**Q88JT6-A** ---LPNSQVPFGLRTVDGSYNNLVTGQ----SEFGAADNSFLRLLEASYR------ANYV 47

**A5W572-A** ---LPNSQVPFGLRTVDGSYNNLVTGQ----SEFGAADNSFLRLLEASYR------ANYV 47

**B0KJL7-A** ---LPNSQVPFGLRTVDGSYNNLVAGQ----SEFGAADNSFLRLLDASYR------ANYV 47

**Q88JT6-B** ---IPNVRAAMGLRAVDGSNNNLMNLNGNNNTQYGAADNVFPRVTDPVFNPAEGAPAGFF 57

**A5W572-B** ---IPNVRAAMGLRAVDGSNNNLMNLNGNNNTQYGAADNVFPRVTDPVFNPAEGAPAGFF 57

**B0KJL7-B** ---IPNIRAPLGLRAVDGSNNNLMNLNGHNNTQFGAADNVFPRLTDPVFNPAEGAPAGFF 57

C7CGY0-A --AIADPHVPYGLRTVDGTYNNLVPGR----ETWGSSGQPMPQLFEPTYLNDADGDTMAL 54

A9W3A5-A --AIADPHVPYGLRTVDGTYNNLVPGR----ETWGSSGQPMPQLFEPTYLNDADGDTMAL 54

B7KW13-A --AIADPHVPYGLRTVDGTYNNLVPGR----ETWGSSGQPMPQLFEPTYLNDADGDTMAL 54

Q13AU2-A --AVADPKVPVGLRTVDGQDNNIVPGR----EQWGAADQSMPRLLTASYTTGAG--SIDL 52

Q07SX1-A --AIADPKVPAGLRTVNGEDNNIVPGR----EEWGAADQSMPRLLTSSYTTGAG--TLDL 52

Q0G341-A ------------------------------------------------------------

A6E280-A ------------------------------------------------------------

Q1YMS2-A NDLVPDPHVPWGLRTVDGTYNNLVDGR----EQWGAADTVMPRYLDGSFVTDTNSGAFFG 56

A3XF15-A ------------------------------------------------------------

Q1YMS2-B ------------------------------------------------------------

Q0G341-B ------------------------------------------------------------

A6E280-B ------------------------------------------------------------

C7CGY0-B ------------------------------------------------------------

A9W3A5-B ------------------------------------------------------------

B7KW13-B ------------------------------------------------------------

Q13AU2-B ------------------------------------------------------------

Q07SX1-B ------------------------------------------------------------

A3XF15-B ------------------------------------------------------------

**Q88JT6-A** GTGN---------------VVDSQPRTISNLIVDQTANNPAA-------------VEAN- 78

**A5W572-A** GTGN---------------VVDSQPRTISNLIVDQTANNPAA-------------VEAN- 78

**B0KJL7-A** GTGN---------------VVDSQPRTISNLIVDQTANNPAA-------------VEAN- 78

**Q88JT6-B** GPGSPAIPGSSYQQTS-GPVFDSQPRTISNLIVDQTSNNPAA-------------YATAY 103

**A5W572-B** GPGSPAIPGSSYQQTS-GPVFDSQPRTISNLIVDQTSNNPAA-------------YATAY 103

**B0KJL7-B** GPGSPAIPGSSYQQTS-GPVFDSQPRTISNLIVDQTSNNPAA-------------YATAY 103

C7CGY0-A GPGAP--VITNTNYGLPGSVADADPRIISNLVVDATLDNPAAIAAALRIAGSENVIADQR 112

A9W3A5-A GPGAP--VITNTNYGLPGSVADADPRIISNLVVDATLDNPAAIAAALRIAGSENVIADQR 112

B7KW13-A GPGAP--VITNTNYGLPGSVADADPRIISNLVVDATLDNPAAIAAALRIAGSENVIADQR 112

Q13AU2-A NGPAPGGVVTGGNYAAPGTIVDTAPRTVSNLIVDMSLNNPAAIIAALTFAGSEDVLADQS 112

Q07SX1-A NGPAPGGAVTGGNYAGPGTIVDTAPRTVSNLIVDMSLNNPAAIIAALTFAGSGDVLGDQG 112

Q0G341-A ------------------------------------------------------QLAAHV 6

A6E280-A ----------------------------TTVISSVTLPEPADGQWADLTLNSGPISAGLA 32

Q1YMS2-A --------VTNNNYAAPGSVVDTDPRIISNLIVDMSVDNPAA------------VLAFLN 96

A3XF15-A ------------------------------AAQDIETTKQSAFDT---------ATTNLD 21

Q1YMS2-B --------------------DDDTAGAGGVRELLGRNNNESH-----------PEYG-AA 28

Q0G341-B --------------------DDDTEGAAGVRELLGRNNNENN-----------PEFG-SA 28

A6E280-B --------------------DDDTEEATGVRTLSGEGNNEAN-----------PAYG-AA 28

C7CGY0-B -----------------PDNAGDDDVPTGYRELSGHGNNLDH-----------PTWG-SA 31

A9W3A5-B -----------------PDNAGDDDVPTGYRELSGHGNNLDH-----------PTWG-SA 31

B7KW13-B -----------------PDNAGDDDVPTGYRELSGHGNNLDH-----------PTWG-SA 31

Q13AU2-B --------------------GDDDDGATGVRDLSGHNNNVAN-----------PNWG-SA 28

Q07SX1-B -----------------PANGDDDGGPTGVRELSGHNNNQAN-----------PNWG-AA 31

A3XF15-B --------------------NEPADLIVGTRDLEGLTNNLLN-----------PEISGGA 29

Insertion 1

