGE-VPSPYNS-RFE-SVAWSASACHDGTSWL  202
CAP69845/A     161 PIGV-APSPSNS-RFE-SVAWSATACSDGPGWL  190

cons           694  :.                .\*\*.::\* \*\*      726

AAA43735/B     190 YIGVDGPDSDALIKIKYGEAYTDT-YHSYAHNI  221
AAA43743/B     190 YIGVDGPDSNALIKIKYGEAYTDT-YHSYANNI  221
AAA43749/B     190 YIGVDGPDNDALVKIKYGEAYTDT-YHSYAHNI  221

AAU94779/B     190 YIGVDGPDSNALLKIKYGEAYTDT-YHSYANNI  221

ABL84344/B     190 YIGVDGPDSNALLKIKYGEAYTDT-YHSYANNI  221
ABO72374/B     190 YIGVDGPDSNALLKIKYGEAYTDT-YHSYANNI  221

ABQ81846/B     190 YIGVDGPDSNALIKIKYGEAYTDT-YHSYANNI  221

ACU12759/B     190 YIGVDGPDNNALLKIKYGEAYTDT-YHSYANNI  221

BAB32609/B     190 YIGVDGPDSNALIKIKYGEAYTDT-YHSYANNI  221

AAA43093/A     189 TICVQGDNENATATVYYNKRLTTT-IKTWAKNI  220
AAA43429/A     190 TVGVTGPDAQAVAVVHYGGVPVDV-INSWAGNI  221
AAA43449/A     192 TIGISGPDDGAVAVLKYNGIITET-IKSWRKQI  223
AAA43575/A     193 SICISGPNNNASAVIWYNRRPVTE-INTWARNI  224
AAD49005/A     191 HVCVTGDDRNATAKFIYNGMLVDS-IGSWSQNI  222
AAD49007/A     191 HVCVTGDDRNATASIIYDGMLVDS-IGSWSKNI  222
AAF77036/A     192 TIGISGPDNGAVAVLKYNGIITDT-IKSWRNNI  223
AAO46232/A     191 HVCVTGDDKNATASFIYDGRLVDS-IGSWSQNI  222
AAO46822/A     192 TIGISGPDNGAVAVLKYNGIITDT-IKSWRNNI  223
AAO62036/A     192 HVCMTGNDNDASAQIIYAGKMTDS-IKSWRRDI  223
AAO62041/A     192 TIGISGPDNGAVAVLKYNGIITDT-IKNWRNNI  223
AAO62044/A     191 TIGITGPDATAVAVLKYNGIITDT-LKSWKGNI  222
AAO62064/A     192 SICMSGPNNNASAVVWYGGRPATE-IPSWAGNI  223
AAT08005/A     190 TIGVTGPDAKAVAVVHYGGIPTDV-INSWAGDI  221
AAT37407/A     192 HVCMTGNDNDASGQIIYAGRMTDS-IKSWRKDI  223
AAT37414/A     192 HVCVTGNDNDATAQIIYAGKMRDS-IKSWRKNI  223
AAT65406/A     192 SICMSGPNNNASAVVWYNGRPVTE-IASWAGNI  223
AAX78821/A     191 HICVTGDDRNATASFIYDGRLVDS-IGSWSQNI  222
AAY52584/A     191 HVCVTGDDRNATASIIYDGILVDS-IGSWSKNI  222
AAY87411/A     191 HVCVTGDDRNATASLIYDGRLVDS-IGSWSQNI  222
ABB17695/A     189 AIGISGADDDAYAVIHYGGMPTDV-VRSWRKQI  220
ABB19439/A     192 SICMSGPNNNASAVVWYNGRPVTE-IASWAGNI  223
ABB19610/A     192 TIGISGPDNGAVAVLKYNGIITDT-IKSWRNNI  223
ABB19747/A     189 AVGVSGADDDAYAVIHYGGMPTDV-VRSWRKQI  220
ABB19914/A     191 TLGITGPDATAVAVLKYNGIITDT-LKSWKGNI  222
ABB20088/A     191 TLGITGPDATAVAVLKYNGIITDT-LKSWKGNI  222
ABB20104/A     190 TICVQGNNDNATATVYYDRRLTTT-IKTWAGNI  221
ABB20243/A     193 SICVSGPNNNASAVVWYNGRPITE-INTWARNI  224
ABB20375/A     192 SICMSGPNNNASAVVWYGGRPVTE-IPSWAGNI  223
ABB20475/A     191 HVCVTGDDRNATASLIYDGRLVDS-IGSWSQNI  222
ABB20501/A     189 TICVQGNNENATATVYYNKRLTTT-IKTWAKNI  220
ABB21754/A     193 SICVSGPNNNASAVIWYNGRPTTE-INTWARNI  224
ABB87198/A     189 AVGISGADDDAYAVIHYGGVPTDV-VRSWRKQI  220
ABB87732/A     191 TLGITGPDATAVAVLKYNGIITDT-LKSWKGNI  222
ABB87959/A     190 TICVQGNNDNATATVYYDRRLTTT-IKTWARNI  221
ABB88058/A     192 HVCMTGNDNDASAQIIYAGRMTDS-IKSWRKDI  223
ABB88351/A     192 SICMSGPNNNASAVVWYGGRPVTE-IPSWAGNI  223
ABC02269/A     191 HVCVTGYDKNATASFIYDGRLVDS-IGSWSQNI  222
ABF47958/A     176 TIGISGPDDGAVAVLKYNGIITET-IKSWRKNI  207
ABG37189/A     191 HVCVTGHDENATASFIYDGRLVDS-IGSWSKNI  222
ABH04381/A     192 HVCMTGNDNDASAQIIYAGRMTDS-IKSWRKDI  223
ABI30359/A     191 HVCVTGDDRNATASFIYDGMLVDS-ISSWSQNI  222
ABI84399/A     192 HVCITGNDNDATAQIIYAGTMRDS-IKSWRRNI  223
ABI84436/A     189 AVGISGADDDAYAVIHYGGMPTDV-VRSWRKQI  220
ABI84475/A     191 TLGITGPDTTAVAVLKYNGVITDT-LKSWKGNI  222
ABI84973/A     192 HVCMTGNDNDASAQIIYAGKMTDS-IKSWRRDI  223
ABI84982/A     191 TICIQGNNDNATATVYYNRRLTTT-IKTWAKNI  222
ABI92217/A     192 SICMSGPNNNASAVVWYNGRPVTE-IASWAGNI  223
ABJ09099/A     190 TIGVTGPDAKAVAVVHYGGIPTDV-INSWAGDI  221
ABK32099/A     191 TLGITGPDSTAVAVIKYNGIITDT-LKSWKGNI  222
ABP49198/A     193 SICISGPNNNASAVIWYNRRPVTE-INTWARNI  224
ABP49253/A     193 SICISGPNNNASAVIWYNRRPVTE-INTWARNI  224
ABQ97208/A     191 HVCITGHDKNATASFIYDGRLVDS-IVSWSKNI  222
ABR28683/A     192 TIGISGPDNGAVAVLKYNGIITDT-IKSWRSKI  223
ABR37723/A     193 SICVSGPNNNASAVIWYNGRPTTE-INTWARNI  224
ABS50124/A     192 TIGISGPDNGAVAVLKYNGIITDT-IKSWRNKI  223
ABS89357/A     191 TICVQGNNDNATATVYYNRRLTTT-IKTWARNI  222
ABU95382/A     192 TIGISGPDNGAVAVLKYNGIITDT-IKSWRNDI  223
ABV25648/A     192 TIGISGPDNGAVAVLKYNGIITDT-IKSWRNKI  223
ABV29593/A     192 TIGISGPDNGAVAVLKYNGIITDT-IKSWRNNI  223
ABV82576/A     192 TIGISGPDNGAVAVLKYNGIITDT-IKSWRNKI  223
ABV82587/A     192 TIGISGPDNGAVAVLKYNGIITDT-IKSWRNKI  223
ABW95951/A     172 TIGISGPDNGAVAVLKYNGIITDT-IKSWRNNI  203
ABX88802/A     191 HVCVTGDDRNATASFIYDGMLVDS-IGSWSQNI  222
ABY84687/A     192 TIGISGPDNGAVAVLKYNGIITDT-IKSWRNKI  223
ACA04655/A     192 SICMSGPNNNASAVVWYGGRPVTE-IPSWAGNI  223
ACA04738/A     191 IICIQGNNDNATATVYYNRRLTTT-IKPWARNI  222
ACA04739/A     190 TVGVTGPDSKAVAVIHYGGVPTDV-INSWAGDI  221
ACA04740/A     193 SICISGPNNNASAVIWYNRRPVTE-INTWARNI  224
ACA14299/A     191 HVCVTGDDRNATASFIYNGMLIDS-IVSWSQNI  222
ACB70583/A     172 TIGISGPDNGAVAVLKYNGIITDT-IKSWGNNI  203
ACD47117/A     191 HVCVTGDDGNATASIIYDGMLTDS-IGSWSKSI  222
ACD65204/A     192 TIGISGPDNGAVAVLKYNGIITDT-IKSWRNKI  223
ACD76864/A     191 HVCVTGDDRNATASFIYDGVLVDS-IGSWSQNI  222
ACD85421/A     190 TVGVTGPDAQAVAVVHYGGVPVDV-INSWAGDI  221
ACE73320/A     191 TLGITGPDATAVAVLKYNGIITDT-LKSWKGNI  222
ACE76594/A     191 HVCVTGDDKNATASFIYDGMLVDS-IGSWSQNI  222
ACE78976/A     191 SICMSGPNNNASAVVWYGGRPVTE-IPSWAGNI  222
ACE78981/A     191 SICISGPNNNASAVVWYEGRPVTE-IPSWAGNI  222
ACF20219/A     190 TICVQGNNDNATATVYYDRRLTTT-IKTWAGNI  221
ACF25054/A     191 HVCVTGDDRNATASFIYDGMLVDS-IGSWSQNI  222
ACF25354/A     190 TICVQGNNDNATATVYYDRRLTTT-IKTWAGNI  221
ACF33655/A     192 HVCMTGNDNDASAQIIYAGRMTDS-IKSWRKDI  223
ACF36500/A     191 HVCVTGDDENATASFIYNGRLVDS-VVSWSKKI  222
ACF93490/A     190 TVGVTGPDNQAIAVVNYGGVPIDI-INSWAGDI  221
ACI41114/A     192 HVCMTGNDNDASAQIIYAGRMTDS-IKSWRKDI  223
ACI48786/A     190 TVGVTGPDNQAIAVVNYGGVPVDI-INSWAWDI  221
ACN65661/A     191 TICIQGNNDNATATVYYNRRLTTT-IKTWARNI  222
ACO24985/A     191 TIGISGPDNGAVAVLKYNGIITDT-IKSWRNNI  222
ACP50710/A     191 HVCITGDDRNATASIIYDGMITDS-IGSWSNNI  222
ACQ73415/A     189 TICVQGDNENATATVYYNKRLTTT-IKTWAKNI  220
ACR66907/A     192 HVCMTGNDNDASGQIMYAGKMTDS-IKSWRKDI  223
ACR83968/A     192 TIGISGPDNGAVAVLKYNGIITDT-IKSWRKNI  223
ACS68311/A     193 SICISGPNNNASAVIWYNRRPVTE-INTWARNI  224
ACS92897/A     191 HVCITGDDKNATASFIYNGRLVDS-IGSWSKNI  222
ACT67761/A     191 HVCITGDDKNATASFIYNGRLVDS-VVSWSKEI  222
ACT97062/A     190 TVGVTGPDSKAVAVVHYGGVPTDV-INSWAGDI  221
ACV41710/A     190 TIGVTGPDAKAVAVVHYGGIPTDV-INSWAGDI  221
ADA71169/A     192 TIGISGPDNGAVAVLKYKGIITGT-IKSWKKQI  223
ADK70163/A     191 TLGITGPDSTAVAVIKYNGIITDT-FKSWKGNI  222
ADU17627/A     193 SICISGPNNNASAVIWYNRRPVTE-INTWARNI  224
ADU20276/A     189 AVGISGADDDAYAVIHYGGMPTDV-VRSWRKQI  220
ADU20397/A     192 HVCMTGNDNDASAQIIYGGRMTDS-IKSWRKDI  223
ADU53220/A     191 TLGITGPDATAVAVLKYNGIITDT-LKSWKGNI  222
AEB89856/A     193 SICISGPNNNASAVVWYNRRPVAE-INTWARNI  224
AEB89867/A     190 TVGVTGPDSKAVAVVHYGGVPTDV-INSWAGDI  221
AEK50939/A     192 SICMSGPNNNASAVVWYNGRPVTE-IASWAGNI  223
AEK50961/A     190 TICVQGNNDNATATVYYDRRLTTT-IKTWAGNI  221
BAA06132/A     191 HVCVTGDDKNATASFIYNGRLVDS-IGSWSQNI  222
BAA06718/A     192 TIGISGPDDGAVAVLKYNGIITET-IKSWRKRI  223
BAF03532/A     188 AIGVSGADDDAYAVIHYGGVPTDV-VRSWRKQI  219
BAF03569/A     188 AIGVSGADDDAYAVIHYGGVPTDV-VRSWRKQI  219
BAF34378/A     191 HVCVTGDDRNATASFIYNGMLVDS-IGSWSQNI  222
BAF34925/A     191 HVCVTGDDRNATASFIYDGMLVDS-IGSWSQNI  222
BAF43417/A     189 AVGISGADDDAYAVIHYGGMPTDV-VRSWRKQI  220
BAF43457/A     190 TIGVTGPDSKAVAVVHYGGVPTDV-VNSWAGDI  221
BAF43461/A     188 AIGVSGADDDAYAVIHYGGVPTDV-VRSWRKQI  219
BAF46763/A     192 HVCMTGNDNDASAQIIYAGRMTDS-IKSWRRDI  223
BAF46905/A     192 SICMSGPNNNASAVVWYGGRPVTE-IPSWAGNI  223
BAF48640/A     191 HVCITGDDRNATASFIYDGMLVDS-IGSWSQNI  222
BAF48644/A     192 HVCMTGNDNDASAQIIYAGKMTDS-IKSWRRDI  223
BAF48646/A     191 TICIQGNNDNATATVYYNRRLTTT-IKTWARNI  222
BAF63047/A     192 TIGISGPDNGAVAVLKYNGIITET-IKSWKKRI  223
BAG66251/A     190 IIGVTGPDAKAVAVVHYGGIPTDV-INSWAGDI  221
BAG66259/A     192 HVCMTGNDNDASAQIIYAGR-MTDSIKSWRKDI  223
BAG66279/A     190 TIGVTGSDSKAVAVVHYGGVPTDV-VNSWAGDI  221
BAH02172/A     191 HVCVTGDDKNATASFIYNGRLVDS-IGSWSQNI  222
BAH70320/A     191 TICIQGNNDNATATVYYNGRLTTT-IKTWARNI  222
BAI39637/A     172 TIGISGPDNGAVAVVKYNGIITDT-IKSWRNNI  203
BAI48894/A     192 TIGISGPDTGAVAVLKYNGIITDT-IKSWRNNI  223
BAI50030/A     192 HVCMTGNDNDASGQIIYAGKMTGS-IKSWRKDI  223
BAJ07979/A     188 AIGVSGADDDAYAVIHYGGIPTDV-VRSWRKQI  219
BAJ10562/A     192 SICMSGPNNNASAVVWYGGRPVTE-IPSWAGNI  223
CAA36475/A     170 TIGISGPDNGAVAVLKYNGIITDT-IKSWKNNI  201
CAC36997/A     191 HVCVTGDDKNATASFIYDGRLVDS-IGSWSQNI  222
CAD57252/A     192 TIGISGPDNGAVAVLKYNGIITET-IKSWKKRI  223
CAO82694/A     203 TIGISGPDNGAVAVLKYNGIITDT-IKSWRSNI  234
CAP69845/A     191 TLGITGPDSTAVAVIKYNGIITDT-LKSWKGNI  222

cons           727  : : \* :  \*   . \*           :   \*  759

AAA43735/B     222 LRTQESACNCIGGDCYLMITDGSASGISKCRFL  254
AAA43743/B     222 LRTQESACNCIGGDCYLMITDGSASGISKCRFL  254
AAA43749/B     222 LRTQESACNCIGGDCYLMITDGSASGISKCRFL  254

