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NTDB id 115 BSU 16940 NP 389576.2	SVRLDVRRAEQLKQGN....DVMGNKTKIKVVKNKVAPPFR	TA	EVDIMYGEGISKEGELIDLGTELDIVQKSGSWYSYE	292	
NTDB id 1150608 KJA80 RS05200 WP 002354860.1	TVRLEVRRAEQLKQGT....DIVGNRTKIKVVKNKVAPPFKA	VAEVDIMYGGISQEGELDMAVEKDIISKSGAWYGYK	293		
NTDB id 625 LCA RS02525 WP 011374196.1	TVRLEVRRAETIKNGT....DMIGNRARIKVVKNKVAPPFKA	EVDIMYGGISRTGELVDMAVEKDIINKSGSWYSYG	294		
NTDB id 600 KW2 RS01765 WP 011675413.1	SVRLDVRGSTKIEEGS.GDNKTI	CKITIKVVKNKVAPPFKVALVDIMFEGEGISSTGELLNIAVEEGTIKSGAWFAYN	312		
NTDB id 269 KZH43 RS08665 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKEITN	GKETKIKVVKNKVAPPFKEAVVEIMYGEGISKTGELLKIASDLDIIKKAGAWYSYK	311		
NTDB id 228 SPD RS09265 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKEITN	GKETKIKVVKNKVAPPFKEAVVEIMYGEGISKTGELLKIASDLDIIKKAGAWYSYK	311		
NTDB id 194 SPR RS08825 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKEITN	GKETKIKVVKNKVAPPFKEAVVEIMYGEGISKTGELLKIASDLDIIKKAGAWYSYK	311		
NTDB id 159 SP RS09750 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKEITN	GKETKIKVVKNKVAPPFKEAVVEIMYGEGISKTGELLKIASDLDIIKKAGAWYSYK	311		
NTDB id 527 SMSK321 RS11065 WP 001085454.1	SVRLDVRGSTQIKGTG.DQKDTN	GKETKIKVVKNKVAPPFKEAFVEIMYEGEGISKTGELLKIASDLDIIKKAGAWYSYK	311		
NTDB id 499 SM12261 RS08315 WP 078228268.1	SVRLDVRGSTQIKGTG.DQKDTN	GKETKIKVVKNKVAPPFKEAFVEIMYEGEGISKTGELLKIASDLDIIKKAGAWYSYK	311		
NTDB id 453 Spy49 1753c ACI62003.1	SVRLDVRGTTQIKGTG.DQKDSST	GKETKIKVVKNKVAPPFKVAEVEIMYEGEGISRTGELVKIASDLDITQKAGAWFSYN	311		
NTDB id 408 SMU RS09530 WP 002262392.1	SVRLDVRGNTQIKGTG.EQKDSN	GKETKIKVVKNKVAPPFKEAFVEITYEGEGISRTGELVKIASDLGITQKAGAWYSYN	311		
NTDB id 1313 DR RS12030 WP 010888966.1	SVRLDVRKIGQ....PTKVGNDAVANTV	KIKTVKNKVAAPFKEVELALVYCKGFDQLSDLVGLAADMDIIKKAGSFSYSYG	307		
NTDB id 1245 Cj1673c YP 002345041.1	SVRLDVRKIVAT....L.KQNEEPI	GNRVKIKVVKNKVAPPFRQA	EFDVMEGEGLSREGELIDYGVKLDIVDKSGAWFSYK	294	
NTDB id 1211 C694 RS00795 WP 000963128.1	SVRIDIRRIAS....L.KQNEQHI	GNRAKIKVVKNKVAPPFRQA	EFDIMFEGEGISKEGETIDYGVKLDIVDKSGAWLSYQ	296	
NTDB id 1214 NCTC11637 00359 SQJ03206.1	SVRIDIRRIAA....L.KQNEQHI	GNRAKIKVVKNKVAPPFRQA	EFDIMFEGEGISKEGETIDYGVKLDIVDKSGAWLSYQ	296	