**Q88JT6-A** --------------------GGAAPVMSP**GIDGVFGTADD**KPVFFIPNVSPDAGLTAGFN 118

**A5W572-A** --------------------GGAAPVMSP**GIDGVFGTADD**KPVFFIPNVSPDAGLTAGFN 118

**B0KJL7-A** --------------------GGAAPVMSP**GIDGVFGTADD**KPVFFIPNVSPDVGLTAGFN 118

**Q88JT6-B** DPGADGVLNFGAAGNDDVLKDGVRIVASP**GMDGQFGTTDD**HDVYLFENTAADAGLSAPFN 163

**A5W572-B** DPGADGVLNFGAAGNDDVLKDGVRIVASP**GMDGQFGTTDD**HDVYLFENTAADAGLSAPFN 163

**B0KJL7-B** DPGADGVLNFGAPGNDDVLKDGVRIVASP**GMDGQFGTTDD**HDVYLFENTAADAGLSAPFN 163

C7CGY0-A AITAAHEALKAAQAANPAGDHAVLQSNLDALLEQTGVTVTNGSIDVLNVSPDEGLSKPFN 172

A9W3A5-A AITAAHEALKAAQAASPAGDHAVLQSNLDALLEQTGVTVTNGSIDVLNVSPDEGLSKPFN 172

B7KW13-A AITAAHEALKAAQAANPAGDHAVLQSNLDALLEQTGVTVTNGSIDVLNVSPDEGLSKPFN 172

Q13AU2-A EITAAFLALKAARDADPLGDHAALQLELDTILEQKGVTVTNGSIDVPNVAPDEGLSAPFN 172

Q07SX1-A EITAAFLALKAARDADPLGDHATLQQALDDVLEQKGVTVTNGSIEVPNVAPDEGLSAPFN 172

Q0G341-A GSELR-VEISHTGGGQALIDNVELSASSGNRIEITDEDLAT----LPNIAPDDGISAPFN 61

A6E280-A GQTLR-VEIQQTGGSQVLVDNVALSTSNGNEIEIDNIDLAT----IPNIAPDDGISAPFN 87

Q1YMS2-A NELAVETFKELHGGLEPVAPGTVVNS--ATQLAVTDADLAL----IPNIAPDEGISAPFN 150

A3XF15-A ALNAPGAADAALAAAQAIAT--EAQTTLDTLLSTHAITMDGNNVMLPDVTPDEGLSAPYN 79

Q1YMS2-B DEVFIRLTEARYGEYDGTTNNRAINPIFAGLDARTISNVLG-----HQEADLSPAASGAN 83

Q0G341-B DEVFIRLTEARYGEYDATINNRAVNPIFAGLDPREISNILG-----VQEADLAPAKSGAN 83

A6E280-B GEPFIRLTEARYGDPDENGN-RQINPIFDGLDPRAISNILG-----PHDDTTAPNAMNAS 82

C7CGY0-B DQAFIRLTQARYGETDANGN-RAINPIFDGLDARTISNILG-----TQEAGLPKAGNDAN 85

A9W3A5-B DQAFIRLTQARYGEADANGN-RAINPIFDGLDARTISNILG-----TQEAGLPKAGNDAN 85

B7KW13-B DQAFIRLTQARYGEADANGN-RAINPIFDGLDARTISNILG-----TQEAGLPKAGNDAN 85

Q13AU2-B DQPFIRITNPHYGEADANGN-LAINPVFDGLDPRTISNVLG-----SQEAGLPSAGNDAN 82

Q07SX1-B DQPFIRITNAHYGDEDANGN-RAINPVFDGLDPRTISNILG-----TQEANLPHAGNDAN 85

A3XF15-B TLPFSRVTEARYAGIGEDGA-GIVNPVFDDLDARAISNALG-----AQDADAAKAAS-AN 82

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**Q88JT6-A** AWMTFFGQFFDHGLDLVSKSSTDIVFIPLRPDDPLFVAGS------------PTNFMVLS 166

**A5W572-A** AWMTFFGQFFDHGLDLVSKSSTDIVFIPLRPDDPLFVAGS------------PTNFMVLS 166

**B0KJL7-A** AWMTFFGQFFDHGLDLVTKSSTDIVFIPLRPDDPLYNASS------------PTNFMVLS 166

**Q88JT6-B** AWMTFFGQFFDHGLDLVTKGGSGTIYIPLQPDDPLYVEGG------------FTNFMVVT 211

**A5W572-B** AWMTFFGQFFDHGLDLVTKGGSGTIYIPLQPDDPLYVEGG------------FTNFMVVT 211

**B0KJL7-B** AWMTFFGQFFDHGLDLVTKGGSGTIYIPLQPDDPLYVEGG------------FTNFMVVT 211

C7CGY0-A AWMTFFGQFFDHGLDLISKGGNGTVYVPLAADDPL-VLGQDGLAGTADDLAPHLRFMTLT 231

A9W3A5-A AWMTFFGQFFDHGLDLISKGGNGTVYVPLAADDPL-VLGQDGLAGTADDLAPHLRFMTLT 231

B7KW13-A AWMTFFGQFFDHGLDLISKGGNGTVYVPLAADDPL-VLGQDGLAGTADDLAPHLRFMTLT 231

Q13AU2-A AWMTFFGQFFDHGLDLISKGGAGTVYVPLAADDPLRTHGPDGIAGTGDEVPGQMAFMALT 232

Q07SX1-A AWMTFFGQFFDHGLDLISKGGAGTIYVPLAADDPLRTHGPDGVAGTGDEVSEQMAFMALT 232

Q0G341-A AWMTFFGQFFDHGLDLITKGGNGTVFIPLQADDPL-VVSG--------QVPPHMQFMVLT 112

A6E280-A AWMTFFGQFFDHGLDLITKGDNGTVFIPLQADDPL-VLGADGIAGTADDLPNHLRFMALT 146

Q1YMS2-A GWTTFFGQFFDHGLDLITKGTNGTVYIPLQPDDPLYVPGG------------FTNFMVLT 198

A3XF15-A SWMTLFGQFFDHGLDLVGKGGSGTVYIPLQPDDPLYDATS------------PTNFMVLT 127

Q1YMS2-B TFFMAFGQYFDHGLDFLPKNSANGVLAIGGPGTSRAPGVD--------------NPADLT 129

Q0G341-B TFFMAFGQYFDHGLDFLPKDSLNGVIEIGGPGSARAPGVD--------------NPADLT 129

A6E280-B ALFMAFGQYFDHGLDFIAKNPAFGTIEIGGPGAERSPTSD--------------NPADLT 128

C7CGY0-B IFFMAMGQYIDHGLDFLPKG-GNGSIVIGAPGG-GAPGSN--------------NPADLT 129

A9W3A5-B IFFMAMGQYIDHGLDFLPKG-GNGSIVIGAPGG-GAPGSN--------------NPADLT 129

B7KW13-B IFFMAMGQYIDHGLDFLPKG-GNGSIVIGAPGG-GAPGSN--------------NPADLT 129

Q13AU2-B IFFMAMGQYIDHGLDFLGKG-GNGTIQIGALGG-GAPGSG--------------NPADLT 126

Q07SX1-B IFFMAMGQYIDHGLDFLGKG-GNGSIQIGAAGG-GAPGSD--------------NPADLT 129

A3XF15-B MFMMSFGQYFDHGLTFIPKG-GHDPITIGGADM-GRPSGD--------------NPADLT 126

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Insertion 2(=A)