AAU94779/B     222 LRTQESACNCIGGDCYLMITDGSASGISECRFL  254

ABL84344/B     222 LRTQESACNCIGGDCYLMITDGSASGVSECRFL  254
ABO72374/B     222 LRTQESACNCIGGNCYLMITDGSASGISECRFL  254

ABQ81846/B     222 LRTQESACNCIGGDCYLMITDGSASGISKCRFL  254

ACU12759/B     222 LRTQESACNCIGGNCYLMITDGSASGVSECRFL  254

BAB32609/B     222 LRTQESACNCIGGDCYLMITDGSASGISKCRFL  254
AAA43093/A     221 LRTQESECVCHNSTCVVVMTDGPANNQAFTKVI  253
AAA43429/A     222 LRTQESSCTCIKGDCYWVMTDGPANRQAQYKIF  254
AAA43449/A     224 LRTQESECVCVNGSCFTIMTDGPSDGPASYRIF  256
AAA43575/A     225 LRTQESECVCQNGVCPVVFTDGSATGPAETRIY  257
AAD49005/A     223 LRTQESECVCINGTCTVVMTDGSASGRADTRIL  255
AAD49007/A     223 LRTQESECVCINGTCTVVMTDGSASGRADTRIL  255
AAF77036/A     224 LRTQESECACVNGSCFTIMTDGPSNGQASYKIL  256
AAO46232/A     223 LRTQESECVCINGTCTVVMTDGSASGRADTRIL  255
AAO46822/A     224 LRTQESECACVNGSCFTVMTDGPSNGQASYKIF  256
AAO62036/A     224 LRTQESECQCIDGTCVVAVTDGPAANSADHRVY  256
AAO62041/A     224 LRTQESECACVNGSCFTVMTDGPSNGQASYKIF  256
AAO62044/A     223 MRTQESECVCQDEFCYTLITDGPSDAQAFYKIL  255
AAO62064/A     224 LRTQESECVCHNGVCPVVMTDGPANNRAATKII  256
AAT08005/A     222 LRTQESSCTCIQGECYWVMTDGPANRQAQYRAF  254
AAT37407/A     224 LRTQESECQCIDGTCVVAVTDGPAANSADHRIY  256
AAT37414/A     224 LRTQESECQCLYGTCVVAVTDGPADNKADHRVY  256
AAT65406/A     224 LRTQESECVCHNGICPVVMTDGPANNRAETKII  256
AAX78821/A     223 LRTQESECVCINGTCTVVMTDGSASGRADTRIL  255
AAY52584/A     223 LRTQESECVCINGTCAVVMTDGSASGRADTRIL  255
AAY87411/A     223 LRTQESECVCINGTCTVVMTDGSASGKADTRIL  255
ABB17695/A     221 LRTQESSCVCMNGDCYWVMTDGPANNQASYKIF  253
ABB19439/A     224 LRTQESECVCHNGICPVVMTDGPANNRAETKII  256
ABB19610/A     224 LRTQESECACINGSCFTIMTDGPSNGQASYKIF  256
ABB19747/A     221 LRTQESSCVCMKGNCYWVMTDGPANNQASYKIF  253
ABB19914/A     223 MRTQESECVCQDEFCYTLITDGPSDAQAFYKIL  255
ABB20088/A     223 MRTQESECVCQDEFCYTLITDGPSDAQAFYKIL  255
ABB20104/A     222 LRTQESECVCHNGTCVAVMTDGSASSQAYTKVL  254
ABB20243/A     225 LRTQESECVCHNGICPVVFTDGSATGPAETRIY  257
ABB20375/A     224 LRTQESECVCHNGVCPVVMTDGPANNRAATKVI  256
ABB20475/A     223 LRTQESECVCINGTCTVVMTDGSASGRADTRIL  255
ABB20501/A     221 LRTQESECVCHNSTCVVVMTDGPANNQAFTKVI  253
ABB21754/A     225 LRTQESECVCHNGICPVVFTDGSATGPAETRIY  257
ABB87198/A     221 LRTQESSCVCMKGNCYWVMTDGPANNQASYKIF  253
ABB87732/A     223 MRTQESECVCQDEFCYTLITDGPSDAQAFYKIL  255
ABB87959/A     222 LRTQESECVCHNGTCVVVMTDGSASSQAHTKVL  254
ABB88058/A     224 LRTQESECQCISGTCVVAVTDGPAANSADHRVY  256
ABB88351/A     224 LRTQESECVCHKGVCPVVMTDGPANNRAATKII  256
ABC02269/A     223 LRTQESECVCINGTCTVVMTDGSASGRADTKIL  255
ABF47958/A     208 LRTQESECTCVNGSCFTIMTDGPSDGLASYKIF  240
ABG37189/A     223 LRTQESECVCINGTCTVVMTDGSASGRADTKIL  255
ABH04381/A     224 LRTQESECQCIGGTCVVAVTDGPAANSADHRVY  256
ABI30359/A     223 LRTQESECVCINGTCTVVMTDGSASGKADTRIL  255
ABI84399/A     224 LRTQESECQCLHGTCVVAVTDGPADNKADHRVY  256
ABI84436/A     221 LRTQESSCVCMNGNCYWVMTDGPANKQASYKIF  253
ABI84475/A     223 MRTQESECVCQDEFCYTLVTDGPSDAQAFYKIL  255
ABI84973/A     224 LRTQESECQCIDGTCVVAVTDGPAANSADHRVY  256
ABI84982/A     223 LRTQESECVCHNGTCAVVMTDGPASSQAYTKIM  255
ABI92217/A     224 LRTQESECVCHNGICPVVMTDGPANNRAETKII  256
ABJ09099/A     222 LRTQESSCTCIQGECYWVMTDGPANRQAQYRAF  254
ABK32099/A     223 MRTQESECVCQDEFCYTLITDGPSDAQAFYKIL  255
ABP49198/A     225 LRTQESECVCHNGVCPVVFTDGSATGPAETRIY  257
ABP49253/A     225 LRTQESECVCHNGVCPVVFTDGSATGPAETRVY  257
ABQ97208/A     223 LRTQESECVCINGTCTVVMTDGSASGRADTKIL  255
ABR28683/A     224 LRTQESECVCINGSCFTIMTDGPSNGQASYKIF  256
ABR37723/A     225 LRTQESECVCHNGICPVVFTDGSATGPAETRIY  257
ABS50124/A     224 LRTQESECVCINGSCFTIMTDGPSNGQASYKIF  256
ABS89357/A     223 LRTQESECVCHNGTCAVVMTDGSASSQAYTKVM  255
ABU95382/A     224 LRTQESECACINGSCFTIMTDGPSNGQASYKIF  256
ABV25648/A     224 LRTQESECVCINGSCFTIMTDGPSNGQASYKIF  256
ABV29593/A     224 LRTQESECACVNGSCFTVMTDGPSNGQASYKIF  256
ABV82576/A     224 LRTQESECVCINGSCFTIMTDGPSNGQASYKIF  256
ABV82587/A     224 LRTQESECVCINGSCFTIMTDGPSNGQASYKIF  256
ABW95951/A     204 LRTQESECACVNGSCFTVMTDGPSNGQASYKIF  236
ABX88802/A     223 LRTQESECVCINGTCTVVMTDGSASGRADTRIL  255
ABY84687/A     224 LRTQESECVCINGSCFTIMTDGPSNGQASYKIF  256
ACA04655/A     224 LRTQESECVCHKGICPVVMTDGPANNRAATKII  256
ACA04738/A     223 LRTQESECVCHNGTCAVVMTDGSASSQAYTKVM  255
ACA04739/A     222 LRTQESSCTCIQGDCYWVMTDGPANRQAQYRIY  254
ACA04740/A     225 LRTQESECVCHNGVCPVVFTDGSATGPAETRIY  257
ACA14299/A     223 LRTQESECVCINGTCTVVMTDGSASGRADTRVL  255
ACB70583/A     204 LRTQESECACVNGSCFTVMTDGPSNGQASHKIF  236
ACD47117/A     223 LRTQESECVCINGTCTVVMTDGSASGRADTRIL  255
ACD65204/A     224 LRTQESECVCINGSCFTIMTDGPSNGQASYKIF  256
ACD76864/A     223 LRTQESECVCISGTCAVVMTDGSASGKADTRIL  255
ACD85421/A     222 LRTQESSCTCIKGDCYWVMTDGPANRQAQYRIF  254
ACE73320/A     223 MRTQESECVCQDEFCYTLITDGPSDAQAFYKIL  255
ACE76594/A     223 LRTQESECVCINGTCTVVMTDGSASGRADTRIL  255
ACE78976/A     223 LRTQESECVCHKGICPVVMTDGPANNKAATKII  255
ACE78981/A     223 LRTQESECVCHKGICPVVMTDGPANNRAATKII  255
ACF20219/A     222 LRTQESECVCHNGTCVVIMTDGSASSQAYTKVL  254
ACF25054/A     223 LRTQESECVCINGTCTVVMTDGSASGRADTRIL  255
ACF25354/A     222 LRTQESECVCHNGTCVVIMTDGSASSQAHTKVL  254
ACF33655/A     224 LRTQESECQCIDGTCVVAVTDGPAANSADHRVY  256
ACF36500/A     223 LRTQESECVCINGTCTVVMTDGSASGKADTKIL  255
ACF93490/A     222 LRTQESSCTCIKGDCYWVMTDGPANRQAKYRIF  254
ACI41114/A     224 LRTQESECQCIDGTCVVAVTDGPAANSADHRVY  256
ACI48786/A     222 LRTQESSCTCIKGDCYWVMTDGPANRQAKYRIF  254
ACN65661/A     223 LRTQDSECVSHNGTWAVVMTDGSASSQAYTKIM  255
ACO24985/A     223 LRTQESECACVNGSCFTVMTDGPSNGQASYKIF  255
ACP50710/A     223 LRTQESECVCINGTCTVVMTDGSASGMADTRIL  255
ACQ73415/A     221 LRTQESECVCHNSTCVVVMTDGPANNQAFTKVI  253
ACR66907/A     224 LRTQESECQCIDGTCVVAVTDGPAANSADHRIY  256
ACR83968/A     224 LRTQESECACINGSCFTVMTDGPSNGQASYKVF  256
ACS68311/A     225 LRTQESECVCHNGVCPVVFTDGSATGPAETRVY  257
ACS92897/A     223 LRTQESECVCINGTCTVVMTDGSASGKADTKIL  255
ACT67761/A     223 LRTQESECVCINGTCTVVMTDGSASGKADTKIL  255
ACT97062/A     222 LRTQESSCTCIQGNCYWVMTDGPANRQAQYRIY  254
ACV41710/A     222 LRTQESSCTCIQGECYWVMTDGPANRQAQYRAF  254
ADA71169/A     224 LRTQESECVCINGSCFTIMTDGPSDGAASYKIF  256
ADK70163/A     223 MRTQESECVCQDEFCYTLITDGPSDAQAFYKIL  255
ADU17627/A     225 LRTQESECVCHNGVCPVVFTDGSATGPAETRVY  257
ADU20276/A     221 LRTQESSCVCVKGHCYWVMTDGPANNQASYKIF  253
ADU20397/A     224 LRTQESECQCIDGTCVVAVTDGPAANSADHRVY  256
ADU53220/A     223 MRTQESECVCQDEFCYTLITDGPSDAQAFYKIL  255
AEB89856/A     225 LRTQESECVCHNGVCPVVFTDGSATGPADTRIY  257
AEB89867/A     222 LRTQESSCTCIQGDCYWVMTDGPANRQAQYRIY  254
AEK50939/A     224 LRTQESECVCHNGICPVVMTDGPANNRAETKII  256
AEK50961/A     222 LRTQESECVCHNGTCVVIMTDGSASSQAYTKVL  254
BAA06132/A     223 LRTQESECVCINGTCTVVMTDGSASGRADTRIL  255
BAA06718/A     224 LRTQESECVCVNGSCFTIMTDGPNNGPASYRIF  256
BAF03532/A     220 LRTQESSCVCMKGECYWVMTDGPANNQASYKIF  252
BAF03569/A     220 LRTQESSCVCMKGECYWVMTDGPANNQASYKIF  252
BAF34378/A     223 LRTQESECVCINGICTVVMTDGSASGRADTRIL  255
BAF34925/A     223 LRTQESECVCINGTCTVVMTDGSASGRADTRIL  255
BAF43417/A     221 LRTQESSCVCMNGNCYWVMTDGPANSQASYKIF  253
BAF43457/A     222 LRTQESSCTCIQGNCYWVMTDGPANRQAQYRIY  254
BAF43461/A     220 LRTQESSCVCMKGECYWVMTDGPANNQASYKIF  252
BAF46763/A     224 LRTQESECQCIDGTCIVAVTDGPAANSADHRIY  256
BAF46905/A     224 LRTQESECVCHKGICPVVMTDGPANNRAATKII  256
BAF48640/A     223 LRTQESECVCINGTCTVVMTDGSASGRADTKIL  255
BAF48644/A     224 LRTQESECQCIDGTCIVAVTDGPAANSADHRIY  256
BAF48646/A     223 LRTQESECVCHNGTCAVVMTDGSASSQAYTKIM  255
BAF63047/A     224 LRTQESECVCVNGSCFTIMTDGPSNGAASYKIF  256
BAG66251/A     222 LRTQESSCTCIQGECYWVMTDGPANRQAQYRAF  254
BAG66259/A     224 LRTQESECQCIGGICVVAVTDGPAANSADHRVY  256
BAG66279/A     222 LRTQESSCTCIQGNCYWVMTDGPANRQAQYRIY  254
BAH02172/A     223 LRTQESECVCINGTCTVVMTDGSASGRADTRIL  255
BAH70320/A     223 LRTQESECVCHNGTCAVVMTDGSASSQAYTKVM  255
BAI39637/A     204 LRTQESECACVNGSCFTVMTDGPSNGQASYKIF  236
BAI48894/A     224 LRTQESECACVNGSCFTVMTDGPSNGQASYKIF  256
BAI50030/A     224 LRTQESECQCIDGTCVVAVTDGPAANSADHRIY  256
BAJ07979/A     220 LRTQESSCVCMKGECYWVMTDGPANNQASYKIF  252
BAJ10562/A     224 LRTQESECVCHRGICPVIMTDGPANNRAATKII  256
CAA36475/A     202 LRTQESECACINGSCFTIMTDGPSNGQASYKIF  234
CAC36997/A     223 LRTQESECVCINGTCTVVMTDGSASGRADTRIL  255
CAD57252/A     224 LRTQESECVCVNGSCFTIMTDGPSNGAASYKIF  256
CAO82694/A     235 LRTQESECACVNGSCFTVMTDGPSNGQASYKIF  267
CAP69845/A     223 MRTQESECVCQDEFCYTLITDGPSDAQAFYKIL  255

cons           760 :\*\*\*:\* \* .        .\*\*\*.    :  :    792

AAA43735/B     255 KIREGRII-KEI--FPAGRVEHTEECTCGFASN  284
AAA43743/B     255 KIREGRII-KEI--FPTGRVEHTEECTCGFASN  284
AAA43749/B     255 KIREGRII-KEI--LPTGRVEHTEECTCGFASN  284