NTDB id 1334 RA0C RS04870 WP 004918236.1	SVRIDIRRSLSDTGKIKDKSGEVI	GNRTKIKVVKNKVAPPFKSA	EFDIMYEGEGISKVGELIDVATDLDIQKSGWFSYQ	307	
NTDB id 1389 A4U84 RS07560 WP 021112712.1	SVRLDIRRCGV....V.KDGD	EITGSETKIKVVKNKVAPPFR	EVQFDIMYGEGISRMNELLILAEANGFIKKSAGAWFSYD	310	
NTDB id 1130 NGFG RS03960 WP 003688695.1	SVRLDIRRTGS....I.KKGE	EVLGNETRIVKIKNKVAPPFRQA	EFDILYEGEGISWEGELIDIGVKNDIINKSGAWYSYN	294	
NTDB id 1124 NGFG RS03960 WP 003688695.1	SVRLDIRRTGS....I.KKGE	EVLGNETRIVKIKNKVAPPFRQA	EFDILYEGEGISWEGELIDIGVKNDIINKSGAWYSYN	294	
NTDB id 1123 OK783 RS03845 WP 003688695.1	SVRLDIRRTGS....I.KKGE	EVLGNETRIVKIKNKVAPPFRQA	EFDILYEGEGISWEGELIDIGVKNDIINKSGAWYSYN	294	
NTDB id 1427 RS RS02760 WP 011000510.1	SVRLDIRRIGS....I.KKGE	EVVGNETKIKVVKNKVAPPFR	EAFDILYGA	CVSREGELIDLGVEAKVVEKSGAWYSYN	302
NTDB id 1165 A1552VC RS01565 WP 000344154.1	SVRLDIRRTGA....I.KEGE	EVVGNETRIKVVKNKIA	APPKEANTQIMYGGCFNREGELIDLGVKHKMVEKSGAWYSYN	293	
NTDB id 1142 GTF74 RS11550 WP 000344154.1	SVRLDIRRTGA....I.KEGE	EVVGNETRIKVVKNKIA	APPKEANTQIMYGGCFNREGELIDLGVKHKMVEKSGAWYSYN	293	
NTDB id 1022 ACIAD RS06390 WP 004925639.1	SVRLDIRRIGQ....V.KEG	DEITGSETKIKVVKNKM	APPFRQAIFQILYKGVNQLGELVDLAVQQNIVQKAGAWYSYQ	293	
NTDB id 1074 ABD1 RS10195 WP 000344167.1	SVRLDIRRIGQ....V.KEG	DEITGSETKIKVVKNKM	APPFRQAIFQILYKGVNQLGELVDLAVQQNIVQKAGAWYSYQ	293	
NTDB id 1205 PSJM300 05545 AFN77183.1	SVRLDIRRTGA....V.KEG	DEVVGETRIVKVVKNKVAPPFRQA	EFAQILYKGVINREGELIDLGVQQGLVEKSGAWYAYK	293	
consensus	*!!**!* *	* ** *****!***!!*!!*!*	* *****!*!*** ***** *	*** ! !**!*!	

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NTDB id 115 BSU 16940 NP 389576.2	EERIGQGRENAAKQFLKENKDIIMLMIQEQIREHYCIDMNGVVQQQAEETQE..ELEFEE.....	348
NTDB id 1150608 KJA80 RS05200 WP 002354860.1	EERIGQGRENAAKQYMADHPMMAEVSKLVRDAYCIDGDGSTITEEAEGQ...EELPLDE.....	348
NTDB id 625 LCA RS02525 WP 011374196.1	SERIGQGRENAAKNYLADHEDVEDEVRLKVRAAAYCISDVPEEDLPPTTEDEQINILPDDSTEE.....	355
NTDB id 600 KW2 RS01765 WP 011675413.1	DEKIGQCAEKAKNYLKEHQDVFEIDHKVRAAHCILDDSEVAETEEETTASHTKAKAKKEEKAVETEEIELELED.....	387
NTDB id 269 KZH43 RS08665 WP 001085462.1	DEKIGQGSENAkkYLAEHPEIFDEIDKQVRSKFCILDGEEVSEQDTEKNDKDE...PKKEEA..VNEEVPLDLGDELEIE	385