**Q88JT6-A** RAVRTA**GA---DGVVGTADDS**--QPNTTSPFVDQSQTYSSHPSHQVFLREYTVNAAGDPV 221

**A5W572-A** RAVRTA**GA---DGVVGTADDS**--QPNTTSPFVDQSQTYSSHPSHQVFLREYTVNAAGEPV 221

**B0KJL7-A** RAVRTA**GA---DGVVGTADDG**--QPNTTSPFVDQSQTYSSHPSHQVFLREYMLDAAGDPV 221

**Q88JT6-B** RATNLP**GP---DGILGNADDI**REHTNTTTPFVDQNQTYSSHPSHQVFLRAYVMTDDG-PV 267

**A5W572-B** RATNLP**GP---DGILGNADDI**REHTNTTTPFVDQNQTYSSHPSHQVFLRAYVMTDDG-PV 267

**B0KJL7-B** RATNLP**GP---DGILGNADDI**HEHTNTTTPFVDQNQTYSSHPSHQVFLRAYVMTDDG-PV 267

C7CGY0-A RAAQVE---------------GSQRNVTTPFVDQNQTYTSNASHQVFLREYALVD-GRPV 275

A9W3A5-A RAAQVE---------------GSQRNVTTPFVDQNQTYTSNASHQVFLREYALVD-GRPV 275

B7KW13-A RAAQVE---------------GSQRNVTTPFVDQNQTYTSNASHQVFLREYALVD-GRPV 275

Q13AU2-A RATPAAD--------------GSQVNTTTPFVDQNQTYTSHASHQVFLREYKMVG-GVPM 277

Q07SX1-A RATPASD--------------GSQTNTTTPFVDQNQTYTSHASHQVFLREYSMAS-GVPM 277

Q0G341-A RSTPTEGP---------DGSMTEGKNVTTPFVDQNQTYTSHASHQVFVREYEMVD-GRPI 162

A6E280-A RSTPVDGPGADGVLGTADDTQHEGQNTTTPFVDQNQTYTSHASHQVFLREYAFDTNGNPV 206

Q1YMS2-A RAAKAEHLPGEDGVLGTADDIVSHTNTTTPFVDQNQTYTSHASHQVFLREYKFNADGEPV 258

A3XF15-A RATNQPGP---DGILGTADDVREHFNKTTPWVDQNQTYTSHPSHQVFLREYDLDANGSPV 184

Q1YMS2-B RGEVYTIDEN---------GVPQHLNKASPFVDQNQAYGSNALVGQFLRE----SDGDQG 176

Q0G341-B RGKVHVIDEN---------GIPQHLNKASPFVDQNQAYGSNELVGQFLRE----SDGAQG 176

A6E280-B RAEVAGYDED---------GVPQHTNMTSPFVDQNQAYGSHELVGQFLRE----SDGAHG 175

C7CGY0-B RGTVMAVDAN---------GVPQHKNQTSPYIDQNQAYGSNALVGQFLRE----SDGAQG 176

A9W3A5-B RGTVMAVDAN---------GVPQHKNQTSPYIDQNQAYGSNALVGQFLRE----SDGAQG 176

B7KW13-B RGTVMAVDAN---------GVPQHKNQTSPYIDQNQAYGSNALVGQFLRE----SDGAQG 176

Q13AU2-B RGSVASYDAN---------GVPQHINRTSPYVDQNQAYGSNDLVGQFLRA----GDDNGG 173

Q07SX1-B RGSVAGYEN----------GVPQHVNRTSPYVDQNQAYGSNDLVGQFLRE----GDGNGG 175

A3XF15-B RATATINPET---------GEIEHTNITSPVVDQNQVYGSSNLVGQLLRE----SGSNGG 173

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Insertion 3(=B)