AAU94779/B     255 KIREGRII-KEI--FPTGRVKHTEECTCGFASN  284

ABL84344/B     255 KIREGRII-KEI--FPTGRVEHTEECTCGFASN  284
ABO72374/B     255 KIREGRII-KEI--FPTGRVKHTEECTCGFASN  284

ABQ81846/B     255 KIREGRII-KEI--FPTGRVEHTEECTCGFASN  284

ACU12759/B     255 KIREGRII-KEI--FPTGRVKHTEECTCGFASN  284

BAB32609/B     255 KIREGRII-KEI--FPTGRVEHTEECTCGFASN  284
AAA43093/A     254 YFHKGMII-KEE--SLKGSAKHIEECSCYGHN-  282
AAA43429/A     255 KAKDGRII-GQT--DVNFNGGHIEECSCYPNE-  283
AAA43449/A     257 KIEKGKIT-KSI--ELDAPNSHYEECSCYPDT-  285
AAA43575/A     258 YFKEGKIL-KWE--PLTGTAKHIEECSCYGEQ-  286
AAD49005/A     256 FIREGKIV-HIS--PLSGSAQHIEECSCYPRY-  284
AAD49007/A     256 FIREGKIV-HIS--PLSGSAQHVEECSCYPRY-  284
AAF77036/A     257 KIEKGKVT-KSI--ELNAPNYHYEECSCYPDT-  285
AAO46232/A     256 FIEEGKIV-HIS--PLSGSAQHVEECSCYPRY-  284
AAO46822/A     257 KMEKGKVV-KSV--ELDAPNYHYEECSCYPDA-  285
AAO62036/A     257 WIREGKVI-KYENIPKT-KIQHLEECSCYVDI-  286
AAO62041/A     257 KIEKGKVV-KSV--ELNAPNYHYEECSCYPDA-  285
AAO62044/A     256 KIKKGKIV-SVK--DVDAPGFHFEECSCYPSG-  284
AAO62064/A     257 YFKEGKIQ-KIE--ELTGSAQHIEECSCYGAK-  285
AAT08005/A     255 KAKQGKII-GQT--EISFNGGHIEECSCYPNE-  283
AAT37407/A     257 WIREGKVI-KYENIPKT-KIQHLEECSCYVDI-  286
AAT37414/A     257 WIREGRIIKHEK-VPDD-KIQHLEECSCYTDV-  286
AAT65406/A     257 YFKEGKIQ-KIE--ELTGSAQHIEECSCYGAE-  285
AAX78821/A     256 FIKEGKIV-HIS--PLSGSAQHIEECSCYPRY-  284
AAY52584/A     256 FIREGKIA-HIS--PLSGSAQHVEECSCYPRY-  284
AAY87411/A     256 FIKEGKIV-HVS--PLSGSAQHIEECSCYPRY-  284
ABB17695/A     254 KSHEGMVI-NER--EVSFQGGHIEECSCYPNL-  282
ABB19439/A     257 YFKEGKIQ-KVE--ELTGSAQHIEECSCYGAE-  285
ABB19610/A     257 KIEKGKVI-KSV--ELNAPNYHYEECSCYPDA-  285
ABB19747/A     254 KSHKGIVI-NER--EVSFQGGHIEECSCYPNL-  282
ABB19914/A     256 KIRKGKIV-SMK--DVDATGFHFEECSCYPSG-  284
ABB20088/A     256 KIRKGKIV-SME--DVDATGFHFEECSCYPSG-  284
ABB20104/A     255 YFHKGLII-KEE--ALKGSARHIEECSCYGHD-  283
ABB20243/A     258 YFKEGKIL-KWE--PLTGTAKHIEECSCYGKD-  286
ABB20375/A     257 YFKEGKIQ-KIE--ELTGSAQHIEECSCYGAK-  285
ABB20475/A     256 FIKEGKIV-HVS--PLSGSAQHIEECSCYPRY-  284
ABB20501/A     254 YFHKGTII-KEE--PLKGSAKHIEECSCYGHN-  282
ABB21754/A     258 YFKEGRIL-KWE--PLTGTAKHIEECSCYGKD-  286
ABB87198/A     254 KSHKGMVT-NER--EVSFQGGHIEECSCYPNL-  282
ABB87732/A     256 KIRKGKIV-SVK--DVDATGFHFEECSCYPSG-  284
ABB87959/A     255 YFHKGLII-KEE--ALQGSARHIEECSCYGHD-  283
ABB88058/A     257 WIREGRIVKHEN-IPKT-KIQHLEECSCYVDI-  286
ABB88351/A     257 YFKEGKIQ-KIE--ELTGNAQHIEECSCYGAV-  285
ABC02269/A     256 FIEEGKIV-HTS--PLSGSAQHVEECSCYPRY-  284
ABF47958/A     241 KIEKGKVT-KSI--ELNAPNSHYEECSCYPDT-  269
ABG37189/A     256 FIEEGKIV-HIS--SLSGSAQHVEECSCYPRY-  284
ABH04381/A     257 WIREGRIV-KYENVPKT-KIQHLEECSCYVDI-  286
ABI30359/A     256 FIKEGKIV-HIS--PLSGSAQHIEECSCYPRY-  284
ABI84399/A     257 WIREGKIIKHEK-IPDD-KIQHLEECSCYTDV-  286
ABI84436/A     254 KSREGMVT-NER--EVSFQGGHIEECSCYPNL-  282
ABI84475/A     256 KIKKGKIV-GAK--DVDATGFHFEECSCYPSG-  284
ABI84973/A     257 WIREGKVI-KYENVPKT-KIQHLEECSCYVDT-  286
ABI84982/A     256 YFHKGLII-KEE--PLRGSARHIEECSCYGHD-  284
ABI92217/A     257 YFKEGKIQ-KIE--ELTGSAQHIEECSCYGAE-  285
ABJ09099/A     255 KAKQGKII-GQT--EISFNGGHIEECSCYPNE-  283
ABK32099/A     256 KIRKGKIM-GVK--DVDATGFHFEECSCYPSG-  284
ABP49198/A     258 YFKEGKIL-KWE--PLTGTAKHIEECSCYGEQ-  286
ABP49253/A     258 YFKEGKIL-KWE--PLTGTAKHIEECSCYGEQ-  286
ABQ97208/A     256 FIEEGKIV-HIS--PLSGSAQHVEECSCYPRY-  284
ABR28683/A     257 KMEKGRII-KSI--ELDAPNYHYEECSCYPDT-  285
ABR37723/A     258 YFKEGRIL-KWE--PLTGTAKHIEECSCYGKD-  286
ABS50124/A     257 KMEKGKII-KSV--ELDAPNYHYEECSCYPDT-  285
ABS89357/A     256 YFHKGLVI-KEE--PLKGSAKHIEECSCYGHN-  284
ABU95382/A     257 KIEKGKVV-KSV--ELNAPNYHYEECSCYPDA-  285
ABV25648/A     257 KMEKGKII-KSV--ELDAPNYHYEECSCYPDT-  285
ABV29593/A     257 KIEKGKVV-KSV--ELNAPNYHYEECSCYPDS-  285
ABV82576/A     257 KMEKGRII-KSI--ELDAPNYHYEECSCYPDT-  285
ABV82587/A     257 KMEKGRII-KSI--ELDAPNYHYEECSCYPDT-  285
ABW95951/A     237 KMEKGKVV-KSV--ELDAPNYHYEECSCYPDA-  265
ABX88802/A     256 FIKEGKII-HIS--SLSGSAQHIEECSCYPRY-  284
ABY84687/A     257 KMEKGKII-KSV--ELDAPNYHYEECSCYPDT-  285
ACA04655/A     257 YFKEGKIQ-KIE--ELAGNAQHIEECSCYGAV-  285
ACA04738/A     256 YFHKGLVI-KEE--PLKGSAKHIEECSCYGHN-  284
ACA04739/A     255 KANQGRII-DQA--DISFNGGHIEECSCYPND-  283
ACA04740/A     258 YFKEGKTL-KWE--PLTGTAKHIEECSSYGER-  286
ACA14299/A     256 FFKEGKII-HIS--PLSGSAQHIEECSCYPRY-  284
ACB70583/A     237 KMEKGKVI-KSV--ELDAPNYHYEECSCYPDA-  265
ACD47117/A     256 FIREGKIV-HSS--PLSGSAQHVEECSCYPRY-  284
ACD65204/A     257 KMEKGKII-KSV--ELDAPNYHYEECSCYPDT-  285
ACD76864/A     256 FIKEGKIV-HIS--PLSGSAQHIEECSCYPRY-  284
ACD85421/A     255 KAKDGRII-GQT--DVNFNGGHIEECSCYPNE-  283
ACE73320/A     256 KIRKGKIV-SMK--DVDATGFHFEECSCYPSG-  284
ACE76594/A     256 FIKEGKII-HIS--PLSGSAQHIEECSCYPRY-  284
ACE78976/A     256 YFKEGKIQ-KIE--ELTGNAQHIEECSCYGAK-  284
ACE78981/A     256 YFKEGKIQ-KIE--ELAGNAQHIEECSCYGAV-  284
ACF20219/A     255 YFHKGLVI-KEE--ALKGSARHVEECSCYGHN-  283
ACF25054/A     256 FIREGKIV-HIS--PLSGSAQHIEECSCYPRY-  284
ACF25354/A     255 YFHKGLVI-KEE--ALKGSARHIEECSCYGHN-  283
ACF33655/A     257 WIREGRII-KYENVPKT-KIQHLEECSCYVDI-  286
ACF36500/A     256 FIEEGKIV-HTS--TLSGSAQHVEECSCYPRY-  284
ACF93490/A     255 KAKDGRII-GQT--DISFNGGHIEECSCYPNE-  283
ACI41114/A     257 WIREGRII-KYENVPKT-KIQHLEECSCYVDI-  286
ACI48786/A     255 KAKDGRII-GQT--DISFNGGHIEECSCYPNE-  283
ACN65661/A     256 YFHKGLVV-KEE--ALKGSARHIEECSCYGHS-  284
ACO24985/A     256 KIEKGKVV-KSV--ELNAPNYHYEECSCYPDA-  284
ACP50710/A     256 FIREGRIV-HIS--PLSGSAQHVEECSCYPRY-  284
ACQ73415/A     254 YFHKGMII-KEE--SLKGSAKHIEECSCYGHN-  282
ACR66907/A     257 WIREGRVI-KYENIPKT-KIQHLEECSCYVDI-  286
ACR83968/A     257 KIERGKVV-KSV--ELNAPNYHYEECSCYPES-  285
ACS68311/A     258 YFKEGKII-KWE--PLTGTAKHIEECSCYGEQ-  286
ACS92897/A     256 FIEEGKIV-HIS--TLSGSAQHVEECSCYPRY-  284
ACT67761/A     256 FIEEGKIV-HTS--TLSGSAQHVEECSCYPRY-  284
ACT97062/A     255 KANQGRIV-GQI--DVNFNGGHIEECSCYPND-  283
ACV41710/A     255 KAKQGKIV-GQI--EISFNGGHIEECSCYPNE-  283
ADA71169/A     257 KIEKGKVT-KSM--ELNAPNFHYEECSCYPDT-  285
ADK70163/A     256 KIRKGKIM-SVK--DVDATGFHFEECSCYPSG-  284
ADU17627/A     258 YFKEGKIL-KWE--PLTGTAKHIEECSCYGVQ-  286
ADU20276/A     254 KSHKGMVT-NER--EVSFQGGHIEECSCYPNL-  282
ADU20397/A     257 WIREGRII-KYENVPKT-KIQHLEECSCYVDI-  286
ADU53220/A     256 KIRKGKIV-SMK--DVDATGFHFEECSCYPSG-  284
AEB89856/A     258 YFKEGKIL-KWE--SLTGTAKHIEECSCYGER-  286
AEB89867/A     255 KANQGKII-GQT--DVNFNGGHIEECSCYPND-  283
AEK50939/A     257 YFKEGKIQ-KIE--ELTGSAQHIEECSCYGAE-  285
AEK50961/A     255 YFHKGLVI-KEE--ALKGSARHIEECSCYGHN-  283
BAA06132/A     256 FIEEGKIV-HIS--PLSGSAQHVEECSCYPRY-  284
BAA06718/A     257 KIEKGKIT-KSI--ELDAPNSHYEECSCYPDA-  285
BAF03532/A     253 KSQKGLVV-DEK--EISFQGGHIEECSCYPNM-  281
BAF03569/A     253 KSQKGLVV-NEK--EISFQGGHIEECSCYPNM-  281
BAF34378/A     256 FIREGKIV-HIS--PLSGSAQHIEECSCYPRY-  284
BAF34925/A     256 FIREGKIV-HIS--PLSGSAQHIEECSCYPRY-  284
BAF43417/A     254 KSHEGMVT-NER--EVSFQGGHIEECSCYPNL-  282
BAF43457/A     255 KANQGKIV-GQT--DVSFNGGHIEECSCYPND-  283
BAF43461/A     253 KSQKGLVV-NEK--EISFQGGHIEECSCYPNM-  281
BAF46763/A     257 WIREGKVI-KYENVPKT-KIQHLEECSCYVDT-  286
BAF46905/A     257 YFKEGKIQ-KIE--ELAGNAQHIEECSCYGAV-  285
BAF48640/A     256 FVREGKIV-HIS--PLSGSAQHIEECSCYPRY-  284
BAF48644/A     257 WIREGKVI-KYENVPKT-KIQHLEECSCYVDN-  286
BAF48646/A     256 YFHKGLVV-KEE--ALKGSARHIEECSCYGHS-  284
BAF63047/A     257 KIEKGKVT-KSI--ELNAPNFHYEECSCYPDT-  285
BAG66251/A     255 KAKQGKII-GQT--EISFNGGHIEECSCYPNE-  283
BAG66259/A     257 WIREGRVM-KYENVPKT-KIQHLEECSCYVDI-  286
BAG66279/A     255 KANQGKVV-GQT--DISFNGGHIEECSCYPND-  283
BAH02172/A     256 FIEEGKIV-HIS--PLSGSAQHVEECSCYPRY-  284
BAH70320/A     256 YFHKGLVV-KEE--ALKGSARHIEECSCYGHS-  284
BAI39637/A     237 KMEKGKVI-KSV--ELDAPNYHYEECSCYPDA-  265
BAI48894/A     257 KIEKGKVV-KSV--ELNAPNYHYEECSCYPDA-  285
BAI50030/A     257 WIREGKVV-KYENIPKT-KIQHLEECSCYVDI-  286
BAJ07979/A     253 KSQKGLVV-DEK--EISFQGGHIEECSCYPNM-  281
BAJ10562/A     257 YFREGKIQ-KIE--ELTGNAQHIEECSCYGAA-  285
CAA36475/A     235 KIEKGKVV-KSS--ELNAPNYHYEECSCYPDA-  263
CAC36997/A     256 FIEEGKIV-HIS--PLSGSAQHVEECSCYPRY-  284
CAD57252/A     257 KIEKGKVT-KSI--ELNAPNFHYEECSCYPDT-  285
CAO82694/A     268 KIERGKVV-KSV--ELNAPNYHYEECSCYPES-  296
CAP69845/A     256 KIRKGKIM-GVK--DVDATGFHFEECSCYPSG-  284

cons           793   . \*                \* \*\*\*:.       825

AAA43735/B     285 KTIECACRDNSYTAKRPFVKLNVET-DTAEIR-  315
AAA43743/B     285 KTIECACRDNSYTAKRPFVKLNVET-DTAEIR-  315
AAA43749/B     285 KTIECACRDNSYTAKRPFVKLNVET-DTAEIR-  315

AAU94779/B     285 KTIECACRDNSYTAKRPFVKLNVET-DTAEIR-  315

ABL84344/B     285 KTIECACRDNSYTAKRPFVKLNVET-DTAEIR-  315
ABO72374/B     285 KTIECACRDNSYTAKRPFVKLNVET-DTAEIR-  315
ABQ81846/B     285 KTIECACRDNSYTAKRPFVKLNVET-DTAEIR-  315

ACU12759/B     285 KTIECACRDNSYTAKRPFVKLNVET-DTAEIR-  315

BAB32609/B     285 KTIECACRDNSYTAKRPFVKLNVET-DTAEIR-  315
AAA43093/A     283 QRVTCVCRDNWQGANRPIIEIDMN-KLEHTSR-  313
AAA43429/A     284 GKVECVCRDNWTGTNRPVLVISP-D-LSYTVG-  313
AAA43449/A     286 GTVMCVCRDNWHGSNRPWVSFNQ-N-LDYQIG-  315
AAA43575/A     287 AGVTCTCRDNWQGSNRPVIQIDPV-AMTHTSQ-  317
AAD49005/A     285 PDVRCVCRDNWKGSNRPVIDINMT-DYSIDSS-  315
AAD49007/A     285 PEVRCVCRDNWKGSNRPVLYINMV-DYSIDSS-  315
AAF77036/A     286 GKVMCVCRDNWHGSNRPWVSFDQ-N-LDYQIG-  315
AAO46232/A     285 PDVRCICRDNWKGSNRPIIDINME-DYSIDSS-  315
AAO46822/A     286 GEITCVCRDNWHGSNRPWVSFNQ-N-LEYQIG-  315
AAO62036/A     287 D-VYCVCRDNWKGSNRPWMRIN--N-ETILETG  315
AAO62041/A     286 GEITCVCRDNWHGSNRPWVSFNQ-N-LEYQIG-  315
AAO62044/A     285 ENVECVCRDNWRGSNRPWIRFNS-D-LDYQIG-  314
AAO62064/A     286 SVIKCICRDNWKGANRPVITIDPE-MMTHTSK-  316
AAT08005/A     284 GKVECVCRDNWTGTNRPVLVISS-D-LSYRVG-  313
AAT37407/A     287 D-VYCICRDNWKGSNRPWMRIN--N-ETILETG  315
AAT37414/A     287 D-IYCICRDNWKGSNRPWMRINNET-I-LETG-  315
AAT65406/A     286 EVIKCICRDNWKGANRPVITINPT-TMTHTSK-  316
AAX78821/A     285 PDVRCICRDNWKGSNRPVIDINMA-DYSIDSS-  315
AAY52584/A     285 PEVRCVCRDNWKGSNRPVLYINMA-NYSIDSS-  315
AAY87411/A     285 PDVRCICRDNWKGSNRPVIDINMA-DYSIDSS-  315
ABB17695/A     283 GKVECVCRDNWNGMNRPILIFNE-D-LDYEVG-  312
ABB19439/A     286 EMIKCICRDNWKGANRPVITINPK-TMTHTSK-  316
ABB19610/A     286 SEVMCVCRDNWHGSNRPWVSFNQ-N-LDYQIG-  315
ABB19747/A     283 GKVECVCRDNWNGMNRPILIFDE-D-LSYNVG-  312
ABB19914/A     285 TDVECVCRDNWRGSNRPWIRFNS-D-LDYQIG-  314
ABB20088/A     285 TDIECVCRDNWRGSNRPWIRFNS-N-LDYQIG-  314
ABB20104/A     284 SKVTCVCRDNWQGANRPVIEIDMN-AMEHTSQ-  314
ABB20243/A     287 SEITCTCRDNWQGSNRPVIQIDPT-MMTHTSQ-  317
ABB20375/A     286 SVIKCICRDNWKGANRPVITIDPE-MMTHTSR-  316
ABB20475/A     285 PDVRCICRDNWKGSNRPVIDINMA-DYSIDSS-  315
ABB20501/A     283 QRVTCVCRDNWQGANRPVIEIDMN-NLEHTSR-  313
ABB21754/A     287 SEITCTCRDNWQGSNRPVIQINPT-TMTHTSQ-  317
ABB87198/A     283 GKVECVCRDNWNGMNRPILTFDE-D-LNYEVG-  312
ABB87732/A     285 TDVECVCRDNWRGSNRPWIRFNS-D-LDYQIG-  314
ABB87959/A     284 SKVTCVCRDNWQGANRPVIEIDMN-AMEHTSQ-  314
ABB88058/A     287 D-VYCICRDNWKGSNRPWMRIN--N-ETILETG  315
ABB88351/A     286 GVIKCICRDNWKGANRPVITIDPE-LMTHTSK-  316
ABC02269/A     285 PGVRCICRDNWKGSNRPVVDINVK-DYSIDSS-  315
ABF47958/A     270 GKVMCVCRDNWHGSNRPWVSFDQ-N-LDYKIG-  299
ABG37189/A     285 PGVRCVCRDNWKGSNRPIVDINVK-DYSIVSS-  315
ABH04381/A     287 D-VYCICRDNWKGSNRPWMRIN--N-ETILETG  315
ABI30359/A     285 PNVRCVCRDNWKGSNRPVIDINMA-DYSIDSS-  315
ABI84399/A     287 D-IYCICRDNWKGSNRPWMRINNET-I-LETG-  315
ABI84436/A     283 GKVECVCRDNWNGMNRPILVFDE-D-LDYEVG-  312
ABI84475/A     285 ENVECVCRDNWRGSNRPWIRFNS-D-LDYQIG-  314
ABI84973/A     287 D-VYCVCRDNWKGSNRPWMRIN--N-ETILETG  315
ABI84982/A     285 QKVSCVCRDNWQGANRPIIEIDMS-TLEHTSR-  315
ABI92217/A     286 EMIKCICRDNWKGANRPVITINPK-TMTHTSR-  316
ABJ09099/A     284 GKVECVCRDNWTGTNRPVLIISP-D-LSYRVG-  313
ABK32099/A     285 ENVECVCRDNWRGSNRPWIRFNS-D-LDYQIG-  314
ABP49198/A     287 AGITCTCRDNWQGSNRPVIQIDPM-AMTHTSQ-  317
ABP49253/A     287 ASITCTCRDNWQGSNRPVIQIDPI-AMTHTSQ-  317
ABQ97208/A     285 PGVRCVCRDNWKGSNRPIVDINVK-DYSIVSS-  315
ABR28683/A     286 GKVVCVCRDNWHASNRPWVSFDQ-N-LDYQIG-  315
ABR37723/A     287 SEITCTCRDNWQGSNRPVIQINPT-TMTHTSQ-  317
ABS50124/A     286 GKVVCVCRDNWHASNRPWVSFDQ-N-LDYQIG-  315
ABS89357/A     285 QKITCVCRDNWQGANRPIIEIDMT-TLEHTSR-  315
ABU95382/A     286 GEVICVCRDNWHGSNRPWVSFNQ-N-LEYQIG-  315
ABV25648/A     286 GKVMCVCRDNWHASNRPWVSFDR-N-LDYQIG-  315
ABV29593/A     286 GEITCVCRDNWHGSNRPWMSFNQ-N-LEYQIG-  315
ABV82576/A     286 GKVVCVCRDNWHASNRPWVSFDQ-N-LDYQIG-  315
ABV82587/A     286 GKVVCVCRDNWHASNRPWVSFDQ-N-LNYQIG-  315
ABW95951/A     266 GEITCVCRDNWHGSNRPWVSFNQ-N-LEYQIG-  295
ABX88802/A     285 PDVRCVCRDNWKGSNRPVIDINMA-DYSIDSS-  315
ABY84687/A     286 GKVVCVCRDNWHASNRPWVSFDQ-N-LDYQIG-  315
ACA04655/A     286 GVIKCICRDNWKGANRPVITIDPE-MMTHTSK-  316
ACA04738/A     285 QKITCVCRDNWQGANRPIIEIDMN-TLEHTSR-  315
ACA04739/A     284 GKVECVCRDNWTGTNRPVLVISP-D-LSYRVG-  313
ACA04740/A     287 AGITCTCRDNWQGSNRPVIQIDPV-AMTHTSQ-  317
ACA14299/A     285 PNVRCVCRDNWKGSNRPVIDINMA-DYSIGSS-  315
ACB70583/A     266 GEITCVCRDNWHGSNRPWVSFNQ-N-LEYQIG-  295
ACD47117/A     285 PEVRCVCRDNWKGSNRPVLYINVA-DYSIDSS-  315
ACD65204/A     286 GKVVCVCRDNWHASNRPWVTFDQ-N-LNYQIG-  315
ACD76864/A     285 PNVRCVCRDNWKGSNRPVIDINMA-DYSIDSS-  315
ACD85421/A     284 GKVECVCRDNWTGTNRPVLVISP-D-LSYTVG-  313
ACE73320/A     285 TDIECVCRDNWRGSNRPWIRFNS-D-LDYQIG-  314
ACE76594/A     285 PDVRCVCRDNWKGSNRPVIDINMA-DYSIDSS-  315
ACE78976/A     285 EVIKCICRDNWKGANRPVITIDPE-MMTHTSK-  315
ACE78981/A     285 GVIKCICRDNWKGANRPVITIDPE-MMTHTSK-  315
ACF20219/A     284 SKVTCVCRDNWQGANRPVIEIDMN-AMEHTSQ-  314
ACF25054/A     285 PNVRCVCRDNWKGSNRPVIDINMA-DYSTDSS-  315
ACF25354/A     284 SKVTCVCRDNWQGANRPVIEIDMN-AMEHTSQ-  314
ACF33655/A     287 D-VYCICRDNWKGSNRPWMRIN--N-ETILETG  315
ACF36500/A     285 PGVRCVCRDNWKGSNRPIVDINIK-DYSIVSS-  315
ACF93490/A     284 GKVECICRDNWTGTNRPILVISS-D-LSYTVG-  313
ACI41114/A     287 D-VYCICRDNWKGSNRPWMRIN--N-ETILETG  315
ACI48786/A     284 GKVECICRDNWTGTNRPILVISS-D-LSYTVG-  313
ACN65661/A     285 QKATCVCRDNWQGANRPIIEIDMN-TLEHTSR-  315
ACO24985/A     285 GEITCVCRDNWHGSNRPWVSFNQ-N-LEYQIG-  314
ACP50710/A     285 PEVRCVCRDNWKGSNRPVLYINVE-DYNIDSS-  315
ACQ73415/A     283 QRVTCVCRDNWQGANRPIIEIDMN-NLEHTSR-  313
ACR66907/A     287 D-VYCICRDNWKGSNRPWMRIN--N-ETILETG  315
ACR83968/A     286 GEITCVCRDNWHGSNRPWVSFNQ-N-LEYQMG-  315
ACS68311/A     287 AGITCTCRDNWQGSNRPVIQIDPV-AMTHTSQ-  317
ACS92897/A     285 PGVRCVCRDNWKGSNRPIVDINVK-DYSIVSS-  315
ACT67761/A     285 PGVRCVCRDNWKGSNRPIVDINIK-DHSIVSS-  315
ACT97062/A     284 GKVECVCRDNWTGTNRPVLVISS-D-LSYRVG-  313
ACV41710/A     284 GKVECVCRDNWTGTNRPVLVISP-D-LSYKVG-  313
ADA71169/A     286 GTVMCVCRDNWHGSNRPWVSFNQ-N-LDYQIG-  315
ADK70163/A     285 ENIECVCRDNWRGSNRPWIRFNS-D-LDYQIG-  314
ADU17627/A     287 AGIICTCRDNWQGSNRPVIQIDPV-AMTHTSQ-  317
ADU20276/A     283 GKVECVCRDNWNGMNRPILTFDE-D-LNYEVG-  312
ADU20397/A     287 D-VYCICRDNWKGSNRPWMRIN--N-ETILETG  315
ADU53220/A     285 TDIECVCRDNWRGSNRPWIRFNS-D-LDYQIG-  314
AEB89856/A     287 TGITCTCRDNWQGSNRPVIQIDPV-AMTHTSQ-  317
AEB89867/A     284 GKVECVCRDNWTGTNRPVLVISP-D-LSYRVG-  313
AEK50939/A     286 EVIKCICRDNWKGANRPVITINPT-TMTHTSK-  316
AEK50961/A     284 SKVTCVCRDNWQGANRPVIEIDMN-AMEHTSQ-  314
BAA06132/A     285 PDVRCICRDNWKGSNRPIVDINMK-DHSIDSS-  315
BAA06718/A     286 GTVMCVCRDNWHGSNRPWVSFNQ-N-LDYQIG-  315
BAF03532/A     282 GKVECVCRDNWNGMNRPILTFDE-N-LEYEVG-  311
BAF03569/A     282 GKVECVCRDNWNGMNRPILAFDE-N-LEYEVG-  311
BAF34378/A     285 PDVRCVCRDNWKGSNRPVIDINMV-DYSIDSS-  315
BAF34925/A     285 PDVRCVCRDNWKGSNRPVIDINMA-DYSIDSS-  315
BAF43417/A     283 GKVECVCRDNWNGMNRPILIFDE-D-LDYEVG-  312
BAF43457/A     284 GKVECVCRDNWTGTNRPVLIISP-D-LSYRVG-  313
BAF43461/A     282 GKVECVCRDNWNGMNRPILAFDE-N-LEYEVG-  311
BAF46763/A     287 D-VYCVCRDNWKGSNRPWMRIN--N-ETILETG  315
BAF46905/A     286 GVIKCICRDNWKGANRPVITIDPE-MMTHTSK-  316
BAF48640/A     285 PNVRCVCRDNWKGSNRPVIDISMA-DYSIDSS-  315
BAF48644/A     287 D-VYCICRDNWKGSNRPWMRIN--N-ETIIETG  315
BAF48646/A     285 QKVTCVCRDNWQGANRPIIEINMN-TLEHTSR-  315
BAF63047/A     286 GTVMCVCRDNWHGSNRPWVSFNQ-N-LDYQIG-  315
BAG66251/A     284 GKVECVCRDNWTGTNRPVLVISS-D-LSYRVG-  313
BAG66259/A     287 D-IYCICRDNWKGSNRPWMRIN-NETILETG--  315
BAG66279/A     284 GKVECVCRDNWTGTNRPVLVISP-D-LSYRVG-  313
BAH02172/A     285 PDVRCICRDNWKGSNRPIVDINMK-DYSIDSS-  315
BAH70320/A     285 QKVTCVCRDNWQGANRPIIEIDMN-TLEHTSR-  315
BAI39637/A     266 GEITCVCRDNWHGSNRPWVSFNQ-N-LEYQIG-  295
BAI48894/A     286 GKIMCVCRDNWHGSNRPWVSFNQ-N-LEYQIG-  315
BAI50030/A     287 D-VYCICRDNWKGSNRPWMRIN--N-ETILETG  315
BAJ07979/A     282 GKVECVCRDNWNGMNRPILTFNE-N-LEYEVG-  311
BAJ10562/A     286 GVIKCVCRDNWKGANRPVITIDPE-MMTHTSK-  316
CAA36475/A     264 GEVMCVCRDNWHGSNRPWVSFNK-N-LDYQIG-  293
CAC36997/A     285 PDVRCICRDNWKGSNRPIVDINMK-DYSIDSS-  315
CAD57252/A      286 GTVMCVCRDNWHGSNRPWVSFNQ-N-LDYQIG-  315
CAO82694/A     297 GEITCVCRDNWHGSNRPWVSFNQ-N-LEYQIG-  326
CAP69845/A     285 ENVECVCRDNWRGSNRPWIRFNS-D-LDYQIG-  314