**Q88JT6-A** ATGRLITNRDL**GADGKFGTADD**GNGESGGMATWAVVKAQARDLLGINLTDADVHSVPLLA 281

**A5W572-A** ATGRLITNRDL**GADGKFGTADD**GNGESGGMATWAVVKAQARDLLGINLTDADVHSVPLLA 281

**B0KJL7-A** ATGRLITNRDL**GADGKFGTADD**GNSENGGMATWAVVKAQARDLLGINLTDADVHSVPLLA 281

**Q88JT6-B** ATGRLITNRDL**GADGRFGTADD**—-TEIGGMATWKVVKAQARDLLGINLTDADVDNVPLLA 325

**A5W572-B** ATGRLITNRDL**GADGRFGTADD**—-TEIGGMATWKVVKAQARDLLGINLTDADVDNVPLLA 325

**B0KJL7-B** ATGRLITNRDL**GADGKFGTADD**—-TEIGGMATWKVVKAQARDLLGINLTDADVDNVPLLA 325

C7CGY0-A ATGRLLG----GAD-------------GGLATWADVKFQARTILGIELTDADVSAVPQLL 318

A9W3A5-A ATGRLLG----GAD-------------GGLATWADVKFQARTILGIELTDADVSAVPQLL 318

B7KW13-A ATGRLLG----GAD-------------GGLATWADVKFQARTILGIELTDADVSAVPQLL 318

Q13AU2-A ATGKLLG----GAE-------------GGLATWADVKAQAQNMLGIVLSDLDVLNVPLLR 320

Q07SX1-A ATGKLLG----GAD-------------GGLATWADVKAQARDALGIELSDLDVFNVPLLR 320

Q0G341-A STGHLLD----GAN-------------GGLATWAEVKVQAAEKLGIALADGDAVSIPLIL 205

A6E280-A STGKLLD----GAN-------------GGIPTWAEVKAQARDLLGIELTDGDVLNIPLLR 249

Q1YMS2-A STGRLLD----GLE-------------GGLATWGQIKAEAAAKLGIALDDQDALNIPLLR 301

A3XF15-A SNGYLLH----GQS-------------GGMSTWGDVKAQAAAKLGIQLNDSDVLDGPLLA 227

Q1YMS2-B VGMRLLS---------------------GATDPSTPDFNLLPTLRELIAHHWENDTIFVD 215

Q0G341-B FGMRLLA---------------------GADDPSNPEFRLLPTLRELIEHHWEANTIFRD 215

A6E280-B FGMRLLG---------------------GEADPSDPAFTLLPTLRDLILHHWEAETYFED 214

C7CGY0-B VGMRLLA---------------------GAPDPSNPAFNLLPTLRELVNHHWQADTIFAG 215

A9W3A5-B VGMRLLA---------------------GAPDPSNPAFNLLPTLRELVNHHWQADTIFAG 215

B7KW13-B VGMRLLA---------------------GAPDPSNPAFNLLPTLRELVNHHWQADTIFAG 215

Q13AU2-B LGAHLFA---------------------GAPDPSNPEFALLPTLRELITEHWQNNTVFHS 212

Q07SX1-B VGAHLFA---------------------GGPDPSNPQFSLLPTLRELIEEHWSNNTVFHS 214

A3XF15-B FGAHVLM---------------------GQEDPSASGFQLMATLRELLDHHTQAGTVFTD 212

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Insertion 4

**Q88JT6-A** TDAYGNFLRGPNGMPQVVMRVNN**GADGI-AGTADD**VTQLVEGDRNAPISLANA------- 333

**A5W572-A** TDAYGNFLRGPNGMPQVVVRVNN**GADGI-AGTADD**VTQLVEGDRNAPISLANA------- 333

**B0KJL7-A** TDAYGNFLRGPNGMPQVVMRVNN**GADGI-AGTADD**VTTLVEGNRAAPISLANA------- 333

**Q88JT6-B** TDAYGNFIKGPNGYPMVVM---K**GLDGI-AGTADD**--QEVEGNPLAPLDLTNA------- 372

**A5W572-B** TDAYGNFIKGPNGYPMVVM---K**GLDGI-AGTADD**--QEVEGNPLAPLDLTNA------- 372

**B0KJL7-B** TDAYGNFIKGPNGYPMVVM---K**GVDGI-AGTADD**--QQVEGNPLAPISLTNA------- 372

C7CGY0-A VDAYGEFVRSANGLPQVMVG--VGPGGQ-AVYASG--SLAEPLKLSAIQLPVGTVLVGPN 373

A9W3A5-A VDAYGEFVRSVNGLPQVMVG--VGPGGQ-AVYASG--SLAEPLKLSAIQLPVGTVLVGPN 373

B7KW13-A VDAYGEFVRSANGLPQVMVG--VGPGGQ-AVYASG--SLAEPLKLSAIQLPVGTVLVGPN 373

Q13AU2-A TDAYGEFIRDANGFAQVIIG--LGDDGI-PNTADD--LVASGTNLAPLNLATLNNGAGP- 374

Q07SX1-A TDPYGEFIRDANGFPQVIVG--IGADGI-PNTADD--IVASGTNLAPFDLASLNGGLGP- 374

Q0G341-A TDAYGEFVRGPNGFPQVVLG--VGPDGI-PNTADD--IVVEGDPENPINTFTVQSEDGS- 259

A6E280-A TDDYGEFIRGPNGLPQIVVG--IGADGI-PNTADD--DVVEGNLAAPVNTFTA------- 297

Q1YMS2-A TDPYGEFIRGDNGLPMIVTG--LGPDGI-PNTADD--IVVQGNLTTPVNTMAIG------ 350

A3XF15-A TDAYGNFIPGANGLPQLVVA--NPAYVEGGTEPLN--ILIEGDLANPVDASQA------- 276

Q1YMS2-B PSLPGGSVSFRDYFTDYPISDNATGSIFDEATGAYDPDVVASMVSNFMGGGYP------- 268

Q0G341-B PSLPNGAISFREYFTDFPISEGVTGNLFDEATGAYDPDVVNHLVSDFMGGGYP------- 268

A6E280-B PGLPGGAARLQDVFPD----------LVDEITGEIDPDMVQALASDFLGSGQP------- 257

C7CGY0-B ---PDGPISFRTYYTNFALSEGVTGTLFNTETGAFDPQVLTKLVGNFMGSGHP------- 265

A9W3A5-B ---PDGPISFRTYYTNFALSEGVTGTLFNTETGAFDPQVLTKLVGNFMGSGHP------- 265

B7KW13-B ---PDGPISFRTYYTNFALSEGVTGTLFNTETGAFDPQVLTKLVGNFMGSGHP------- 265

Q13AU2-B SSLQGGSVAFRDYFAGLVG-----------QNGVINQALLPSMISNFMGTNHA------- 254

Q07SX1-B ESLPDGAVAFRDYFPGLV------------QGGVINTAMLPGMISNFMGTSHA------- 255

A3XF15-B TD--KGDVTLEGYYPDLFN-----------EDGTYNAATIKDLSDDFMGEGWP------- 252

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**Q88JT6-A** --------------VSTGHGFLDDIAHNAAP--------VVVGGALQADADTLVGNAQPV 371

**A5W572-A** --------------VSTGHGFLDDIAHNAAP--------VVVGGVLQADADTLVGNAQPV 371

**B0KJL7-A** --------------VSTGHGFLDDIAHNAEP--------VKVGGVLQADADSAVGNVQPV 371

**Q88JT6-B** --------------VRTGHQFLADIAHNAVP--------VFSGGVLAPDADNVAGNAVPV 410

**A5W572-B** --------------VRTGHQFLADIAHNAVP--------VFSGGVLAPDADNVAGNAVPV 410

**B0KJL7-B** --------------VRTGHQFLADIAHNAVP--------VFSGGVLAPDADNAVGNAVPV 410

C7CGY0-A GAQNVIEAGETVAAARTFNAFLDDIAHNAVP--------VAVNGVLRPDADALTGNAVQM 425

A9W3A5-A GAQNVIEAGETVAAARTFNAFLDDIAHNAVP--------VAVNGVLRPDADALTGNAVQM 425

B7KW13-A GAQNVIEAGETVAAARTFNAFLDDIAHNAVP--------VAVNGVLRPDADALTGNAVQM 425

Q13AU2-A --------------VRTSHAFLDDIAHNAAP--------VVVDGVLTPDTDSATGNDVAI 412

Q07SX1-A --------------VRTSHAFLDDIAHNAAP--------VVVGGVLAPDADSATGNDVAI 412

Q0G341-A ----------LTGAVRIGHAFLDDIAHAANP--------VDSQTGLLK------------ 289

A6E280-A ------------GAIRIGHAFLDDIAHAANP--------FDSQSGMLKTADDDT--AVGL 335

Q1YMS2-A -------------AIRIGHAFLDDIAHNAAP--------VINGGVLQPDADVLTGNTVAS 389

A3XF15-A --------------VRNGHAFLEDIAHNAVPGTYVVDRFTGETATKQADADTDTGNAIIP 322

Q1YMS2-B ------------------------LLLDTNP----------------------------- 275

Q0G341-B ------------------------LLLDTNP----------------------------- 275

A6E280-B ------------------------LLLDANP----------------------------- 264

C7CGY0-B ------------------------LLLDTNP----------------------------- 272

A9W3A5-B ------------------------LLLDTNP----------------------------- 272

B7KW13-B ------------------------LLLDTNP----------------------------- 272

Q13AU2-B ------------------------LLLDANP----------------------------- 261

Q07SX1-B ------------------------LVLDANP----------------------------- 262

A3XF15-B ------------------------LLIDTNP----------------------------- 259

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**Q88JT6-A** G-QGGNNLTYDNELLDAHYIAGDGRVNENIGLTAVHHVFHSEHNRLVQQTKDTLLAAGDL 430