cons           826     \* \*\*\*\*    :\*\* : :.             858

AAA43735/B     316 LMCTETYLDTPRPDDG-SITGPCESN-G-DK-G  344
AAA43743/B     316 LMCTETYLDTPRPDDG-SITGPCESN-G-DK-G  344
AAA43749/B     316 LMCTKTYLDTPRPDDG-SIAGPCESN-G-DK-W  344

AAU94779/B     316 LMCTETYLDTPRPDDG-SITGPCESN-G-DK-G  344

ABL84344/B     316 LMCTETYLDTPRPDDG-SITGPCESN-G-DK-G  344
ABO72374/B     316 LMCTETYLDTPRPDDG-SITGPCESN-G-NK-G  344

ABQ81846/B     316 LMCTETYLDTPRPDDG-SITGPCESN-G-DK-G  344

ACU12759/B     316 LMCTETYLDTPRPDDG-SITGPCESN-G-DK-G  344
BAB32609/B     316 LMCTETYLDTPRPDDG-SITGPCESN-G-EK-G  344
AAA43093/A     314 YICTGVLTDTSRPKD-KTIG-ECFNPIT-GS-P  342
AAA43429/A     314 YLCAGIPTDTPRGEDS-QFTGSCTKPLG-NQ--  342
AAA43449/A     316 YICSGVFGDNPRPKDG-K--GRC-DPVN-VD-G  342
AAA43575/A     318 YICSPVLTDNPRPND-PTVG-KCNDPYP-GN-N  346
AAD49005/A     316 YVCSGLVGDTPRYDDS-SSSSNCRDPNN-ER-G  345
AAD49007/A     316 YVCSGLVGDTPRNDDS-SSSSNCRDPNN-ER-G  345
AAF77036/A     316 YICSGVFGDNPRPNDG-T--GSC-GPVS-SN-G  342
AAO46232/A     316 YVCSGLVGDTPRNDDR-SSNSNCRNPNN-ER-G  345
AAO46822/A     316 YICSGVFGDNPRPNDG-T--GSC-GPVS-PN-G  342
AAO62036/A     316 YVCSKFHSDTPRPADP-STV-SCDSPSN-VN-G  344
AAO62041/A     316 YICSGVFGDNPRPNDG-T--GSC-GPVS-SN-G  342
AAO62044/A     315 YVCSGVFGDNPRPMDS-T--GSCNSPINNGK-G  343
AAO62064/A     317 YLCSKILTDTSRPND-PIDG-DCDAPIT-GGSP  346
AAT08005/A     314 YLCAGLPSDTPRGEDS-QFTGSCTSPMG-NQ--  342
AAT37407/A     316 YVCSKFHSDTPRPADP-SKV-SCDSPSN-VN-G  344
AAT37414/A     316 YICSKFHSDTPRPSDP-STV-SCSSPSG-ID-G  344
AAT65406/A     317 YLCSKILTDTSRPND-PGSG-NCDAPIT-GGSP  346
AAX78821/A     316 YVCSGLVGDTPRNDDS-SSSSNCRDPNN-ER-G  345
AAY52584/A     316 YVCSGLVGDTPRNDDR-SSSSNCRDPNN-ER-G  345
AAY87411/A     316 YVCSGLVGDTPRNDDS-SSSSNCRDPNN-ER-G  345
ABB17695/A     313 YLCAGIPTDTPRVQDS-SFTGSCTSAVG-GS--  341
ABB19439/A     317 YLCSRILTDTSRPND-PGSG-NCDAPIT-GGSP  346
ABB19610/A     316 YICSGVFGDNPRPNDG-T--GSC-GPVS-SN-G  342
ABB19747/A     313 YLCAGIPTDTPRIQDS-SFTGSCTNAVG-GS--  341
ABB19914/A     315 YVCSGIFGDNPRPVDG-T--GSCNSPVNNGK-G  343
ABB20088/A     315 YVCSGIFGDNPRPMDG-T--GSCNSPVNNGK-G  343
ABB20104/A     315 YLCTGVLTDTSRPSD-KSIG-DCNNPIT-GS-P  343
ABB20243/A     318 YICSPVLTDNPRPND-PTVG-KCNDPYP-GN-N  346
ABB20375/A     317 YLCSKILTDTSRPND-PING-DCDAPIT-GGSP  346
ABB20475/A     316 YVCSGLVGDTPRNDDS-SSSSNCRDPNN-ER-G  345
ABB20501/A     314 YICTGVLTDTSRPKD-KAIG-ECFNPIT-GS-P  342
ABB21754/A     318 YICSPVLTDNPRPND-PTVG-KCNDPYP-GN-N  346
ABB87198/A     313 YLCAGIPTDTPRVQDS-SFTGSCTNAVG-GS--  341
ABB87732/A     315 YVCSGIFGDNPRPVDG-T--GSCTSPVNNGK-G  343
ABB87959/A     315 YLCTGVLTDTSRPSD-KSIG-DCNNPIT-GS-P  343
ABB88058/A     316 YVCSKFHSDTPRPADP-STI-SCDSPSN-VN-G  344
ABB88351/A     317 YLCSKVLTDTSRPND-PTNG-NCDAPIT-GGSP  346
ABC02269/A     316 YVCSGLVGDTPRNNDR-SSSSYCRNPNN-EK-G  345
ABF47958/A     300 YICSGVFGDNPRPKDG-T--GSC-GPVS-AD-G  326
ABG37189/A     316 YVCSGLVGDTPRKNDS-SSSSHCLNPNN-EE-G  345
ABH04381/A     316 YVCSKFHSDTPRPADP-STV-SCDSPSN-IN-G  344
ABI30359/A     316 YVCSGLVGDTPRNDDS-SSSSNCRDPNN-ER-G  345
ABI84399/A     316 YICSKFHSDTPRPSDP-STI-SCNSPSG-ID-G  344
ABI84436/A     313 YLCAGIPTDTPRVQDS-SFTGSCTNAVG-GS--  341
ABI84475/A     315 YVCSGVFGDNPRPVDG-T--GSCNSPVNNGK-G  343
ABI84973/A     316 YVCSKFHSDTPRPADP-STV-SCDSPSN-VN-G  344
ABI84982/A     316 YVCTGVLTDTSRPGDKPN-G-DCSNPIT-GS-P  344
ABI92217/A     317 YLCSKILTDTSRPND-PGSG-NCDEPIT-GGSP  346
ABJ09099/A     314 YLCAGLPSDTPRGEDS-QFTGSCTSPMG-NQ--  342
ABK32099/A     315 YVCSGVFGDNPRPVDG-T--GSCSGPINNGK-G  343
ABP49198/A     318 YICSPVLTDNPRPND-PTVG-KCNDPYP-GN-N  346
ABP49253/A     318 YICSPVLTDNPRPND-PAVG-KCNDPYP-GN-N  346
ABQ97208/A     316 YVCSGLVGDTPRKSDR-SSSSYCRNPNN-EK-G  345
ABR28683/A     316 YICSGVFGDNPRSNDG-K--GNC-GPVL-SN-G  342
ABR37723/A     318 YICSPVLTDNPRPND-PTVG-KCNDPYP-GN-N  346
ABS50124/A     316 YICSGVFGDNPRSNDG-K--GNC-GPVL-SN-G  342
ABS89357/A     316 YVCTGVLTDTSRPGDKPS-G-DCSNPIT-GS-P  344
ABU95382/A     316 YICSGVFGDNPRPNDG-T--GSC-GPVS-SN-G  342
ABV25648/A     316 YICSGVFGDNPRSNDG-K--GNC-GPVL-SN-G  342
ABV29593/A     316 YICSGIFGDNPRPKDG-T--GSC-SPVS-SN-G  342
ABV82576/A     316 YICSGVFGDNPRSNDG-K--GNC-GPVL-SN-G  342
ABV82587/A     316 YICSGVFGDNPRSNDG-K--GNC-GPVL-SN-G  342
ABW95951/A     296 YICSGVFGDNPRPNDG-T--GSC-GPMS-PN-G  322
ABX88802/A     316 YVCSGLVGDTPRNDDS-SSSSNCRDPNN-ER-G  345
ABY84687/A     316 YICSGVFGDNPRSNDG-K--GNC-GPVL-SN-G  342
ACA04655/A     317 YLCSKILTDTSRPND-PTNG-NCDAPIT-GGSP  346
ACA04738/A     316 YVCTGILTDTSRPGDKPS-G-DCSNPIT-GS-P  344
ACA04739/A     314 YLCAGIPSDTPRGEDA-QFTGSCTSPMG-NQ--  342
ACA04740/A     318 YICSPVLTDNPRPND-PTVG-KCNDPYP-GN-N  346
ACA14299/A     316 YVCSGLVGDTPRNDDS-SSSSNCKDPNN-ER-G  345
ACB70583/A     296 YICSGVFGDNPRPNDG-K--GSC-GPVS-SN-G  322
ACD47117/A     316 YLCSGLVGDTPRNEDS-SSSSNCRDPNN-ER-G  345
ACD65204/A     316 YICSGVFGDNPRSNDG-K--GNC-GPVP-SN-G  342
ACD76864/A     316 YVCSGLVGDTPRNDDS-SSSSNCRDPNN-ER-G  345
ACD85421/A     314 YLCAGIPTDTPRGEDS-QFTGSCTSPLG-SQ--  342
ACE73320/A     315 YVCSGIFGDNPRPVDG-T--GSCNSPVNNGK-G  343
ACE76594/A     316 YVCSGLVGDTPRNDDS-SSSSNCRDPNN-ER-G  345
ACE78976/A     316 YLCSKILTDISRPND-PTSG-NCDAPVT-GGGP  345
ACE78981/A     316 YLCSKILTDTSRPND-PTNG-NCDAPIT-GGSP  345
ACF20219/A     315 YLCTGVLTDTSRPSD-KSIG-DCNNPIT-GS-P  343
ACF25054/A     316 YVCSGLVGDTPRNDDS-SSSSNCRDPNN-ER-G  345
ACF25354/A     315 YLCTGVLTDTSRPSD-KSTG-DCSNPIT-GS-P  343
ACF33655/A     316 YVCSKFHSDTPRPADP-STM-SCDSPSN-IN-G  344
ACF36500/A     316 YVCSGLVGDTPRKNDS-SSSSHCLDPNN-EE-G  345
ACF93490/A     314 YLCAGIPTDTPRGEDS-QFTGSCTSPLG-NK--  342
ACI41114/A     316 YVCSKFHSDTPRPADP-STM-SCDSPSN-VN-G  344
ACI48786/A     314 YLCAGIPTDTPRGEDS-QFTGSCTSPLG-NK--  342
ACN65661/A     316 YVCTGILTDTSRPGD-KSSG-DCSNPIT-GS-P  344
ACO24985/A     315 YICSGIFGDNPRPNDG-T--GSC-GPVS-SN-G  341
ACP50710/A     316 YVCSGLVGDTPRSDDS-SSSSNCRDPNN-ER-G  345
ACQ73415/A     314 YICTGVLTDTSRPKD-KTIG-ECFNPIT-GS-P  342
ACR66907/A     316 YVCSKFHSDTPRPADP-STI-SCDSPSN-VN-G  344
ACR83968/A     316 YICSGIFGDNPRPNDK-T--GSC-GPVF-SN-G  342
ACS68311/A     318 YICSPVLTDNPRPND-PAVG-KCNDPYP-GN-N  346
ACS92897/A     316 YVCSGLVGDTPRKNDS-FSSSHCLDPNN-EE-G  345
ACT67761/A     316 YVCSGLVGDTPRKNDS-SSSSHCLDPNN-EE-G  345
ACT97062/A     314 YLCAGLPSDTPRGEDA-QFTGSCTSPMG-NQ--  342
ACV41710/A     314 YLCAGLPSDTPRGEDS-QFTGSCTSPMG-NQ--  342
ADA71169/A     316 YICSGVFGDNPRPKDG-E--GSC-NPVT-VD-G  342
ADK70163/A     315 YVCSGVFGDNPRPVDG-T--GSCSGPINNGK-G  343
ADU17627/A     318 YICSPVLTDNPRPND-PAVG-KCNDPYP-GN-N  346
ADU20276/A     313 YLCAGIPTDTPRVQDS-SFSGSCTNAVG-GS--  341
ADU20397/A     316 YVCSKFHSDTPRPADP-STM-SCDSPSN-VN-G  344
ADU53220/A     315 YVCSGIFGDNPRPVDG-T--GSCNSPVNNGK-G  343
AEB89856/A     318 YICSPVLTDNPRPND-PNIG-KCNDPYP-GN-N  346
AEB89867/A     314 YLCAGLPSDTPRGEDA-QFTGSCTSPMG-NQ--  342
AEK50939/A     317 YLCSKILTDTSRPND-PGSG-NCDAPIT-GGSP  346
AEK50961/A     315 YLCTGVLTDTSRPSD-KSMG-DCNNPIT-GS-P  343
BAA06132/A     316 YVCSGLVGDTPRNDDR-SSKSNCRNPNN-ER-G  345
BAA06718/A     316 YICSGVFGDNPRPKDG-K--GSC-DPVT-VD-G  342
BAF03532/A     312 YLCAGIPTDTPRVQDS-SFTGSCTNAVG-GS--  340
BAF03569/A     312 YLCAGIPTDTPRVQDS-SFTGSCTNAVG-GS--  340
BAF34378/A     316 YVCSGLVGDTPRNDDS-SSSSNCRDPNN-ER-G  345
BAF34925/A     316 YVCSGLVGDTPRNDDS-SSSSNCRDPNN-ER-G  345
BAF43417/A     313 YLCAGIPTDTPRVQDS-SFTGSCTNAVG-GS--  341
BAF43457/A     314 YLCAGLPSDTPRGEDA-QFTGSCTSPMG-NQ--  342
BAF43461/A     312 YLCAGIPTDTPRVQDS-SFTGSCTNAVG-GS--  340
BAF46763/A     316 YVCSKFHSDTPRPADP-STV-SCDSPSN-VN-G  344
BAF46905/A     317 YLCSKILTDTSRPND-PTNG-NCDAPIT-GGSP  346
BAF48640/A     316 YVCSGLVGDTPRNDDS-SSSSNCKDPNN-ER-G  345
BAF48644/A     316 YVCSKFHSDTPRPVDP-STV-SCDSPSN-VN-G  344
BAF48646/A     316 YVCTGILTDTSRPGD-KSSG-DCSNPIT-GS-P  344
BAF63047/A     316 YICSGVFGDNPRPKDG-E--GSC-NPVT-VD-G  342
BAG66251/A     314 YLCAGLPSDTPRGEDN-QFTGSCTSPMG-NQ--  342
BAG66259/A     316 YVCSKFHSDTPRPADPSTIS--CDSP---SN-V  342
BAG66279/A     314 YLCAGLPSDTPRGEDA-QFTGSCTSPMG-NQ--  342
BAH02172/A     316 YVCSGLVGDTPRNDDR-SSKSNCRNPNN-ER-G  345
BAH70320/A     316 YVCTGILTDTSRPGD-KSSG-DCSNPIT-GS-P  344
BAI39637/A     296 YICSGVFGDNPRPNDG-T--GSC-GPVS-SN-G  322
BAI48894/A     316 YICSGVFGDNPRPNDG-T--GSC-GPVS-SN-G  342
BAI50030/A     316 YVCSKFHSDTPRPADP-STV-SCDSPSN-IN-G  344
BAJ07979/A     312 YLCAGIPTDTPRVQDS-SFTGSCTNAVG-GS--  340
BAJ10562/A     317 YLCSKILTDTSRPND-PTNG-NCDAPIT-GGSP  346
CAA36475/A     294 YICSGVFGDNPRPNDG-T--GSC-GPVS-SN-G  320
CAC36997/A     316 YVCSGLVGDTPRNDDR-SSKSNCRNPNN-ER-G  345
CAD57252/A     316 YICSGVFGDNPRPKDG-E--GSC-NPVT-VD-G  342
CAO82694/A     327 YICSGIFGDNPRPNDR-T--GSC-GPVF-SN-G  353
CAP69845/A     315 YVCSGVFGDNPRPVDG-T--GSCSGPINNGK-G  343

cons           859  :\*:    \* .\*  \*       \*            891

AAA43735/B     345 L--G-G--IKGGFVHQRMASKIGRWYSRTMSKT  372
AAA43743/B     345 L--G-G--IKGGFVHQRMASKIGRWYSRTMSKT  372
AAA43749/B     345 L--G-G--IKGGFVHQRMASKIGRWYSRTMSKT  372