**A5W572-A** G-QGGNNLTYDNELLDAHYIAGDGRVNENIGLTAVHHVFHSEHNRLVQQTKDTLLAAGDL 430

**B0KJL7-A** G-PGGNNLTYDNELLDAHYIAGDGRVNENIGLTAVHHVFHSEHNRLVQQTKDTLLAAGDL 430

**Q88JT6-B** NPQTGANLAYDNELLDAHYIAGDGRVNENIGLTAVHAIFHSEHNRLVAQTMDTVLDSGDL 470

**A5W572-B** NPQTGANLAYDNELLDAHYIAGDGRVNENIGLTAVHAIFHSEHNRLVAQTMDTVLDSGDL 470

**B0KJL7-B** NPQTGANLAYDNELLDAHYIAGDGRVNENIGLTAVHAIFHAEHNRLVAQTMDTVLDSHDL 470

C7CGY0-A NPQTGRNLEYDNELLDRHFVTGDGRGNENIGLTAVHHIFHSEHNRQIDAHKLTILQSGDL 485

A9W3A5-A NPQTGRNLEYDNELLDRHFVTGDGRGNENIGLTAVHHIFHSEHNRQIDAHKLTILQSGDL 485

B7KW13-A NPQTGRNLEYDNELLDRHFVTGDGRGNENIGLTAVHHIFHSEHNRQIDAHKLTILQSGDL 485

Q13AU2-A NPLTGQRLEYDDELLDRHYITGDGRGNENIGLTAVHHIFHSEHNRQVDSQKLTILNSGDI 472

Q07SX1-A NPLTGQRLEYDNELLDRHYITGDGRGNENIGLTAVHHIFHSEHNRQVDSQKLTILRSGDT 472

Q0G341-A -----AEGTYDSELLGRHFITGDGRGNENIALTSVHHVFHSEHNRQVEDQKKTILETGDL 344

A6E280-A SDSVSTAGTYDNELLDRHFVTGDGRGNENIGLTAVHHVFHSEHNRQVVAQKKTILESGDI 395

Q1YMS2-A --QQGQNTEYDNELLDRHYITGDGRGNENIALTAVHHVFHSEHNRLVDATRMEVLKSGDL 447

A3XF15-A N-QFGQNETYDNELLDRHFIAGDGRGNENFGLTAVHHVFHSEHNRQTTEMKQTILDSGEL 381

Q1YMS2-B -----------YINLLDHYVAGDGRANENFALTSMHTIWARNHNFHVEMLLEAGFEG--- 321

Q0G341-B -----------FINLLDHYIAGDGRANENFALTSMHTVWARNHNFHVETLMEAGFEG--- 321

A6E280-B -----------FIDLLDHRMAGDGRANENFALTSVHTVWARNHNFHVENMLAQGFEG--- 310

C7CGY0-B -----------FISVLDHFVAGDGRANENFALTSIHTVWARNHNYHVEKLLESGFEG--- 318

A9W3A5-B -----------FISVLDHFVAGDGRANENFALTSIHTVWARNHNYHVEKLLESGFEG--- 318

B7KW13-B -----------FISVLDHFVAGDGRANENFALTSIHTVWARNHNYHVEKLLESGFEG--- 318

Q13AU2-B -----------FINVLDHYVSGDGRTNENFALTSIHTIWARNHNHHVEGLAAAGFQG--- 307

Q07SX1-B -----------FINVLDHYVAGDGRANENFALTSIHTIWARNHNHHVEGLEAAGFQG--- 308

A3XF15-B -----------FMNLLDHFVGGDGRANENVGLTSMHTVWARNHNYHVDQLLASGYDAD-- 306

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**Q88JT6-A** AFLNEWLIDDVTAIPTT---------PADIAALVWDGERLFQAAKFGTEMQYQHLVFEEF 481

**A5W572-A** AFLNEWLIDDVTAIPTA---------PADIAALVWDGERLFQAAKFGTEMQYQHLVFEEF 481

**B0KJL7-A** AFLNEWLIDDVIAIPTT---------PAGIAALVWDGERLFQAAKFGTEMQYQHLVFEEF 481

**Q88JT6-B** AFLNEWLLNPVSALPVT---------PAEIGALVWNGERLFQAAKFGTEMQYQHLVFEEF 521

**A5W572-B** AFLNEWLLNPVSALPVT---------PAEIDALVWNGERLFQAAKFGTEMQYQHLVFEEF 521

**B0KJL7-B** AFLNEWLLNPVTALPVT---------PAEIDALVWNGERLFQAAKFGTEMQYQHLVFEEF 521

C7CGY0-A AFINDWLATDIAALPGNFAQMTALGQLAYANTLSWDGERLFQAARFATEMQYQHLVFEEF 545

A9W3A5-A AFINDWLATDIAALPGNFAQMTALGQLAYANTLSWDGERLFQAARFATEMQYQHLVFEEF 545

B7KW13-A AFINDWLATDIAALPGNFAQMTPLGQLAYANTLSWDGERLFQAARFATEMQYQHLVFEEF 545

Q13AU2-A AFINEWLATDIGALDPGFGTMTALQQLDYANSLNWDGERLFQGARFATEMQYQHLVFEEF 532

Q07SX1-A AFINEWLATDIGGLPSGFASLSGLDQLAYANSLNWDGERLFQAARFATEMQYQHLVFEEF 532

Q0G341-A EMLNEWLAVDVSEVPT---------DPAVIATLSWDGERLFQAARFATEMQYQHLVFEEF 395

A6E280-A DFINEWLLVDLAAGDP---------IPTDPTALTWDGERLFQAGRFATEMQYQHLVFEEF 446

Q1YMS2-A AFINEWLATDIATLEG--IPADGLPLLNFANTLDWDGERVFQAARFGTEMQYQHLVFEEF 505

A3XF15-A AFINEWLATPINEDELS---------TAAIDTLTWDGGRLFQAAKFTTEMQYQHLAFEEF 432

Q1YMS2-B -----------------------------------TEEEVFQAAKMINEAEYQRVVFTEF 346

Q0G341-B -----------------------------------TSEEFFQAAKMLNEAEYQRVVFDEF 346

A6E280-B -----------------------------------SDEEIFQAAKMLNESDYQRVVFQEF 335

C7CGY0-B -----------------------------------TPEQVFQAAKMVNEAEYQRVVFDEY 343

A9W3A5-B -----------------------------------TPEQVFQAAKMVNEAEYQRVVFDEY 343

B7KW13-B -----------------------------------TPEQVFQAAKMVNEAEYQRVVFDEY 343

Q13AU2-B -----------------------------------TAEELFQAAKMINEAEYQRVVFDEY 332

Q07SX1-B -----------------------------------TAEELFQAAKMINEAEYQRVVFDEY 333

A3XF15-B -----------------------------------TPEELFQAARILNIGEYQQVVFNDF 331

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**Q88JT6-A** ARTIQPQIDEFLAP------NGYDTSINPAILAEFAHVVYRFGHSMLTETVDRYDPAFNP 535