AAU94779/B     345 S--G-G--IKGGFVHQRMASKIGRWYSRTMSKT  372

ABL84344/B     345 S--G-G--IKGGFVHQRMASKIGRWYSRTMSKT  372
ABO72374/B     345 S--G-G--IKGGFVHQRMASKIGRWYSRTMSKT  372
ABQ81846/B     345 L--G-G--IKGGFVHQRMASKIGRWYSRTMSKT  372

ACU12759/B     345 S--G-G--IKGGFVHQRMASKIGRWYSRTMSKT  372

BAB32609/B     345 R--G-G--IKGGFVHQRMASKIGRWYSRTMSKT  372
AAA43093/A     343 G--APG--IKGFGFLN----EDNTWLGRTISPR  367
AAA43429/A     343 G---YG--IKGFGFRQ----GNDVWAGRTISRT  366
AAA43449/A     343 A---DG--VKGFSYRY----GNGGWIGRTKSNS  366
AAA43575/A     347 N--N-G--VKGFSYLD----GGNTWLGRTISIA  370
AAD49005/A     346 N--P-G--VKGWAFDN----GNDVWMGRTISKD  369
AAD49007/A     346 A--P-G--VKGWAFDN----GNDIWMGRTIKED  369
AAF77036/A     343 A---NG--IKGFSFRY----DNGVWIGRTKSTS  366
AAO46232/A     346 N--P-G--VKGWAFDN----GDDVWMGRTISKD  369
AAO46822/A     343 A---YG--VKGFSFKY----GNGVWIGRTKSTN  366
AAO62036/A     345 G--P-G--VKGFGFKS----GNDVWLGRTVSTS  368
AAO62041/A     343 A---YG--VKGFSFKY----GNGVWIGRTKSTS  366
AAO62044/A     344 R---YG--VKGFSFRY----GDGVWIGRTKSLE  367
AAO62064/A     347 D--P-G--VKGFAFLD----GDNSWLGRTISKD  370
AAT08005/A     343 G---YG--VKGFGFRQ----GNDVWMGRTISRT  366
AAT37407/A     345 G--P-G--VKGFGFKT----GNDVWLGRTVSTS  368
AAT37414/A     345 R--R-G--VKGFGFKV----QNDVWLGRTISYS  368
AAT65406/A     347 D--P-G--VKGFAFLD----GGNSWLGRTISKD  370
AAX78821/A     346 N--P-G--VKGWAFDN----GDDVWMGRTISKD  369
AAY52584/A     346 A--P-G--VKGWAFDN----GNDIWMGRTIKKD  369
AAY87411/A     346 N--P-G--VKGWAFDD----GSDVWMGRTISKD  369
ABB17695/A     342 GTNNYG--VKGFGFRQ----GNSVWAGRTVSIS  368
ABB19439/A     347 D--P-G--VKGFAFLD----GGNSWLGRTISKD  370
ABB19610/A     343 A---YG--VKGFSFKY----GNGVWIGRTKSTS  366
ABB19747/A     342 GTNNYG--VKGFGFRQ----GNSVWAGRTVSIS  368
ABB19914/A     344 R---YG--VKGFSFRY----GDGVWIGRTKSLE  367
ABB20088/A     344 R---YG--VKGFSFRY----GDGVWIGRTKSLE  367
ABB20104/A     344 G--APG--VKGFGFLD----SSNTWLGRTISPR  368
ABB20243/A     347 N--N-G--VKGFSYLD----GDNTWLGRTISTA  370
ABB20375/A     347 D--P-G--VKGFAFLD----GDNSWLGRTISKD  370
ABB20475/A     346 N--P-G--VKGWAFDD----GDDVWMGRTISKD  369
ABB20501/A     343 G--APG--IKGFGFLN----ENNTWLGRTISPK  367
ABB21754/A     347 N--N-G--VKGFSYLD----GDNTWLGRTISTA  370
ABB87198/A     342 GTNNYG--VKGFGFRQ----GNSVWAGRTVSIS  368
ABB87732/A     344 R---YG--VKGFSFRY----GDGVWIGRTKSLE  367
ABB87959/A     344 G--APG--VKGFGFLD----SSNTWLGRTISPR  368
ABB88058/A     345 G--P-G--VKGFGFKV----GNDVWLGRTVSTS  368
ABB88351/A     347 D--P-G--VKGFAFLD----GENSWLGRTISKD  370
ABC02269/A     346 T--H-G--VKGWAFDD----GNDVWMGRTISED  369
ABF47958/A     327 A---NG--VKGFSYKY----GNGVWIGRTKSDS  350
ABG37189/A     346 G--H-G--VKGWAFDD----GNDVWMGRTISEK  369
ABH04381/A     345 G--P-G--VKGFGFKA----GNDVWLGRTVSTS  368
ABI30359/A     346 N--P-G--VKGWAFDD----GNDVWMGRTISKD  369
ABI84399/A     345 R--R-G--VKGFGFKV----QNDVWLGRTISYS  368
ABI84436/A     342 GTNNYG--VKGFGFRQ----GNSVWAGRTVSIS  368
ABI84475/A     344 R---YG--VKGFSFRY----GDGVWIGRTKSLE  367
ABI84973/A     345 G--P-G--VKGFGFKT----GDDVWLGRTVSTN  368
ABI84982/A     345 G--APG--VKGFGFLN----GDNTWLGRTISPR  369
ABI92217/A     347 D--P-G--VKGFAFLD----GGNSWLGRTISKD  370
ABJ09099/A     343 G---YG--VKGFGFRQ----GNDVWMGRTISRT  366
ABK32099/A     344 R---YG--VKGFSFRY----GDGVWIGRTKSLE  367
ABP49198/A     347 N--N-G--VKGFSYLD----GDNTWLGRTISTA  370
ABP49253/A     347 N--N-G--VKGFSYLD----GGNTWLGRTISTA  370
ABQ97208/A     346 N--H-G--VKGWAFDD----GDDVWMGRTIGEE  369
ABR28683/A     343 A---NG--VKGFSFRY----GNGVWIGRTKSIS  366
ABR37723/A     347 N--N-G--VKGFSYLD----GDNTWLGRTISTA  370
ABS50124/A     343 A---NG--VKGFSFRY----GNGVWIGRTKSIS  366
ABS89357/A     345 G--APG--VKGFGFLN----GDNTWLGRTISPR  369
ABU95382/A     343 A---YG--VKGFSFRY----GKGVWIGRTKSTS  366
ABV25648/A     343 A---NG--VKGFSFRY----GNGVWIGRTKSIS  366
ABV29593/A     343 A---NG--VKGFSFKY----GNGVWIGRTKSTS  366
ABV82576/A     343 A---NG--VKGFSFRY----GNGVWIGRTKSIS  366
ABV82587/A     343 A---NG--VKGFSFRY----GNGVWIGRTKSIS  366
ABW95951/A     323 A---YG--VKGFSFKY----GNGVWIGRTKSTN  346
ABX88802/A     346 N--P-G--VKGWAFDN----GKDVWMGRTISKD  369
ABY84687/A     343 A---NG--VKGFSFRY----GNGVWIGRTKSIS  366
ACA04655/A     347 D--P-G--VKGFAFLD----GENSWLGRTISKD  370
ACA04738/A     345 S--APG--VKGFGFLN----GDNTWLGRTFSPR  369
ACA04739/A     343 G---YG--VKGFGFRQ----GTDVWMGRTISRT  366
ACA04740/A     347 N--N-G--VKGFSYLD----GSNTWLGRTISTA  370
ACA14299/A     346 N--P-G--VKGWAFDN----ENDVWMGRTISKD  369
ACB70583/A     323 A---YG--VKGFSFKY----GNGVWIGRTKSTN  346
ACD47117/A     346 G--P-G--VKGWAFDN----GNDVWMGRTIKQD  369
ACD65204/A     343 A---NG--VKGFSFRY----GNGVWIGRTKSIS  366
ACD76864/A     346 N--P-G--VKGWAFDN----GDDVWMGRTISKD  369
ACD85421/A     343 G---YG--VKGFGFRQ----GNDVWAGRTISRT  366
ACE73320/A     344 R---YG--VKGFSFRY----GDGVWIGRTKSLE  367
ACE76594/A     346 N--P-G--VKGWAFDN----GNDVWMGRTISKD  369
ACE78976/A     346 D--P-G--VKGFAFLD----GENSWLGRTISKD  369
ACE78981/A     346 D--P-G--VKGFAFLD----GENSWLGRTISKD  369
ACF20219/A     344 G--APG--VKGFGFLD----SGNTWLGRTISPH  368
ACF25054/A     346 N--P-G--VKGWAFDN----GNDVWMGRTISKD  369
ACF25354/A     344 G--APG--VKGFGFLD----SGNTWLGRTISPR  368
ACF33655/A     345 G--P-G--VKGFGFKA----GNDVWLGRTVSTS  368
ACF36500/A     346 G--H-G--VKGWAFDD----GNDVWMGRTISEK  369
ACF93490/A     343 G---YG--VKGFGFRQ----GTDVWAGRTISRT  366
ACI41114/A     345 G--P-G--VKGFGFKA----GNDVWLGRTVSTS  368
ACI48786/A     343 G---YG--VKGFGFRQ----GTDVWAGRTISRT  366
ACN65661/A     345 G--APG--VKGFGFLN----GDNTWLGRTISPR  369
ACO24985/A     342 A---YG--VKGFSFKY----DNGVWIGRTKSTS  365
ACP50710/A     346 G--P-G--VKGWAFDN----GNDVWMGRTIKKD  369
ACQ73415/A     343 G--APG--IKGFGFLN----EDNTWLGRTISPK  367
ACR66907/A     345 G--P-G--VKGFGFKT----GNDVWLGRTVSTS  368
ACR83968/A     343 A---NG--VKGFSFKY----GNGVWIGRTKSTS  366
ACS68311/A     347 N--N-G--VKGFSYLD----GGNTWLGRTISTA  370
ACS92897/A     346 G--H-G--VKGWAFDD----GNDVWMGRTISEK  369
ACT67761/A     346 G--H-G--VKGWAFDD----GNDVWMGRTISEK  369
ACT97062/A     343 G---YG--VKGFGFRQ----GTDVWMGRTISRT  366
ACV41710/A     343 G---YG--VKGFGFRQ----GNDVWMGRTISRT  366
ADA71169/A     343 A---NG--VKGFSYKY----GNGVWIGRTKSNR  366
ADK70163/A     344 R---YG--VKGFSFRY----GDGVWIGRTKSLE  367
ADU17627/A     347 N--N-G--VKGFSYLD----GGNTWLGRTISTA  370
ADU20276/A     342 GTNNYG--VKGFGFRQ----GNSVWAGRTVSIS  368
ADU20397/A     345 G--P-G--VKGFGFKA----GNDVWLGRTVSTS  368
ADU53220/A     344 R---YG--VKGFSFRY----GDGVWIGRTKSLE  367
AEB89856/A     347 N--N-G--VKGFSYLD----GVNTWLGRTISTA  370
AEB89867/A     343 G---YG--VKGFGFRQ----GTDVWMGRTISRT  366
AEK50939/A     347 D--P-G--VKGFAFLD----GGNSWLGRTISKD  370
AEK50961/A     344 G--APG--VKGFGFLD----SSNTWLGRTISPR  368
BAA06132/A     346 N--H-G--VKGWAFDN----GDDVWMGRTISKD  369
BAA06718/A     343 A---DG--VKGFSYRY----GNGVWIGRTKSNS  366
BAF03532/A     341 GTNNYG--VKGFGFRQ----GNSVWAGRTISTS  367
BAF03569/A     341 GTNNYG--VKGFGFRQ----GNSVWAGRTISTS  367
BAF34378/A     346 N--P-G--VKGWAFDN----GNDVWMGRTISKD  369
BAF34925/A     346 N--P-G--VKGWAFDN----GNDVWMGRTISKD  369
BAF43417/A     342 GTNNYG--VKGFGFRQ----GNSVWAGRTVSIS  368
BAF43457/A     343 G---YG--VKGFGFRQ----GTDVWMGRTISRT  366
BAF43461/A     341 GTNNYG--VKGFGFRQ----GNSVWAGRTISTS  367
BAF46763/A     345 G--P-G--VKGFGFKA----GNDVWLGRTVSTS  368
BAF46905/A     347 D--P-G--VKGFAFLD----GENSWLGRTISKD  370
BAF48640/A     346 N--P-G--VKGWAFDN----GNDVWMGRTISKD  369
BAF48644/A     345 G--P-G--VKGFGFKA----GNDVWLGRTVSTS  368
BAF48646/A     345 G--APG--VKGFGFLN----GDNTWLGRTISPR  369
BAF63047/A     343 A---DG--VKGFSYKY----GNGVWIGRTKSNR  366
BAG66251/A     343 G---YG--VKGFGFRQ----GNDVWMGRTISRT  366
BAG66259/A     343 N--G-GPGVKGFGFKT----GNDVWLGRTVSTS  368
BAG66279/A     343 G---YG--VKGFGFRQ----GTDVWMGQTISRT  366
BAH02172/A     346 N--H-G--VKGWAFDN----GDDVWMGRTISKD  369
BAH70320/A     345 G--APG--VKGFGFLN----GDNTWLGRTISPR  369
BAI39637/A     323 A---DG--VKGFSFKY----GNGVWIGRTKSPN  346
BAI48894/A     343 A---YG--VKGFSFKY----GNGVWIGRTKSTS  366
BAI50030/A     345 G--P-G--VKGFGFKT----GDDVWLGRTVSTS  368
BAJ07979/A     341 GTNNYG--VKGFGFRQ----GTSVWAGRTISIS  367
BAJ10562/A     347 D--P-G--VKGFAFLD----RENSWLGRTISKD  370
CAA36475/A     321 A---YG--IKGFSFKY----GNGVWIGRTKSTS  344
CAC36997/A     346 N--H-G--VKGWAFDN----GNDVWMGRTISKD  369
CAD57252/A      343 A---DG--VKGFSYKY----GNGVWIGRTKSNR  366
CAO82694/A     354 A---NG--VKGFSFRY----GNGVWIGRTKSTS  377
CAP69845/A     344 R---YG--VKGFSFRY----GDGVWIGRTKSLE  367

cons           892      \*  :\*\*           . \* .:\*      924

AAA43735/B     373 ERMGMELYVK-------YDGD-PWTDSDA----  393
AAA43743/B     373 ERMGMELYVK-------YDGD-PWTDSEA----  393
AAA43749/B     373 NRMGMELYVK-------YDGD-PWTDSDA----  393