**A5W572-A** ARTIQPQIDEFLAP------NGYDTSINPAILAEFAHVVYRFGHSMLTETVDRYDPAFNP 535

**B0KJL7-A** ARTIQPQIDEFLAP------NGYDTSINPAILAEFAHVVYRFGHSMLTETVDRFDPSFNP 535

**Q88JT6-B** ARTVQPRVDLFFAPT-----QVYDVDLDASIVAEFAHTVYRFGHSMLTETVDRFDIDFNV 576

**A5W572-B** ARTVQPRVDLFFAPT-----QVYDVDLDASIVAEFAHTVYRFGHSMLTETVDRFDIDFNV 576

**B0KJL7-B** ARTVQPRVDLFFAPT-----QVYDVDLDASIVAEFAHTVYRFGHSMLTETVDRFDIDFNV 576

C7CGY0-A ARKIQPLVDPFVFN--------PVTEIDPSIFAEFANTVYRFGHSMLTENMPRLGP---- 593

A9W3A5-A ARKIQPLVDPFVFN--------PVTEIDPSIFAEFANTVYRFGHSMLTENMPRLGP---- 593

B7KW13-A ARKIQPLVDPFVFN--------PVTEIDPSIFAEFANTVYRFGHSMLTENMPRLGP---- 593

Q13AU2-A ARKIQPAIDPFVFN--------SVTDINPAIFSEFANTVYRFGHSMLTEAMPRLDA---- 580

Q07SX1-A ARKIQPAIDPFVFN--------SVTDINPAIFSEFANTVYRFGHSMLTEGMPRLDG---- 580

Q0G341-A GRKINPNIDPFVFN--------AVTDINPAIFAEFANVVYRFGHSMLTDNMPRVFVDE-- 445

A6E280-A GRKIHPNIDPFVFN--------AVTDINPSIFAEFANVVYRFGHSMLTENMPRVLVNE-- 496

Q1YMS2-A ARKIQPAIDPFVFN--------SSTDIDPSIFSEFANVVYRFGHSMLTETVARTNIH--- 554

A3XF15-A GRTVQPQIAAFMVN--------ASAEVDASIMAEFAHVVYRFGHSMLTENVQTMDP---- 480

Q1YMS2-B ADMLIGGIRGEG----DHGFNDYNPNADARISHEFASAVYRVGHSLVGQTMTVIGPDGQ- 401

Q0G341-B ADFLIGGIRGSG----SHGHDEYNPDVDARISHEFAAAVYRVGHSLVGQTMTVIGPDGQ- 401

A6E280-B ADKLLGGLRNADGDREDHGWDGYNPDVDARISHEFAAAAYRFGHSLVGENLQVQGPNGE- 394

C7CGY0-B LETLIGGLRSDG----THGFEAYDPSVDVAISHEFAAAVFRFGHSLIGQTLNVKGADGE- 398

A9W3A5-B LETLIGGLRSDG----THGFEAYDPSVDVAISHEFAAAVFRFGHSLIGQTLNVKGADGE- 398

B7KW13-B LETLIGGLRSDG----THGFEAYDPNVDVAISHEFAAAVFRFGHSLIGQTLNVKGADGE- 398

Q13AU2-B LETLLGGLRSQG----THGFEEYDPNANAGISHEFAGAVFRFGHSLIGQTMTVLDANGN- 387

Q07SX1-B LETLLGGLRSQG----THGFEEYDPGADAGISHEFAAAVFRFGHSLIGQTMTVLDADGN- 388

A3XF15-B ADSLLGGLQGSG----THGHDKYDPTTDARISHEFAAAAYRFGHSQIGQSMTLKDVDADG 387

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**Q88JT6-A** VSA-DPANPDQQLGLIAAFLNPLAFA----------------GSGATADEAAGAIIRGVT 578

**A5W572-A** VSA-DPANPDQQLGLIAAFLNPLAFA----------------GSGATADEAAGAIIRGVT 578

**B0KJL7-A** VSG-DPANPDQQLGLIAAFLNPLAFA----------------GSGATADEAAGAIIRGVT 578

**Q88JT6-B** IQDPASANPDQQLGLIAAFLNPLAYA----------------ASGVTPEDATSAIVRGVT 620

**A5W572-B** IQDPASANPDQQLGLIAAFLNPLAYA----------------ASGVTPEDATSAIVRGVT 620

**B0KJL7-B** IKDPASANPDQQLGLIAAFLNPLAYA----------------ASGVTPEDATSAIVRGVT 620

C7CGY0-A ----DGQALDAGLGLIDAFLNPLAFD---------------NDGGLSHDESAAAIMRGMT 634

A9W3A5-A ----DGQALDADLGLIDAFLNPLAFD---------------NDGGLSHDESAAAIMRGMT 634

B7KW13-A ----DGQALDADLGLIDAFLNPLAFD---------------NDGGLSHDESAAAIMRGMT 634

Q13AU2-A ----NGNPMDSELGLVESFLNPVLFD---------------NDGAISHDAGAAAIVRGMT 621

Q07SX1-A ----AGNSMDSDLGLVEAFLNPVLFD---------------NDGAISHDAGAAAIVRGMT 621

Q0G341-A ---TTGEVSTDDMGLIQAFLNPDVFKRDG------------NDNEISADEAAAAIVRGMT 490

A6E280-A ---LTGEVTTDNMGLIAAFLNPVAYD---------------NDGAMSADAAAAAVILGMT 538

Q1YMS2-A ------DGSADNIGLIQAFLNPVEFT---------------KNSTVSADEATASIVLGMT 593

A3XF15-A ------NGVNTSTGLIEAFLNPVAFD---------------LDQTLTSDQAAGAVARGMS 519

Q1YMS2-B ---------PRQVELFDAFLNPTSELGAFKPGLP----DGYVPQPGYAQLGAGAILAGVA 448

Q0G341-B ---------PREVALFDAFLNPTNEAGAFTGPLP----PGYVPQPGYAQLGVGAILSGTA 448

A6E280-B ---------LIQVPLYDAFLNPSNDPSVFNGPLP----QGYVPAPGYAQYGVAAIIGGTA 441

C7CGY0-B ---------TVPVSLFDAFLNPSNDPSVFTAPLP----PGYVPQPGYAQYGVGGIIGGTI 445

A9W3A5-B ---------TVPVSLFDAFLNPSNDPSVFTAPLP----PGYVPQPGYAQYGVGGIIGGTI 445

B7KW13-B ---------TVPVSLFDAFLNPSNDPSVFTAPLP----PGYVPQPGYAQYGVGGIIGGTI 445

Q13AU2-B ---------PTQVNLFDAFLNPSNDPSAFPNPLP----PGYTPQPGYAQHGVNAIIGGTV 434

Q07SX1-B ---------PTQVNLFDAFLNPSNDPSVFPSPLP----PGYTPQPGYAQHGVNAIIGGTV 435

A3XF15-B ------NPFTVEVPLFDIFLNPTNDPDAFTADFGTLEQYGYKPQSGYAQYGVDNILGGLV 441

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**Q88JT6-A** RQVGNEIDEFVTEALRNNLLGLPLDLPALNIARGRDTGIPSLNEARREFYAATGDSQLKP 638