AAU94779/B     373 KRMGMGLYVK-------YDGD-PWTDSDA----  393

ABL84344/B     373 KRMGMGLYVK-------YDGD-PWIDSDA----  393
ABO72374/B     373 KRMGMGLYVK-------YDGD-PWSDSDA----  393

ABQ81846/B     373 ERMGMELYVK-------YDGD-PWTDSDA----  393
ACU12759/B     373 ERMGMGLYVK-------YDGD-PWADSDA----  393

BAB32609/B     373 ERMGMELYVK-------YDGD-PWTDSDA----  393
AAA43093/A     368 LRSGFEMLKI-------PNAG-TDPE-SK----  387
AAA43429/A     367 SRSGFEIIKI-------RNGW-TQNS-KD----  386
AAA43449/A     367 SRKGFEMIWD-------PNGW-TDPD-SN----  386
AAA43575/A     371 SRSGYEMLKV-------PNAL-TDDR-SK----  390
AAD49005/A     370 SRSGYETFRV-------IGGW-ATANSKL----  390
AAD49007/A     370 SRSGYETFRV-------VGGW-TTANSKS----  390
AAF77036/A     367 SRSGFEMIWD-------PNGW-TETD-SS----  386
AAO46232/A     370 LRSGYETFKV-------IGGW-STPNSKS----  390
AAO46822/A     367 SRSGFEMIWD-------PNGW-TGTD-SS----  386
AAO62036/A     369 GRSGFEIIKV-------TEGWINSPS-H-A---  389
AAO62041/A     367 SRSGFEMIWD-------PNGW-TETD-SS----  386
AAO62044/A     368 SRSGFEMVWD-------ANGW-VSTD-KD----  387
AAO62064/A     371 SRSGYEMLKV-------PNAE-TSTQ-SG----  390
AAT08005/A     367 SRSGFEILKV-------RNGW-IQNS-KE----  386
AAT37407/A     369 GRSGFEIIKV-------TEGWINSPN-H-A---  389
AAT37414/A     369 SRSGFEVIKV-------SNGWIDSRN-QEKAAI  393
AAT65406/A     371 SRSGYEMLKV-------PNAE-TDNQ-SG----  390
AAX78821/A     370 SRSGYETFKV-------IGGW-STPNSKS----  390
AAY52584/A     370 SRSGYETFRV-------IGGW-TTANSKS----  390
AAY87411/A     370 SRSGYETFKV-------IGGW-STANSKS----  390
ABB17695/A     369 SRSGFEILLI-------EDGW-IKTS-KT----  388
ABB19439/A     371 SRSGYEMLKV-------PNAE-TDNQ-SG----  390
ABB19610/A     367 SRSGFEMIWD-------PNGW-TETD-NS----  386
ABB19747/A     369 SRSGFEILLI-------EDGW-TKTS-KT----  388
ABB19914/A     368 SRSGFEMVWD-------ANGW-VSTD-KD----  387
ABB20088/A     368 SRSGFEMVWD-------ANGW-VSTD-KD----  387
ABB20104/A     369 SRSGFEVLKV-------PNAE-KDPK-SG----  388
ABB20243/A     371 SRSGYEMLKV-------PNAL-TDDR-SK----  390
ABB20375/A     371 YRSGYEMLKV-------PDAE-TSTQ-SG----  390
ABB20475/A     370 SRSGYETFKV-------IGGW-STANSKS----  390
ABB20501/A     368 LRSGFEMLKI-------PNAG-TDPD-SK----  387
ABB21754/A     371 SRSGYEMLKV-------PNAL-TDDR-SK----  390
ABB87198/A     369 SRSGFEILLI-------EDGW-TKTS-KT----  388
ABB87732/A     368 SRSGFEMVWD-------ANGW-VSTD-KD----  387
ABB87959/A     369 SRSGFEMLKI-------PNAG-TDPN-SR----  388
ABB88058/A     369 GRSGFEIIKV-------TEGWINSPNHS-----  389
ABB88351/A     371 SRSGYEMLKV-------PNAE-TDTQ-SG----  390
ABC02269/A     370 SRSGYETFKV-------IGGW-STPNSKL----  390
ABF47958/A     351 SRHGFEMIWD-------PNGW-TETD-SR----  370
ABG37189/A     370 LRSGYETFKV-------IGGW-SKPNSKL----  390
ABH04381/A     369 GRSGFEIIKV-------TDGWINSPN-H-A---  389
ABI30359/A     370 SRSGYETFRV-------IGGW-ATASSKS----  390
ABI84399/A     369 SRSGFEVIKV-------SNGW-I--N-S-NNQL  389
ABI84436/A     369 SRSGFEILLI-------EDGW-IKTS-KT----  388
ABI84475/A     368 SRSGFEMVWD-------ANGW-VSTD-KD----  387
ABI84973/A     369 GRSGFEIIKV-------TEGWINSPN-H-A---  389
ABI84982/A     370 SRSGFEMLKI-------PNAE-TDPN-SR----  389
ABI92217/A     371 SRSGYEMLKV-------PNAE-TDNQ-SG----  390
ABJ09099/A     367 SRSGFEILRV-------RNGW-VQNS-KE----  386
ABK32099/A     368 SRSGFEMVWD-------ANGW-VSTD-KD----  387
ABP49198/A     371 SRSGYEMLKV-------PNAL-TDDR-SK----  390
ABP49253/A     371 SRSGYEMLKV-------PNAL-TDDR-SK----  390
ABQ97208/A     370 LRSGYETFKV-------IGGW-STPNSKL----  390
ABR28683/A     367 SRSGFEMIWD-------PNGW-TETD-SS----  386
ABR37723/A     371 SRSGYEMLKV-------PNAL-TDDR-SK----  390
ABS50124/A     367 SRSGFEMIWD-------PNGW-TETD-SS----  386
ABS89357/A     370 SRSGFEMLKI-------PNAG-TDPN-SK----  389
ABU95382/A     367 SRSGFEMIWD-------PNGW-TETD-SS----  386
ABV25648/A     367 SRSGFEMIWD-------PNGW-TETD-SS----  386
ABV29593/A     367 SRSGFEMIWD-------PNGW-TETD-SS----  386
ABV82576/A     367 SRSGFEMIWD-------PNGW-TETD-SS----  386
ABV82587/A     367 SRSGFEMIWD-------PNGW-TETD-SS----  386
ABW95951/A     347 SRSGFEMIWD-------PNGW-TGTD-SS----  366
ABX88802/A     370 SRSGYETFRV-------IGGW-TTANSKS----  390
ABY84687/A     367 SRSGFEMIWD-------PNGW-TGTD-SS----  386
ACA04655/A     371 SRSGYEMLKV-------PNAE-TDTQ-SG----  390
ACA04738/A     370 SRSGFEMLKI-------PNAG-TDPN-SR----  389
ACA04739/A     367 SRSGFEILRI-------KNGW-TQTS-KE----  386
ACA04740/A     371 SRSGYEMLKV-------PNAL-TDDR-SK----  390
ACA14299/A     370 SRSGYETFRV-------IGGW-TTANSKS----  390
ACB70583/A     347 SRSGFEMIWD-------PNGW-TETD-SS----  366
ACD47117/A     370 SRAGYETFRV-------VGGW-TTANSKS----  390
ACD65204/A     367 SRSGFEMIWD-------PNGW-TETD-SS----  386
ACD76864/A     370 SRSGYETFRV-------IGGW-ATANSKS----  390
ACD85421/A     367 SRSGFEIIKI-------RNGW-TQNS-KD----  386
ACE73320/A     368 SRSGFEMVWD-------ANGW-VSTD-KD----  387
ACE76594/A     370 SRSGYETFRV-------LGGW-TTANSKS----  390
ACE78976/A     370 SRSGYEMLKV-------PNAE-TSTQ-SG----  389
ACE78981/A     370 SRSGYEMLKV-------PNAE-TDTQ-SG----  389
ACF20219/A     369 SRSGFEMLKI-------PNAG-TDPN-SR----  388
ACF25054/A     370 SRSGYETFRV-------IGGW-ATANSKS----  390
ACF25354/A     369 SRSGFEMLKI-------PNAG-TDPN-SR----  388
ACF33655/A     369 GRSGFEIIKV-------TEGWINSPN-H-A---  389
ACF36500/A     370 LRSGYETFKV-------IEGW-SNPNSKL----  390
ACF93490/A     367 SRSGFEIIKI-------RNGW-TQNS-KD----  386
ACI41114/A     369 GRSGFEIIKV-------TEGWINSPN-H-A---  389
ACI48786/A     367 SRSGFEIIKI-------RNGW-TQNS-KD----  386
ACN65661/A     370 SRSGFEMLKI-------PNAG-TDPN-SR----  389
ACO24985/A     366 SRSGFEMIWD-------PNGW-TETD-SS----  385
ACP50710/A     370 SRAGYETFRV-------IGGW-TMANSKS----  390
ACQ73415/A     368 LRSGFEMLKI-------PNAG-TDPE-SK----  387
ACR66907/A     369 GRSGFEIIKV-------TEGWINSPN-H-A---  389
ACR83968/A     367 SRRGFEMIWD-------PDGW-TRTD-DK----  386
ACS68311/A     371 SRSGYEMLKV-------PNAL-TDDR-SK----  390
ACS92897/A     370 SRSGYETFKV-------IEGW-SKPNSKL----  390
ACT67761/A     370 SRLGYETFKV-------IEGW-SNPKSKL----  390
ACT97062/A     367 SRSGFEILRI-------KNGW-TQTS-KG----  386
ACV41710/A     367 SRSGFEILRV-------RNGW-VQNS-KE----  386
ADA71169/A     367 IRKGFEMIWD-------PNGW-TNTD-SD----  386
ADK70163/A     368 SRSGFEMVWD-------ANGW-VSTD-KD----  387
ADU17627/A     371 SRSGYEVLRV-------PNAL-TDDR-SK----  390
ADU20276/A     369 SRSGFEILLI-------EDGW-TKTS-KT----  388
ADU20397/A     369 GRSGFEIIKV-------TEGWINSPN-H-V---  389
ADU53220/A     368 SRSGFEMVWD-------ANGW-VSTD-KD----  387
AEB89856/A     371 SRSGYEMLKV-------PNAL-TDDR-SK----  390
AEB89867/A     367 SRSGFEILRI-------KNGW-TQTS-KE----  386
AEK50939/A     371 SRSGYEMLKV-------PNAE-TDNQ-SG----  390
AEK50961/A     369 SRSGFEMLKI-------PNAG-TDPN-SK----  388
BAA06132/A     370 LRSGYETFKV-------IGGW-STPNSKT----  390
BAA06718/A     367 SRRGFEMIWD-------PNGW-TDTD-SK----  386
BAF03532/A     368 SRSGFEVLLI-------EDGW-IKPS-KT----  387
BAF03569/A     368 SRSGFEVLLI-------EDGW-IRPS-KT----  387
BAF34378/A     370 SRSGYETFRV-------IGGW-ATANSKS----  390
BAF34925/A     370 SRSGYETFRV-------IGGW-ATANSKS----  390
BAF43417/A     369 SRSGFEILLI-------EDGW-IRTS-KT----  388
BAF43457/A     367 SRSGFEILRV-------KNGW-TQTS-KE----  386
BAF43461/A     368 SRSGFEVLLI-------EDGW-IRPS-KT----  387
BAF46763/A     369 GRSGFEIIKV-------TEGWINSPN-H-A---  389
BAF46905/A     371 SRSGYEMLKV-------PNAE-TDTQ-SG----  390
BAF48640/A     370 SRSGYETFRV-------IGGW-TTANSKS----  390
BAF48644/A     369 GRSGFEIIKV-------TEGWINSPN-H-A---  389
BAF48646/A     370 SRSGFEMLKI-------PNAG-TDPN-SK----  389
BAF63047/A     367 LRKGFEMIWD-------PNGW-TDTD-SD----  386
BAG66251/A     367 SRSGFEILKV-------RDGW-IQNS-KE----  386
BAG66259/A     369 GRSGFEIIKVTEGWINSPN------H-A-----  389
BAG66279/A     367 SRSGFEILRV-------KNGW-TQTS-KE----  386
BAH02172/A     370 LRSGYETFKV-------IGGW-STPNSKS----  390
BAH70320/A     370 SRSGFEMLKI-------PNAG-TDPN-SR----  389
BAI39637/A     347 SRSGFEMIWD-------PNGW-SETD-SS----  366
BAI48894/A     367 SRSGFEMIWD-------PNGW-TETD-SS----  386
BAI50030/A     369 GRSGFEIIKV-------TEGWINSPN-H-A---  389
BAJ07979/A     368 SRSGFEVLLI-------EDGW-IRPS-KT----  387
BAJ10562/A     371 SRSGYEMLKV-------PNAE-TDTQ-SG----  390
CAA36475/A     345 SRSGFEMIWD-------PNGW-TETD-SS----  364
CAC36997/A     370 LRSGYETFKV-------IGGW-STPNSKS----  390
CAD57252/A      367 LRKGFEMIWD-------PNGW-TDTD-SD----  386
CAO82694/A     378 SRSGFEMIWD-------PNGW-TRTD-DN----  397
CAP69845/A     368 SRSGFEMVWD-------ANGW-VSTD-KD----  387

cons           925  \* \*                               957

AAA43735/B     394 -L-APSGV-MVSIKEPGWYSFGFE-IK-----D  417
AAA43743/B     394 -L-APSGV-MVSMKEPGWYSFGFE-IK-----D  417
AAA43749/B     394 -L-TLSGV-MVSIEEPGWYSFGFE-IK-----D  417

AAU94779/B     394 -L-ALSGV-MVSMEEPGWYSFGFE-IK-----D  417

ABL84344/B     394 -L-TLSGV-MVSMEEPGWYSFGFE-IK-----D  417
ABO72374/B     394 -L-ALSGV-MVSMEEPGWYSFGFE-IK-----D  417
ABQ81846/B     394 -L-APSGV-MVSMKEPGWYSFGFE-IK-----D  417

ACU12759/B     394 -L-VFSGV-MVSMKEPGWYSFGFE-IK-----D  417
BAB32609/B     394 -L-APSGV-MVSMKEPGWYSFGFE-IK-----D  417
AAA43093/A     388 -I-KERQE-IVSNDNWSGYSGSFI-DYWN--DN  414
AAA43429/A     387 -Q-IRKQV-IVDNLNWSGYSGSFT-LP-VELTK  414
AAA43449/A     387 -F-LVKQD-IVAMTDWSGYSGRFV-QH-PELTG  414
AAA43575/A     391 -P-TQGQT-IVLNTDWSGYSGSFM-DY-W--AE  416
AAD49005/A     391 -Q-VNRQV-IVDNNNWSGYSGIFS-VE-----G  414
AAD49007/A     391 -Q-INRQV-IVDSDNWSGYSGIFS-VE-----G  414
AAF77036/A     387 -F-SVRQD-IVAITDWSGYSGSFV-QH-PELTG  414
AAO46232/A     391 -Q-INRQV-IVDSNNWSGYSGIFS-VE-----G  414
AAO46822/A     387 -F-SVKQD-IVAITDWSGYSGSFV-QH-PELTG  414
AAO62036/A     390 KS-VT-QT-LVSNNDWSGYSGSFI-VE-----N  413
AAO62041/A     387 -F-SVKQD-IVAITDWSGYSGSFV-QH-PELTG  414
AAO62044/A     388 -S-NGVQD-IIDNDNWSGYSGSFS-IR-GETTG  415
AAO62064/A     391 -P-VSHQV-IVNNQNWSGYSGAFI-DY-W--SN  416
AAT08005/A     387 -Q-IKRQV-VVDNLNWSGYSGSFT-LP-VELTR  414
AAT37407/A     390 KS-VT-QT-LVSNNDWSGYSGSFI-VE-----N  413
AAT37414/A     394 ------QT-LVSNNDWSGYSGSFV-IE-----N  413
AAT65406/A     391 -P-VAHQV-IVNNQNWSGYSGAFI-DY-W--AD  416
AAX78821/A     391 -Q-VNRQV-IVDNNNRSGYSGIFS-VE-----G  414
AAY52584/A     391 -Q-INRQV-IVDSDNSSGYSGIFS-VE-----G  414
AAY87411/A     391 -Q-VNRQV-IVDNNNWSGYSGIFS-VE-----G  414
ABB17695/A     389 -I-VKKVE-VLNNKNWSGYSGAFT-IP-ITMTG  416
ABB19439/A     391 -P-VAHQV-IVNNQNWSGYSGAFI-DY-W--AD  416
ABB19610/A     387 -F-SMKQD-IVAITDWSGYSGSFV-QH-PELTG  414
ABB19747/A     389 -V-VKKVE-VLNNKNWSGYSGAFT-IP-VTMTG  416
ABB19914/A     388 -S-NGVQD-IIDNDNWSGYSGSFS-IR-GETTG  415
ABB20088/A     388 -S-NGVQD-IIDNDNWSGYSGSFS-IR-GETTG  415
ABB20104/A     389 -I-IERQE-IVDNNNWSGYSGSFI-DY-W--DE  414
ABB20243/A     391 -P-TQGQT-IVLNTDWSGYSGSFI-DY-W--AK  416
ABB20375/A     391 -P-VSHQV-IVNNQNWSGYSGSFI-DY-W--SN  416
ABB20475/A     391 -Q-INRQV-IVDNNNWSGYSGIFS-VE-----G  414
ABB20501/A     388 -I-KERQE-IVGNDNWSGYSGSFI-DYWN--DN  414
ABB21754/A     391 -P-TQGQT-IVLNTDWSGYSGSFI-DY-W--AK  416
ABB87198/A     389 -V-VKKVE-VLNNKNWSGYSGAFT-IP-ITMTS  416
ABB87732/A     388 -S-NGVQD-IIDNDNWSGYSGSFS-IR-GETTG  415
ABB87959/A     389 -I-TERQE-IVDNNNWSGYSGSFI-DY-W--DE  414
ABB88058/A     390 KS-IT-QT-LVSNNDWSGYSGSFI-VK-----T  413
ABB88351/A     391 -P-ISHQV-IVNNQNWSGYSGAFI-DY-W--AN  416
ABC02269/A     391 -Q-INRQV-IVDSDNRSGYSGIFS-VE-----G  414
ABF47958/A     371 -F-SMRQD-VVAMTDRSGYSGSFV-QH-PELTG  398
ABG37189/A     391 -Q-INRQV-IVDRGNRSGYSGIFS-VE-----G  414
ABH04381/A     390 KS-VT-QT-LVSNNDWSGYSGSFI-VK-----T  413
ABI30359/A     391 -Q-TNRQV-IVDNNNWSGYSGIFS-VE-----N  414
ABI84399/A     390 KV-FN-QT-LVSNNDWSGYSGSFV-IE-----N  413
ABI84436/A     389 ---IAKKVEVLNNKNWSGYSGAFT-IP-TTMTG  416
ABI84475/A     388 -S-NGVQD-IIDNDNWSGYSGSFS-IR-GETTG  415
ABI84973/A     390 KS-VT-QT-LVSNNDWSGYSGSFI-VE-----N  413
ABI84982/A     390 -I-IERQE-IVDXSNRSGYSGSFI-DY-W--DE  415
ABI92217/A     391 -P-VAHQV-IVNNQNWSGYSGAFI-DY-W--AD  416
ABJ09099/A     387 -Q-IKRQV-VVDNLNWSGYSGSFT-LP-VKLTK  414
ABK32099/A     388 -S-NGVQD-IIDNDNWSGYSGSFS-IR-GETTG  415
ABP49198/A     391 -P-TQGQT-IVLNTDWSGYSGSFM-DY-W--AE  416
ABP49253/A     391 -P-TQGQT-IVLNTDWSGYSGSFM-DY-W--AE  416
ABQ97208/A     391 -Q-INRQV-IVDSGDRSGYSGIFS-VE-----G  414
ABR28683/A     387 -F-SIKQD-IIALTDWSGYSGSFV-QH-PELTG  414
ABR37723/A     391 -P-TQGQT-IVLTTDWSGYSGSFI-DY-W--AK  416
ABS50124/A     387 -F-SIKQD-IIALTDWSGYSGSFV-QH-PELTG  414
ABS89357/A     390 -I-VERQE-IVDNNNWSGYSGSFI-DY-W--DD  415
ABU95382/A     387 -F-SVKQD-IVAITDWSGYSGSFV-QH-PELTG  414
ABV25648/A     387 -F-SIKQD-IIALTDWSGYSGSFV-QH-PELTG  414
ABV29593/A     387 -F-SVKQD-IVGITDWSGYSGSFV-QH-PELTG  414
ABV82576/A     387 -F-SVKQD-IIALTDWSGYSGSFV-QH-PELTG  414
ABV82587/A     387 -F-SMKQD-IIASTDWSGYSGSFV-QH-PELTG  414
ABW95951/A     367 -F-SVKQD-IVAITDWSGYSGSFV-QH-PELTG  394
ABX88802/A     391 -Q-VNRQV-IVDNNNWSGYSGIFS-VE-----G  414
ABY84687/A     387 -F-SIKQD-IIALTDWSGYSGSFV-QH-PELTG  414
ACA04655/A     391 -P-ISHQV-IVNNQNWSGYSGAFI-DY-W--AN  416
ACA04738/A     390 -I-AERQE-IVDNNNWSGYSGSFI-DYWD--DD  416
ACA04739/A     387 -Q-VRKQV-VVDNLNWSGYSGSFT-LP-VELSG  414
ACA04740/A     391 -P-TQGQT-IVLNTDWSGYSGSFM-DY-W--AE  416
ACA14299/A     391 -Q-VNRQV-IVDNNNWSGYSGIFS-VE-----S  414
ACB70583/A     367 -F-SVKQD-IVAITDWSGYSGSFV-QH-PELTG  394
ACD47117/A     391 -Q-INRQV-IVDSDNLSGYSGIFS-VE-----G  414
ACD65204/A     387 -F-SIKQD-IIALTDWSGYSGSFV-QH-PELTG  414
ACD76864/A     391 -Q-TNRQV-IVDNNNWSGYSGIFS-VE-----N  414
ACD85421/A     387 -Q-IRKQV-IVDNLNWSGYSGSFT-LP-VELTK  414
ACE73320/A     388 -S-NGVQD-IIDNDNWSGYSGSFS-IR-GETTG  415
ACE76594/A     391 -Q-INRQV-IVDNNNWSGYSGIFS-VE-----S  414
ACE78976/A     390 -P-IAHQV-IVNNQNWSGYSGAFI-DY-W--AS  415
ACE78981/A     390 -P-ISHQV-IVNNQNWSGYSGAFI-DY-W--AN  415
ACF20219/A     389 -I-TERQE-IVDNNNWSGYSGSFI-DY-W--DE  414
ACF25054/A     391 -Q-TNRQV-IVGNNNWSGYSGIFS-VE-----G  414
ACF25354/A     389 -I-TERQE-IVDNNNWSGYSGSFI-DY-W--DE  414
ACF33655/A     390 KS-IT-QT-LVSNNDWSGYSGSFI-VK-----T  413
ACF36500/A     391 -Q-INRQV-IVDRGNRSGYSGIFS-VE-----G  414
ACF93490/A     387 -Q-IIRQV-IINNPNWSGYSGSFT-LP-VELTK  414
ACI41114/A     390 KS-IT-QT-LVSNNDWSGYSGSFI-VK-----T  413
ACI48786/A     387 -Q-IRRQV-IIDNPNWSGYSGSFT-LP-VELTK  414
ACN65661/A     390 -I-AERQE-IVDNNNWSGYSGSFI-DYWN--DN  416
ACO24985/A     386 -F-SVKQD-IVAITDWSGYSGSFV-QH-PELTG  413
ACP50710/A     391 -Q-INRQV-IVDSDNRSGYSGIFS-VE-----G  414
ACQ73415/A     388 -I-KERQE-IVSNDNWSGYSGSFI-DYWN--DN  414
ACR66907/A     390 KS-VT-QT-LVSNNDWSGYSGSFI-VE-----N  413
ACR83968/A     387 -F-SVKQD-IIGITDWSGYSGSFV-QH-PELTG  414
ACS68311/A     391 -P-IQGQT-IVLNTDWSGYSGSFM-DY-W--AE  416
ACS92897/A     391 -Q-TNRQV-IVERGKRSGYSGIFS-VE-----G  414
ACT67761/A     391 -Q-INRQV-IVDRGNRSGYSGIFS-VE-----G  414
ACT97062/A     387 -Q-VRKQI-VVDNLNWSGYSGSFT-LP-VELTG  414
ACV41710/A     387 -Q-IKRQV-VVDNLNWSGYSGSFT-LP-VELTK  414
ADA71169/A     387 -F-SVKQD-IVAITDWSGYSGSFV-QH-PELTG  414
ADK70163/A     388 -S-NGVQD-IIDNDNWSGYSGSFS-IR-GETTG  415
ADU17627/A     391 -P-TQGQT-IVLNTDWSGYSGSFM-DY-W--AE  416
ADU20276/A     389 -V-VKKVE-VLNNKNWSGYSGAFT-IP-ITMTN  416
ADU20397/A     390 KS-IT-QT-LVSNNDWSGYSGSFI-VK-----A  413
ADU53220/A     388 -S-NGVQD-IIDNDNWSGYSGSFS-IR-GETTG  415
AEB89856/A     391 -P-IQGQT-IVLNTDWSGYSGSFM-DY-W--AE  416
AEB89867/A     387 -Q-VRKQI-VVDNLNWSGYSGSFT-LP-VELTG  414
AEK50939/A     391 -P-VAHQV-IVNNQNWSGYSGAFI-DY-W--AD  416
AEK50961/A     389 -I-TERQE-IVDNNNWSGYSGSFI-DY-W--DE  414
BAA06132/A     391 -Q-TNRQV-IIDSDNWSGYSGIFS-VE-----G  414
BAA06718/A     387 -F-LVKQD-VVAMTDWSGYSGSFV-QH-PELTG  414
BAF03532/A     388 ---ISKKVEVLNNKNWSGYSGSFT-IP-TAMTS  415
BAF03569/A     388 ---ISKKVEVLNNKNWSGYSGSFT-IP-TAMTS  415
BAF34378/A     391 -Q-VDRQV-IVDNNNWSGYSGIFS-VE-----G  414
BAF34925/A     391 -Q-VNRQV-IVDNNNWSGYSGIFS-VE-----G  414
BAF43417/A     389 -I-VKKVE-VLNNKNWSGYSGAFT-IP-ITMTS  416
BAF43457/A     387 -Q-IRKQV-VVDNLNWSGYSGSFT-LP-VELSG  414
BAF43461/A     388 ---ISKKVEVLNNKNWSGYSGSFT-IP-TAMTS  415
BAF46763/A     390 KS-VT-QT-LVSNNDWSGYSGSFI-IE-----S  413
BAF46905/A     391 -P-ISHQV-IVNNQNWSGYSGAFI-DY-W--AN  416
BAF48640/A     391 -Q-VNRQV-IVDNNNWSGYSGIFS-VE-----G  414
BAF48644/A     390 KS-VT-QT-LVSNNDWSGYSGSFI-IE-----N  413
BAF48646/A     390 -I-AERQE-IVDNNNWSGYSGSFI-DYWD--DN  416
BAF63047/A     387 -F-SVKQD-VVAITDWSGYSGSFV-QH-PELTG  414
BAG66251/A     387 -Q-IKRQV-VVDNLNWSGYSGSFT-LP-VELTR  414
BAG66259/A     390 KSITQ--T-LVSNNDWSGYSGSFIVKA-----K  414
BAG66279/A     387 -Q-VRKQV-VVDNLNWSGYSGSFT-LP-VELSG  414
BAH02172/A     391 -Q-TNRQV-IVDSNNWSGYSGIFS-VE-----G  414
BAH70320/A     390 -I-AERQE-IVDNNNWSGYSGSFI-DYWN--DN  416
BAI39637/A     367 -F-SVKQD-IVAITDWSGYSGSFV-QH-PELTG  394
BAI48894/A     387 -F-SVKQD-IVAITDWSGYSGSFV-QH-PELTG  414
BAI50030/A     390 KS-VT-QT-LVSNNDWSGYSGSFI-VE-----N  413
BAJ07979/A     388 ---IRKKVEVLNNKNWSGYSGSFT-IP-TAMTS  415
BAJ10562/A     391 -P-VSHQV-IVNNQNWSGYSGAFI-DY-W--AN  416
CAA36475/A     365 -F-SVKQD-IVAITDWSGYSGSFV-QH-PELTG  392
CAC36997/A     391 -Q-INRQV-IVDSDNRSGYSGIFS-VE-----G  414
CAD57252/A      387 -F-SVKQD-VVAITDWSGYSGSFV-QH-PELTG  414
CAO82694/A     398 -F-SVKQD-IIGMTDWSGYSGSFV-QH-PELTG  425
CAP69845/A     388 -S-NGVQD-IIDNDNWSGYSGSFS-IR-GETTG  415

cons                958          ::   . . \*\*  \*            990

AAA43735/B     418 K-KCDVPCIGIEMVHDG-----G-K-E--TWHS  440
AAA43743/B     418 K-KCDVPCIGIEMVHDG-----G-K-E--TWHS  440
AAA43749/B     418 K-KCDVPCIGIEMVHDG-----G-K-D--TWHS  440

AAU94779/B     418 K-KCDVPCIGIEMVHDG-----G-K-K--TWHS  440

ABL84344/B     418 K-KCDVPCIGIEMVHDG-----G-K-E--TWHS  440
ABO72374/B     418 K-KCDVPCIGIEMVHDG-----G-K-E--TWHS  440
ABQ81846/B     418 K-KCDVPCIGIEMVHDG-----G-K-E--TWHS  440
ACU12759/B     418 K-KCDVPCIGIEMVHDG-----G-K-E--TWHS  440
BAB32609/B     418 K-KCDVPCIGIEMVHDG-----G-K-K--TWHS  440
AAA43093/A     415 S-ECYNPCFYVELIRGR--PEEA-KYV--EWTS  441
AAA43429/A     415 K-GCLVPCFWVEMIRGK--PEEI---T--IWTS  439
AAA43449/A     415 L-DCMRPCFWVELIRGR--PREK---TT-IWTS  440
AAA43575/A     417 G-ECYRACFYVELIRGR--PKED-K-V--WWTS  442
AAD49005/A     415 K-SCVNRCFYVELIRGR--PQET-R-V--WWTS  440
AAD49007/A     415 K-SCINRCFYVELIRGR--PQET-R-V--WWTS  440
AAF77036/A     415 L-DCMRPCFWVELIRGQ--PKEN---T--IWTS  439
AAO46232/A     415 K-SCINRCFYVELIRGR--QQET-R-V--WWTS  440
AAO46822/A     415 L-DCIRPCFWVELIRGR--PKES---T--IWTS  439
AAO62036/A     414 N-GCFQPCFYIELIRGRPNKND--D-V--SWTS  440
AAO62041/A     415 L-DCMRPCFWVELIRGR--PKEN---T--IWTS  439
AAO62044/A     416 R-NCTVPCFWVEMIRGQ--PKEK---T--IWTS  440
AAO62064/A     417 K-ECFNPCFYVELIRGR--PKES-S-V--LWTS  442
AAT08005/A     415 R-NCLVPCFWVEMIRGK--PEEK---T--IWTS  439
AAT37407/A     414 N-GCFQPCFYIELIRGRPNKND--D-V--SWTS  440
AAT37414/A     414 N-GCFQPCFYVELTRGVPNKNE--D-V--SWTS  440
AAT65406/A     417 R-ECFNPCFYVELIRGR--PKES-S-V--LWTS  442
AAX78821/A     415 K-SCINRCFYVELIRGR--PQET-R-V--WWTS  440
AAY52584/A     415 K-SCINRCFYVELIRGR--PKET-R-V--WWTS  440
AAY87411/A     415 K-SCINRCFYVELIRGR--PQET-R-V--WWTS  440
ABB17695/A     417 K-QCLVPCFWLEMIRGK--PEER---T-SIWTS  442
ABB19439/A     417 K-ECFNPCFYVELIRGR--PKES-S-V--LWTS  442
ABB19610/A     415 L-DCMRPCFWVELIRGR--PKEN---T--IWTS  439
ABB19747/A     417 K-QCLVPCFWLEMIRGK--PEER---T-SIWTS  442
ABB19914/A     416 R-NCTVPCFWVEMIRGQ--PKEK---T--IWTS  440
ABB20088/A     416 R-NCTVPCFWVEMIRGQ--PKEK---T--IWTS  440
ABB20104/A     415 SNECYNPCFYVELIRGR--PEEA-KYV--WWTS  442
ABB20243/A     417 G-DCYRACFYVELIRGR--PKED-K-V--WWTS  442
ABB20375/A     417 K-ECFNPCFYVELIRGR--PKES-S-V--LWTS  442
ABB20475/A     415 K-GCINRCFYVELIRGR--PQET-R-V--WWTS  440
ABB20501/A     415 S-ECYNPCFYVELIRGR--PEEA-KYV--EWTS  441
ABB21754/A     417 E-ECYRACFYVELIRGR--PKED-K-V--WWTS  442
ABB87198/A     417 K-QCLVPCFWLEMIRGR--PEER---T-SIWTS  442
ABB87732/A     416 R-NCTVPCFWVEMIRGQ--PKEK---T--IWTS  440
ABB87959/A     415 SSECYNPCFYVELIRGR--PEEA-KYV--WWTS  442
ABB88058/A     414 K-DCFQPCFYVELIRGRPNKND--D-V--SWTS  440
ABB88351/A     417 K-ECFNPCFYVELIRGR--PKES-S-V--LWTS  442
ABC02269/A     415 K-SCINRCFYVELIRGR--EQET-R-V--WWTS  440
ABF47958/A     399 L-DCMRPCFWVELIRGL--PEED---A--IWTS  423
ABG37189/A     415 K-SCINRCFYVELIRGR--KQET-E-V--WWTS  440
ABH04381/A     414 K-GCFQPCFYVELIRGRPNKND--D-V--SWTS  440
ABI30359/A     415 K-SCINRCFYVELIRGR--PQET-R-V--WWTS  440
ABI84399/A     414 N-GCFQPCFYVELTRGVPNKNE--D-V--SWTS  440
ABI84436/A     417 K-QCLVPCFWLEMIRGK--PEER---T-SIWTS  442
ABI84475/A     416 R-NCTVPCFWVEMIRGQ--PKEK---T--IWTS  440
ABI84973/A     414 N-GCFQPCFYIELIRGRTNKND--D-V--SWTS  440
ABI84982/A     416 ANECYNPCFYVELIRGR--PEEA-KYV--WWTS  443
ABI92217/A     417 R-ECFNPCFYVELIRGR--PKES-S-V--LWTS  442
ABJ09099/A     415 R-DCLVPCFWVEMIRGK--PEEK---T--IWTS  439
ABK32099/A     416 R-NCTVPCFWVEMIRGQ--PKEK---T--IWTS  440
ABP49198/A     417 G-ECYRACFYVELIRGR--PKED-K-V--WWTS  442
ABP49253/A     417 G-ECYRACFYVELIRGR--PKED-K-V--WWTS  442
ABQ97208/A     415 K-SCINRCFYVELIRGR--KQET-R-V--WWTS  440
ABR28683/A     415 M-DCIRPCFWVELIRGQ--PKES---T--IWTS  439
ABR37723/A     417 E-ECYRACFYVELIRGR--PKED-K-V--WWTS  442
ABS50124/A     415 M-NCIRPCFWVELIRGQ--PKES---T--IWTS  439
ABS89357/A     416 GNECYNPCFYVELIRGR--PEEA-KYV--WWTS  443
ABU95382/A     415 L-DCMRPCFWVELIRGR--PKEN---T--IWTS  439
ABV25648/A     415 M-NCIKPCFWVELIRGQ--PKES---T--IWTS  439
ABV29593/A     415 L-DCMRPCFWVELIRGR--PKEN---T--IWTS  439
ABV82576/A     415 M-DCIRPCFWVELIRGQ--PKEN---T--IWTS  439
ABV82587/A     415 M-DCIRPCFWVELIRGQ--PKES---T--IWTS  439
ABW95951/A     395 L-DCIRPCFWVELIRGR--PKES---T--IWTS  419
ABX88802/A     415 K-SCINRCFYVELIRGR--PQET-R-V--WWTS  440
ABY84687/A     415 M-NCIKPCFWVELIRGQ--PKES---T--IWTS  439
ACA04655/A     417 K-ECFNPCFYVELIRGR--PKES-S-V--LWTS  442
ACA04738/A     417 N-VCYNPCFYVELIRGR--PEEA-KYV--WWTS  443
ACA04739/A     415 K-DCLVPCFWVEMIRGK--PEEK---T--IWTS  439
ACA04740/A     417 G-ECYRACFYVELIRGR--PKED-K-V--WWTS  442
ACA14299/A     415 K-SCVNRCFYVELIRGR--PQET-R-V--WWTS  440
ACB70583/A     395 L-DCIRPCFWVELIRGR--PKEG---T--IWTS  419
ACD47117/A     415 K-SCINRCFYVELIRGR--PQET-R-V--WWTS  440
ACD65204/A     415 M-NCIKPCFWVELIRGQ--PKES---T--IWTS  439
ACD76864/A     415 K-SCINRCFYVELIRGR--PQEA-R-V--WWTS  440
ACD85421/A     415 K-GCLVPCFWVEMIRGK--PEEI---T--IWTS  439
ACE73320/A     416 R-NCTVPCFWVEMIRGQ--PKEK---T--IWTS  440
ACE76594/A     415 K-SCINRCFYVELIRGR--PQET-R-V--WWTS  440
ACE78976/A     416 K-ECFNPCFYVELIRGR--PKES-S-V--LWTS  441
ACE78981/A     416 K-ECFNPCFYVELIRGR--PKES-S-V--LWTS  441
ACF20219/A     415 SSECYNPCFYVELIRGR--PEEA-KYV--WWTS  442
ACF25054/A     415 K-SCINRCFYVELIRGR--PQET-R-V--WWTS  440
ACF25354/A     415 SNECYNPCFYVELIRGR--PEEA-KYV--WWTS  442
ACF33655/A     414 K-DCFQPCFYVELIRGRPNKND--D-V--SWTS  440
ACF36500/A     415 K-SCINRCFYVELIRGR--NQET-E-V--LWTS  440
ACF93490/A     415 K-GCLVPCFWVEMIRGK--PEET---T--IWTS  439
ACI41114/A     414 K-DCFQPCFYVELIRGRPNKND--D-V--SWTS  440
ACI48786/A     415 K-GCLVPCFWVEMIRGK--PEET---T--IWTS  439
ACN65661/A     417 S-ECYNPCFYVELIRGR--PEEA-KYV--WWTS  443
ACO24985/A     414 L-DCMRPCFWVELIRGR--PKEN---T--IWTS  438
ACP50710/A     415 K-TCINRCFYVELIRGR--PQET-R-V--WWTS  440
ACQ73415/A     415 S-ECYNPCFYVELIRGR--PEEA-KYV--EWTS  441
ACR66907/A     414 N-GCFQPCFYIELIRGRPNKND--D-V--SWTS  440
ACR83968/A     415 L-DCMRPCFWVELIRGR--PKEN---T--VWTS  439
ACS68311/A     417 G-ECYRACFYVELIRGR--PKED-K-V--WWTS  442
ACS92897/A     415 K-SCINRCFYVELIRGR--KEET-K-V--WWTS  440
ACT67761/A     415 K-SCINRCFYVELIRGR--KEEN-E-V--LWTS  440
ACT97062/A     415 K-DCLVPCFWVEMIRGK--PEEK---T--IWTS  439
ACV41710/A     415 R-NCLVPCFWVEMIRGK--PEEK---T--IWTS  439
ADA71169/A     415 L-DCIRPCFWVELVRGL--PREN----TTIWTS  440
ADK70163/A     416 R-NCTVPCFWVEMIRGQ--PKEK---T--IWTS  440
ADU17627/A     417 G-ECYRACFYVELIRGR--PKED-K-V--WWTS  442
ADU20276/A     417 K-QCLVPCFWLEMIRGK--PEER---T-SIWTS  442
ADU20397/A     414 K-DCFQPCFYVELIRGRPNKND--D-V--SWTS  440
ADU53220/A     416 R-NCTVPCFWVEMIRGQ--PKEK---T--IWTS  440
AEB89856/A     417 G-DCYRACFYVELIRGR--PKED-K-V--WWTS  442
AEB89867/A     415 K-DCLVPCFWVEMIRGK--PEEK---T--IWTS  439
AEK50939/A     417 R-ECFNPCFYVELIRGR--PKES-S-V--LWTS  442
AEK50961/A     415 SSECYNPCFYVELIRGR--PEEA-KYV--WWTS  442
BAA06132/A     415 K-SCINRCFYVELIRGR--KQET-R-V--WWTS  440
BAA06718/A     415 L-DCMRPCFWVELVRGR--PREN----TTIWTS  440
BAF03532/A     416 K-SCLVPCFWLEMIRGK--PEER---T-SIWTS  441
BAF03569/A     416 K-SCLVPCFWLEMIRGK--PEER---T-SIWTS  441
BAF34378/A     415 K-SCVNRCFYVELIRGR--PQET-R-V--WWTS  440
BAF34925/A     415 K-SCINRCFYVELIRGR--PQET-R-V--WWTS  440
BAF43417/A     417 K-QCLVPCFWLEMIRGK--PEER---T-SIWTS  442
BAF43457/A     415 K-DCLVPCFWVEMIRGK--PEEK---T--IWTS  439
BAF43461/A     416 K-SCLVPCFWLEMIRGK--PEER---T-SIWTS  441
BAF46763/A     414 N-GCFQPCFYIELIRGR--PNENND-V--SWTS  440
BAF46905/A     417 K-ECFNPCFYVELIRGR--PKES-S-V--LWTS  442
BAF48640/A     415 K-SCINRCFYVELIRGR--PQET-R-V--WWTS  440
BAF48644/A     414 N-GCFQPCFYIELIRGRPNKND--D-V--SWTS  440
BAF48646/A     417 S-ECYNPCFYVELIRGR--PEEA-KYV--WWTS  443
BAF63047/A     415 L-DCIRPCFWVELVRGL--PREN----TTIWTS  440
BAG66251/A     415 R-NCLVPCFWVEMIRGK--PEEK---T--MWTS  439
BAG66259/A     415 --DCFQPCFYVELIRGR-PNKND-D-V--SWTS  440
BAG66279/A     415 K-DCLVPCFWVEMIRGK--PEEK---T--IWTS  439
BAH02172/A     415 K-SCINRCFYVELIRGR--KQET-R-V--WWTS  440
BAH70320/A     417 S-ECYNPCFYVELIRGR--PEEA-KYV--WWTS  443
BAI39637/A     395 L-DCIRPCFWVELIRGR--PKES---T--IWTS  419
BAI48894/A     415 L-DCMRPCFWVELIRGR--PKEN---T--IWTS  439
BAI50030/A     414 N-GCFQPCFYIELIRGRPNKND--D-V--SWTS  440
BAJ07979/A     416 K-GCLVPCFWLEMIRGK--PEER---T-SIWTS  441
BAJ10562/A     417 K-ECLNPCFYVELIRGK--PKES-S-V--LWTS  442
CAA36475/A     393 L-DCMRPCFWVELIRGR--PNHN---T--IWTS  417
CAC36997/A     415 K-SCINRCFYVELIRGR--EQET-R-V--WWTS  440
CAD57252/A     415 L-DCIRPCFWVELVRGL--PREN----TTIWTS  440
CAO82694/A     426 L-DCMRPCFWVELIRGR--PKEN---T--IWTS  450
CAP69845/A     416 R-NCTVPCFWVEMIRGQ--PKEK---T--IWTS  440