**A5W572-A** RQVGNEIDEFVTEALRNNLLGLPLDLPALNIARGRDTGIPSLNEARREFYAATGDSQLKP 638

**B0KJL7-A** RQLGNEIDEFVTEALRNNLLGLPLDLPALNIARGRDTGIPSLNEARREFYGATGDSQLKA 638

**Q88JT6-B** RQAGNEIDEFVTEALRNNLLGLPLDLPAINIARGRDVGIPSLNAVRREIYGQTGDTQLKP 680

**A5W572-B** RQAGNEIDEFVTEALRNNLLGLPLDLPAINIARGRDVGIPSLNAVRREIYGQTGDTQLKP 680

**B0KJL7-B** RQGGNEIDEFVTEALRNNLLGLPLDLPAINIARGRDVGIPSLNAVRRDVYGQTGDTQLKP 680

C7CGY0-A IERGSEIDEFVVGALRNNLLGLPLDLAAINIARGRDTGTPTLNEARAQLYAATGSTFLTP 694

A9W3A5-A IERGSEIDEFVVGALRNNLLGLPLDLAAINIARGRDTGTPTLNEARAQLYAATGSTFLTP 694

B7KW13-A IERGSEIDEFVVGALRNNLLGLPLDLAAINIARGRDTGTPTLNEARAQLYAATGSTFLTP 694

Q13AU2-A IERGNEIDEFVVDALRNNLLGLPLDLAAINIARGRDTGMPSLNETRTQLYAASGSTFLKP 681

Q07SX1-A IERGNEIDEFVVDALRNNLLGLPLDLAAINIARGRDTGMPSLNDARTQLYAASGSTFLKP 681

Q0G341-A TERGSAIDEYVVSSLRSNLLGLPLDLPALNIARGRETGMPTFNDARAELYGQTNSVWLKP 550

A6E280-A TEQGSQIDEFIVPALRSNLLGLPLDLAAINIARGRDTGIPSFNDARAELFQQTNSVWLKP 598

Q1YMS2-A SEHGNAIDEFITSALRNNLLGLPLDLAAINIARGRDTGMPTLNETREQLYQATGSSFLKP 653

A3XF15-A RETGANIDEFITSALRDNLVGLPLDLAALNITRGRDTGVPSLNAAREQFYAATGSEFLKP 579

Q1YMS2-B TQSAEEVDFNIVDAIRNDLVRINADLFAFNVARGWDVGLGTLNQVRADLKASGDPYIQEA 508

Q0G341-B IQPAEEVDFNIVDAIR-------------------TTSFG-------------------- 469

A6E280-B VQAAEEVDLKIVEAIRSDLVRINADLFSFNVARGWDVGLGTMNQVRTQLAASTDPYVSQA 501

C7CGY0-B EQAAEDVDFNIVDAVRNDLVRIRADLFAFNVARGWDVGLGTLNQVRADLAASTNPYIRDA 505

A9W3A5-B EQAAEDVDFNIVDAVRNDLVRIRADLFAFNVARGWDVGLGTLNQVRADLAASTNPYIRDA 505

B7KW13-B EQAAEDVDFNIVDAVRNDLVRIRADLFAFNVARGWDVGLGTLNQVRADLAASTNPYIRDA 505

Q13AU2-B SQPAEDVDFNIVDAVRNDLVRINADLFAFNVARGWDLGLGTLNQVRRDLAASTNPYVAES 494

Q07SX1-B SQPAEDVDFNIVDAVRNDLVRINADLFAFNVARGWDVGLGTLNQVRQDLAASTNPYVSEA 495

A3XF15-B EQPSEEVDLQVVDAVRNDLVRVSADLFAFNVARGRDVGLGTLNQVKADLAASDNRYISEA 501

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**Q88JT6-A** YMSWVDFADHLKHPASLINFIAAYGTHSSITGA-TTEAAKRAAAVALVLGGDG-----AP 692

**A5W572-A** YISWVDFADHLKHPASLINFIAAYGTHSSITGA-TTEAAKRAAAVALVLGGDG-----AP 692

**B0KJL7-A** YISWADFADHLKHPASLINFIAAYGTHSSITGA-TTEAAKRAAAVALVLGGAG-----AP 692

**Q88JT6-B** YTSWVDLVQHLKHPESLINFIAAYGTHSTITNA-TTLLEKRAAAMALVFGGDG-----AP 734

**A5W572-B** YSSWVDLVQHLKHPESLINFIAAYGTHSTITAA-TTLLEKRAAAMALVFGGDG-----AP 734

**B0KJL7-B** YTSWVDLVQHLKHPESLINFIAAYGTHSSITGA-TTLLEKRAAAMALVFGGEG-----AP 734

C7CGY0-A YTSWVEMAANLKNPLSVVNFIAAYGTHGTVVAA-TTLAAKRDAAMALVFGGEG-----AP 748

A9W3A5-A YTSWVEMAANLKNPLSVVNFIAAYGTHGTVVAA-TTLAAKRDAAMALVFGGEG-----AP 748

B7KW13-A YTSWVEMAANLKNPLSVVNFIAAYGTHGTVVAA-TTLAAKRDAAMALVFGGDG-----AP 748

Q13AU2-A YDHWVDLATNLKNPASIVNFVAAYGTHATIVGA-TTLEAKRMAAMELVFGVDQNGDATVA 740

Q07SX1-A YDHWVDFAANLKNPASIVNFVAAYGTHSTIAGA-TTLEAKRLAAMELVFGVDQDGDATVA 740

Q0G341-A YESWADLAQNLKTPMTVVNLIAAYGLHETVTGA-TTLADKRAAAFDLVFGSES----LND 605

A6E280-A YENWVELAANLKTPMTIVNLLAAYGTHSTILAA-NTLEEKRDAAFDLVFGGGG----VSD 653

Q1YMS2-A YDSWVDFAANLKNPMSVVNFIAAYGTHETIVAAGNNLQERRNAAMALVFNTEG-----AP 708

A3XF15-A YEGWSDYAANLKNPASIINFIAAYGTHDTIANA-TTVVQKRAAATDLVLGGDT-----AP 633

Q1YMS2-B VG---FAG-NLDPYASWADFQARNGLSDTIMDQ------MKVAYPDLILSTPEE-IAAFI 557

Q0G341-B ---------------------------------------------------------SMP 472

A6E280-B VD---MAG-DLSPYSSWADFQARNDVSDEDMAR------LMEAYPDLVLETPAQ-IAAFV 550

C7CGY0-B VG---FAGGDLSPYASWEDFQARNGLSDAVIAQ------FRQAYPDLVLAAAD--IAAFR 554

A9W3A5-B VG---FAGGDLSPYASWEDFQARNSLSDAVIAQ------FRQAYPDLVLAAAD--IAAFQ 554

B7KW13-B VG---FAGGDLSPYASWEDFQARNGLSDAVIAQ------FRQAYPDLVLAAAD--IAAFR 554

Q13AU2-B VG---FAGSNLTPYSSWEDFQQRNDLNNAVIAQ------FKQAYPDLTLAAAD--IAAFR 543

Q07SX1-B VG---FAGGDLSPYTSWEDFQQRNGLSQAVIEQ------FKQAYPDLQLAAAD--VAAFQ 544

A3XF15-B ID---LSDMSMTPYTDWEDFQARNGLSDEMIAK------FQTAYPALVLTVDTEQYDAFV 552

Insertion 5 (=C)

**Q88JT6-A** LDRLDFLNGTGAYANVTL**AGADGIAGTADDIAGVTVT**GVDAIDFWVGGLAEKKMPFGGML 752

**A5W572-A** LDRLDFLNGTGAYANVTL**AGADGIAGTADDIAGVTVT**GVDAIDFWVGGLAEKKMPFGGML 752

**B0KJL7-A** ADRLDFLNSTGAWANVTL**AGKDGIAGTADDIAGVTVS**GVDAIDFWVGGLAEKKMPFGGML 752

**Q88JT6-B** ADRMDFLNSSGAWANVTL**PGKDGVLGTADDLKAVTVT**GVDAIDLWIGGLAEAKAPFGGML 794

**A5W572-B** ADRMDFLNSSGAWANVTL**PGKDGVLGTADDLKAVTVT**GVDAIDLWIGGLAEAKAPFGGML 794

**B0KJL7-B** ADRLDFLNSSGAWANVTL**PGKDGVLGTADDLKAVTIT**GVDAIDLWIGGLAEEKTPFGGML 794

C7CGY0-A TDRLDYLNSRGSWAGRET-------------------GFGAVDLWIGGLAEKQMPFGGML 789

A9W3A5-A TDRLDYLNSRGSWAGRET-------------------GFGAVDLWIGGLAEKQMPFGGML 789

B7KW13-A TDRLDYLNSRGSWAGRET-------------------GFGAVDLWIGGLAEKQMPFGGML 789

Q13AU2-A ADRTAFLTGTGAWAGVET-------------------GLNRIDLWIGGLAEKKMPFGGML 781

Q07SX1-A ADRTAFLTGTGAWAGVET-------------------GLNRIDLWIGGLAEKKMPFGGML 781

Q0G341-A TDRLDFMLSRGEWNAANN-------------------GLNEIDLWVGGLAERIMPFGGML 646

A6E280-A ADRFDFLLGRNGWTSDTN-------------------GLNTIDLWVGGLAERIMPFGGML 694

Q1YMS2-A ADRLAFLNSTGGETAESV-------------------GLNDIDLWVGGLAEQILLFGGML 749

A3XF15-A ADRLDFVNGTGAWATIET-------------------GINAVEYWIGGLAEAIMPFGGML 674

Q1YMS2-B AVNPDIELTDGANGTKIV------------------KGIDRVDLWVGGLAEKHVLGG-MV 598

Q0G341-B TCSPSTSLAAGTSG------------------------------W--------------- 487

A6E280-B AVNPDVVLEDGANGAKIV------------------KGIDRVDLWTGGLAEKHVNGG-MV 591

C7CGY0-B AINGDIAIAMQADGTGVV------------------KGIDRLDLWVGGLAEKHINNG-VV 595

A9W3A5-B AINGDIAIAMQADGTGVV------------------KGIDRLDLWVGGLAEKHINNG-VV 595

B7KW13-B AINGDIAIAMQADGTGVV------------------KGIDRLDLWVGGLAEKHINNG-VV 595

Q13AU2-B EVNPDIAIAMQNDGTGIV------------------SGIDRLDLWVGGLAEKHINGG-LV 584

Q07SX1-B AINPDIDIAMNDDGTGIV------------------KGIDRVDLWVGGLAEQHINGG-LV 585

A3XF15-B EANPDIALIDNGDGTMTV------------------KGIDRVDLWVGGLAEQHIQDG-VV 593

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**Q88JT6-A** GSSFNFVFETQLEALQNGDRFYYLSRTAGMNFGTELENN-SFAKLIMANSDVTHLS---- 807