cons           991    \*   \*: :\*: :.              \* \* 1023

AAA43735/B     441 AATAIYCL-MGSGQLLWDTVTGVDMAL-----  466
AAA43743/B     441 AATAIYCL-MGSGQLLWDTVTGVDMAL-----  466
AAA43749/B     441 AATAIYCL-MGSGQLLWDTVTGVDMAL-----  466

AAU94779/B     441 AATAIYCL-MGSGQLLWDTATGVDMAL-----  466
ABL84344/B     441 AATAIYCL-MGSGQLLWDTVTGVDMAL-----  466
ABO72374/B     441 AATAIYCL-MGSGQLLWDTVTGVDMAL-----  466

ABQ81846/B     441 AATAIYCL-MGSGQLLWDTVTGVDMAL-----  466

ACU12759/B     441 AATAIYCL-MGSGQLLWDTVTGVNMAL-----  466

BAB32609/B     441 AATAIYCL-MGSGQLLWDTVTGVDMAL-----  466

AAA43093/A     442 NSLIALCG-SPISVGSGSFPDGAQIKYFS---  469
AAA43429/A     440 SSSIVMCG-VDHKVASWSWHDGAILPFDIDKM  470
AAA43449/A     441 GSSISFCG-VNSDTVNWSWPDDAELPLTIDK-  470
AAA43575/A     443 NSIVSMCS-STEFLGQWNWPDGAKIEYFL---  470
AAD49005/A     441 NSIVAFCG-TSGTYGTGSWPDGANINFMAI--  469
AAD49007/A     441 NSIIVFCG-TSGTYGTGSWPDGANINFMAI--  469
AAF77036/A     440 GSSISFCG-VNSDTVGWSWPDGAELPFSIDK-  469
AAO46232/A     441 NSIVVFCG-TSGTYGTGSWPDGANINFMPI--  469
AAO46822/A     440 GSSISFCG-VNSDTVGWSWPDGAELPFTIDK-  469
AAO62036/A     441 NSIVTFCG-LDNEPGSGNWPDGSNIGFMPK--  469
AAO62041/A     440 GSSISFCG-VNSDTVGWSWPDGAELPFTIDK-  469
AAO62044/A     441 GSSIAFCG-VNSDTTGWSWPDGALLPFDIDK-  470
AAO62064/A     443 NSIVALCG-SKERLGSWSWHDGAEIIYFK---  470
AAT08005/A     440 SSSIVMCG-VDHEIADWSWHDGAILPFDIDKM  470
AAT37407/A     441 NSIVTFCG-LDNEPGSGNWPDGSNIGFMPK--  469
AAT37414/A     441 NSIVTFCG-LDNEPGSGNWPDGANIGFMPK--  469
AAT65406/A     443 NSIVALCG-SKERLGSWSWHDGAEIIYFK---  470
AAX78821/A     441 NSIVVFCG-TSGTYGTGSWPDGANINFMPI--  469
AAY52584/A     441 NSIIVFCG-TSGTYGTGSWPDGANINFMPI--  469
AAY87411/A     441 NSIVVFCG-TSGTYGTGSWPDGANINFMPI--  469
ABB17695/A     443 SSSTVFCG-VSSEVPGWSWDDGAILPFDIDKM  473
ABB19439/A     443 NSIVALCG-SKERLGSWSWHDGAEIIYFK---  470
ABB19610/A     440 GSSISFCG-VNSDTVGWSWPDGAELPFTIDK-  469
ABB19747/A     443 SSSTVFCG-VSSEVPGWSWDDGAILPFDIDKM  473
ABB19914/A     441 GSSIAFCG-VNSDTTGWSWPDGALLPFDIDK-  470
ABB20088/A     441 GSSIAFCG-VNSDTTGWSWPDGALLPFDIDK-  470
ABB20104/A     443 NSLVALCG-SPVPVGSGSFPDGAQIQYFS---  470
ABB20243/A     443 NSIVSMCS-STEFLGQWNWPDGAKIEYFL---  470
ABB20375/A     443 NSIVALCG-SKERLGSWSWHDGAEIIYFK---  470
ABB20475/A     441 NSIVVFCG-TSGTYGTGSWPDGANINFMPT--  469
ABB20501/A     442 NSLIALCG-SPIPVGSGSFPDGAQIKYFS---  469
ABB21754/A     443 NSIVSMCS-STEFLGQWNWPDGAKIEYFL---  470
ABB87198/A     443 SSSTVFCG-VSSEVPGWSWDDGAILPFDIDKM  473
ABB87732/A     441 GSSIAFCG-VNSDTTGWSWPDGALLPFDIDK-  470
ABB87959/A     443 NSLVALCG-SPVPVGSGSFPDGAQIQYFS---  470
ABB88058/A     441 NSVVTFCG-LDNEPGSGNWPDGSNIGFMPK--  469
ABB88351/A     443 NSIVALCG-SKERLGSWSWHDGAEIIYFK---  470
ABC02269/A     441 NSIVVFCG-TSGTYGTGSWPDGADINLMPI--  469
ABF47958/A     424 GSIISFCG-VNSDTVDWSWPDGAELPFTIDK-  453
ABG37189/A     441 NSIVVFCG-TSGTYGTGSWPDGADINLMPI--  469
ABH04381/A     441 NSIVTFCG-LDNEPGSGNWPDGSNIGFMPK--  469
ABI30359/A     441 NSIVVFCG-TSGTYGTGSWPDGANINFMPI--  469
ABI84399/A     441 NSIVTFCG-LDNEPGSGNWPDGANIGFMPK--  469
ABI84436/A     443 SSSTVFCG-VSSEVPGWSWDDGAILPFDIDKM  473
ABI84475/A     441 GSSIAFCG-VNSDTTSWSWPDGALLPFDIDK-  470
ABI84973/A     441 NSIVTFCG-LDNEPGSGNWPDGSNIGFMPK--  469
ABI84982/A     444 NSLIALCG-SPVSVGSGSFPDGAQIQYFS---  471
ABI92217/A     443 NSIVALCG-SKERLGSWSWHDGAEIIYFK---  470
ABJ09099/A     440 SSSIVMCG-VDHEIADWSWHDGAILPFDIDKM  470
ABK32099/A     441 GSSIAFCG-VDSDTTGWSWPDGALLPFDIDK-  470
ABP49198/A     443 NSIVSMCS-STEFLGQWNWPDGAKIEYFL---  470
ABP49253/A     443 NSIVSMCS-STEFLGQWNWPDGAKIEYFL---  470
ABQ97208/A     441 NSIVVFCG-TSGTYGTGSWPDGADIDLMPI--  469
ABR28683/A     440 GSSISFCG-VNSGTASWSWPDGADLPFTIDK-  469
ABR37723/A     443 NSIVSMCS-STEFLGQWNWPDGAKIEYFL---  470
ABS50124/A     440 GSSISFCG-VDSETASWSWPDGADLPFTIDK-  469
ABS89357/A     444 NSLIALCG-SPFPVGSGSFPDGAQIQYFS---  471
ABU95382/A     440 GSSISFCG-VSSDTVGWSWPDGAELPFTIDK-  469
ABV25648/A     440 GSSISFCG-VDSETASWSWPDGADLPFTIDK-  469
ABV29593/A     440 GSSISFCG-VNSETVGWSWPDGAELPFTIDK-  469
ABV82576/A     440 GSSISFCG-VNSGTVNWSWPDGADLPFTIDK-  469
ABV82587/A     440 GSSISFCG-VNSGTANWSWPDGADLPFTIDK-  469
ABW95951/A     420 GSSISFCG-VNSDTVGWSWPDGAELPFTIDK-  449
ABX88802/A     441 NSIVVFCG-TSGTYGTGSWPDGANINFMPI--  469
ABY84687/A     440 GSSISFCG-VDSETASWSWPDGADLPFTIDK-  469
ACA04655/A     443 NSIVALCG-SKERLGSWSWHDGAEIIYFK---  470
ACA04738/A     444 NSLIALCG-SPFPVGSGSFPDGAQIQYFS---  471
ACA04739/A     440 SSSIVMCG-VDYEIADWSWHDGAILPFDIDKM  470
ACA04740/A     443 NSIVSMCS-STEFLGQWNWPDGAKIEYFL---  470
ACA14299/A     441 NSIVVFCG-TSGTYGTGSWPDGANINFMPI--  469
ACB70583/A     420 GSSISFCG-VNSDTVGWSWPDGAELPFTIDK-  449
ACD47117/A     441 NSIIVFCG-TSGTYGTGSWPDGANIDFMSI--  469
ACD65204/A     440 GSSISFCG-VDSETVSWSWPDGADLPFTIDK-  469
ACD76864/A     441 NSIVVFCG-TSGTYGTGSWPDGANINFMPI--  469
ACD85421/A     440 SSSIVMCG-VDHKIASWSWHDGAILPFDIDKM  470
ACE73320/A     441 GSSIAFCG-VNSDTTGWSWPDGALLPFDIDK-  470
ACE76594/A     441 NSIVVFCG-TSGTYGTGSWPDGANINFMPI--  469
ACE78976/A     442 NSIVALCG-SRERLGSWSWHDGAEIIYFK---  469
ACE78981/A     442 NSIVALCG-SKERLGSWSWHDGAEIIYFK---  469
ACF20219/A     443 NSLVALCG-SPVPVGSGSFPDGAQIQYFS---  470
ACF25054/A     441 NSIVVFCG-TSGTYGTGSWPDGANINFMPI--  469
ACF25354/A     443 NSLVALCG-SPVSVGSGSFPDGAQIQYFS---  470
ACF33655/A     441 NSIVTFCG-LDNEPGSGNWPDGSNIGFMPK--  469
ACF36500/A     441 NSIVVFCG-TSGTYGTGSWPDGADINLMPI--  469
ACF93490/A     440 SSSIVMCG-VDHKIASWSWHDGAILPFDIDKM  470
ACI41114/A     441 NSIVTFCG-LDNEPGSGNWPDGSNIGFMPK--  469
ACI48786/A     440 SSSIVMCG-VDHKIASWSWHDGAILPFDIDKM  470
ACN65661/A     444 NSLIALCG-SPFPVGSGSFPDGAQIQYFS---  471
ACO24985/A     439 GSSISFCG-VNSDTVGWSWPDGAELPFTIDK-  468
ACP50710/A     441 NSIIVFCG-TSGTYGTGSWPDGANINFMAI--  469
ACQ73415/A     442 NSLIALCG-SPISVGSGSFPDGAQIKYFS---  469
ACR66907/A     441 NSIVTFCG-LDNEPGSGNWPDGSNIGFMPK--  469
ACR83968/A     440 GSSISFCG-VNSDTVGWSWPDGAELPFTIDK-  469
ACS68311/A     443 NSIVSMCS-STEFLGQWNWPDGAKIEYFL---  470
ACS92897/A     441 NSIVVFCG-TSGTYGTGSWPDGADINLMPI--  469
ACT67761/A     441 NSIVVFCG-TSGTYGTGSWPDGADINLMPI--  469
ACT97062/A     440 SSSIVMCG-VDYEVADWSWHDGAIPPFDIDKM  470
ACV41710/A     440 SSSIVMCG-VDHEIADWSWHDGAILPFDIDKM  470
ADA71169/A     441 GSSISFCG-VNGDIANWSWPDGAELPFTIDK-  470
ADK70163/A     441 GSSIAFCG-VDSDTTGWSWPDGALLPFDIDK-  470
ADU17627/A     443 NSIVSMCS-STEFLGQWNWPDGAKIEYFL---  470
ADU20276/A     443 SSSTVFCG-VSSEVPGWSWDDGAILPFDIDKM  473
ADU20397/A     441 NSIVTFCG-LDNEPGSGNWPDGSNIGFMPK--  469
ADU53220/A     441 GSSIAFCG-VNSDTTGWSWPDGALLPFDIDK-  470
AEB89856/A     443 NSIVSMCS-STEFLGQWNWPDGAKIEYFL---  470
AEB89867/A     440 SSSIVMCG-VDYEVADWSWHDGAILPFDIDKM  470
AEK50939/A     443 NSIVALCG-SKERLGSWSWHDGAEIIYFK---  470
AEK50961/A     443 NSLVALCG-SPISVGSGSFPDGAQIQYFS---  470
BAA06132/A     441 NSIVVFCG-TSGTYGTGSWPDGANISFMPI--  469
BAA06718/A     441 GSSISFCG-VNGDTANWSWPDGAELPFTIDK-  470
BAF03532/A     442 SSSTVFCG-VSSEVPGWSWDDGAILPFDIDKM  472
BAF03569/A     442 SSSTVFCG-VSSEVPGWSWDDGAILPFDIDKM  472
BAF34378/A     441 NSIVVFCG-TSGTYGTGSWPDGANINFMPI--  469
BAF34925/A     441 NSIVVFCG-TSGTYGTGSWPDGANINFMPI--  469
BAF43417/A     443 SSSTVFCG-VSSEVPGWSWDDGAILPFDIDKM  473
BAF43457/A     440 SSSIVMCG-VDYEVADWSWHDGAILPFDIDKM  470
BAF43461/A     442 SSSTVFCG-VSSEVPGWSWDDGAILPFDIDKM  472
BAF46763/A     441 NSIVTFCG-LDNEPGSGNWPDGSNIGFMPK--  469
BAF46905/A     443 NSIVALCG-SKERLGSWSWHDGAEIIYFK---  470
BAF48640/A     441 NSIVVFCG-TSGTYGTGSWPDGANINFMPI--  469
BAF48644/A     441 NSIVTFCG-LDNEPGSGNWPDGSNIGFMPK--  469
BAF48646/A     444 NSLIALCG-SPFPVGSGSFPDGAQIQYFS---  471
BAF63047/A     441 GSSISFCG-VNSDTADWSWPDGAELPFTIDK-  470
BAG66251/A     440 SSSIVMCG-VDHEIADWSWHDGAILPFDIDKM  470
BAG66259/A     441 NSIVTFCGLDNE-PGSGNWPDGSNIG-FMPK-  469
BAG66279/A     440 SSSIVMCG-VDYEVADWSWHDGAILPFDIDKM  470
BAH02172/A     441 NSIVVFCG-TSGTYGTGSWPDGANINFMPI--  469
BAH70320/A     444 NSLIALCG-SPFSVGSGSFPDGAQIQYFS---  471
BAI39637/A     420 GSSISFCG-VNSDTVSWSWPDGAELPFTIDK-  449
BAI48894/A     440 GSSISFCG-VDSDTVGWSWPDGAELPFTIDK-  469
BAI50030/A     441 NSIVTFCG-LDNEPGSGNWPDGSNIGFMPK--  469
BAJ07979/A     442 SSSTVFCG-VSSEVPGWSWDDGAILPFDIDKM  472
BAJ10562/A     443 NSIVALCG-SKERLGSWSWHDGAEIIYFK---  470
CAA36475/A     418 GSSISFCG-VNSDTVGWSWPDGAELPFTIDK-  447
CAC36997/A     441 NSIVVFCG-TSGTYGTGSWPDGANINFMPI--  469
CAD57252/A     441 GSSISFCG-VNSDTANWSWPDGAELPFTIDK-  470
CAO82694/A     451 GSSISFCG-VNSGTVGWSWPDGAELPFTIDK-  480
CAP69845/A     441 GSSIAFCG-VDSDTTGWSWPDGALLPFDIDK-  470

cons          1024  :    \*          .   .           1055