**A5W572-A** GSSFNFVFETQLEALQNGDRFYYLSRTAGMNFGTELENN-SFAKLIMANSDVTHLS---- 807

**B0KJL7-A** GSSFNFVFETQLEALQNGDRFYYLSRTAGMNFGTELENN-SFAKLIMLNSDVTHLS---- 807

**Q88JT6-B** GSTFNFVFENQMEKLQDGDRFYYLERTAGLSMNAELESN-SFAKLIMANSSATHLP---- 849

**A5W572-B** GSTFNFVFENQMEKLQDGDRFYYLERTAGLSMNAELESN-SFAKLIMANSSATHLP---- 849

**B0KJL7-B** GSTFNFVFENQMEKLQDGDRFYYLERTSGLSMNAELESN-SFAKLIMANTSAAHLP---- 849

C7CGY0-A GSTFNAIFEAQMENLQDADRFYYLSRVQGQNFLNELEQN-SFSKIMLANSSLSLPG---P 845

A9W3A5-A GSTFNAIFEAQMENLQDADRFYYLSRVQGQNFLNELEQN-SFSKIMLANSSLSLPG---P 845

B7KW13-A GSTFNAIFEAQMENLQDADRFYYLSRVQGQNFLNELEQN-SFSKIMLANSSLSLPG---P 845

Q13AU2-A GSTFNAIFELQLENLQDGDRFYYLTRTQGQNFLNMLEQN-SFAKLIMANTDLAQPG---P 837

Q07SX1-A GSTFNAIFELQLENLQDGDRFYYLTRTQGQNFLNMLEQN-SFAKMIMANTDLAQPG---P 837

Q0G341-A GSTFSAIFEAQMEALQFGDRFYYLTRTQGQNLLNELEEN-AFAKIIMANTNLTLPG---P 702

A6E280-A GSTFTAIFEAQMEALQDGDRFYYLTRTQGQNFLNELEEN-SFSKMLLANTSLADPG---A 750

Q1YMS2-A GSTFAAIFEAQLEALQDGDRFYYLSRTQGLNLLNELENN-AFSKLIIANTDLSDPG---P 805

A3XF15-A GSSFGFAFQQQMEALQNGDRFYYLSRTNGMDMLGGLENN-SFASMIMRNTDIADGGAHIP 733

Q1YMS2-B GQTFWVVLHEQFDRLQEGDRFYYLERFDNFDFYDNFIDGQEFSDIIARNTGLTGLP---- 654

Q0G341-B ------------------------------------------------------------

A6E280-B GQTFWVVLHEQLDRLQEGDRFYYIDRFDNFDFYQEFGEDTTFASIVARNTSLTDID---- 647

C7CGY0-B GQTFWVVLHEQFDRLQDGDRFYYLERFDNFDFYENVVDGQGFSDIVARNTGLTVLP---- 651

A9W3A5-B GQTFWVVLHEQFDRLQDGDRFYYLERFDNFDFYENVIDGQGFSDIVARNTGLTVLP---- 651

B7KW13-B GQTFWVVLHEQFDRLQDGDRFYYLERFDNFDFYENLVDGQGFSDIVARNTGLTVLP---- 651

Q13AU2-B GETFWVVLSEQFERLQDGDRFYYISRFDNFDFYENFIDGQQFADIVTRNTGMTGIP---- 640

Q07SX1-B GQTFWVVLSEQFERLQDGDRFYYISRFDNFDFYENFIDGQEFADIIARNTGMTGLP---- 641

A3XF15-B GHTFWVLIHEQLDRLQEGDRFYYVDQIGDLPVYNNFISNLTFGDIVTRNTGMTDLP---- 649

**Q88JT6-A** NTVFLTPTFTLEVNQANQFTG-------LGADG-----KADPT 838

**A5W572-A** NTVFLTPTFTLEVNQANQFTG-------LGADG-----KADPT 838

**B0KJL7-A** NTVFLTPTFTLEVNQANQFTG-------LGADG-----KADPT 838

**Q88JT6-B** GLVFSDPGFYLELDQTKQYNEGLGSADPLGENGEQVVFRDSP- 891

**A5W572-B** GLVFSDPGFYLELDQTKQYNEGLGSADPLGENGEQVVFRDSP- 891

**B0KJL7-B** GLVFSDPGLYLELDQSKQYNDGLGHADPLGENGEQVVFRDSP- 891

C7CGY0-A DGIRGTADDIVPRHIGVDAFAD--YDFELEVNAA--------- 877

A9W3A5-A DGIRGTADDIVPRHIGVDAFAD--YDFELEVNAA--------- 877

B7KW13-A DGIRGTADDIVPRHIGVDAFAD--YDFELEVNAA--------- 877

Q13AU2-A DGIRGTADDIVPRHIGVDSFAN--YDYVLEVDES--------- 869

Q07SX1-A DGIRGTADDIVPRHIGVDSFAD--YDYVLEVD----------- 867

Q0G341-A DGIKGTEDDVTPHHIGIDVFAD--YDFVLEVN----------- 732

A6E280-A DGIRGTEDDVVRHHIGVDSFAR--YDFVLEVNQA--------- 782

Q1YMS2-A DGIRGTGDDVIARHIGVDAFGQ--YDYVLEVNKS--------- 837

A3XF15-A ANIFSSMEYILEVDQSVQAMADP-VSTELDPFLAAM------- 768

Q1YMS2-B EEIFRAN---DENDDTADNDDGVGDDTSDEDGDSDTV------ 688

Q0G341-B -------------------------------------------

A6E280-B NNLFDANGIDDDDDNATEDDNATEDDNATEDDD---------- 680

C7CGY0-B EHIFELSDEDG-PGTEPGDDDDDGDTDPVGGDP---------- 683

A9W3A5-B EHIFELSDEDG-PGTEPGDDDDDGDTDPVGGDP---------- 683

B7KW13-B EHIFELSDEDG-PGTEPGDDDDDD------------------- 674

Q13AU2-B EHMFQTDPID--QNENEGEGEGEEDGTPVGNGDPPTDDD---- 677

Q07SX1-B EHMFRTDPIDDENNQNPDDNEGDDDG----------------- 667

A3XF15-B QDVFSYTGDEIVEDNGTADQQTQQPPVTDDAGNANQAD----- 687