NTDB id 228 SPD RS09265 WP 001085462.1	DEKIGQGSENAkkYLAEHPEIFDEIDKQVRSKFCILDGEEVSEQDTEKNDKDE...PKKEEA..VNEEVPLDLGDELEIE	385
NTDB id 194 SPR RS08825 WP 001085462.1	DEKIGQGSENAkkYLAEHPEIFDEIDKQVRSKFCILDGEEVSEQDTEKNDKDE...PKKEEA..VNEEVPLDLGDELEIE	385
NTDB id 159 SP RS09750 WP 001085462.1	DEKIGQGSENAkkYLAEHPEIFDEIDKQVRSKFCILDGEEVSEQDTEKNDKDE...PKKEEA..VNEEVPLDLGDELEIE	385
NTDB id 527 SMSK321 RS11065 WP 001085454.1	DEKIGQGSENAkkYLADNPEVFAEIDHQVVRVQFCILDGEEAAE...SKKDE...VAQVDS..VNEEVTLDLGDELEIE	381
NTDB id 499 SM12261 RS08315 WP 078228268.1	DEKIGQGSENAkkYLADNPEIFDEIDHQVVRVQFCILDGEEIAE...SKKDE...AAQVDS..VNEEVTLDLGDELEIE	381
NTDB id 453 Spy49 1753c ACI62003.1	GEKIGQGSENAkkRYLADHPQLFDEIDRKVRVKFCILEESEEEESAMAVASE.....E.....TDDLALDLNGIEIE	377
NTDB id 408 SMU RS09530 WP 002262392.1	GEKIGQGSENAkkFLADNPEIFDDIDHKVVRVQFCILEEDNTEEKQSSKEK.....ETDEK..ADKNLVLELDDTIELE	382
NTDB id 1313 DR RS12030 WP 010888966.1	DERIGQGKEKTIAIYIAERPMEQEIRDRVMAATRAGNAGEAPALAPAPAAPEAAE..A.....	363
NTDB id 1245 Cj1673c YP 002345041.1	DKKIGQGRENSKAFLKENPEIADKALQNSMCI EGMI...SGSEDD..EGE..E.....	343
NTDB id 1211 C694 RS00795 WP 000963128.1	DKKIGQGRENAKALLKEDKALADEITLKIRESICSNEEI...MPLPDE..PLE..EME.....	347
NTDB id 1214 NCTC11637 00359 SQJ03206.1	DKKIGQGRENAKALLKEDKALADEITLKIRESICSNEEI...MPLPDE..PLE..EME.....	347
NTDB id 1334 RA0C RS04870 WP 004918236.1	DTKIGQGRDITVKELTKDNPEIAEELAKIREKLQAK.....	343
NTDB id 1389 A4U84 RS07560 WP 021112712.1	GTKIGQGGKNNAVKWLKENPEIADKLEQEI RNTLASNPNS...VLKATASDSND..ESDVVEEFSEEL.....	372
NTDB id 1130 NGFG RS03960 WP 003688695.1	GAKIGQGKDNVRVWLKENPEISDEIDAKTRALNCVEMHI...TEGTQDETGE..R.....PEE.....	348
NTDB id 1124 NGFG RS03960 WP 003688695.1	GAKIGQGKDNVRVWLKENPEISDEIDAKTRALNCVEMHI...TEGTQDETGE..R.....PEE.....	348
NTDB id 1123 OK783 RS03845 WP 003688695.1	GAKIGQGKDNVRVWLKENPEISDEIDAKTRALNCVEMHI...TEGTQDETGE..R.....PEE.....	348
NTDB id 1427 RS RS02760 WP 011000510.1	GERIGQGRDNCREFLRENAELAREIENKVRHLGVTPMG...AVTLA..EEVEE..D.....	352
NTDB id 1165 A1552VC RS01565 WP 000344154.1	GDKIGQGGKANACKYLKENPEIAKTLDKKLREMLLNPNEM...QLIAETSSAAD..DVEFGAVPEEF.....	354
NTDB id 1142 GTF74 RS11550 WP 000344154.1	GDKIGQGGKANACKYLKENPEIAKTLDKKLREMLLNPNEM...QLIAETSSAAD..DVEFGAVPEEF.....	354
NTDB id 1022 ACIAD RS06390 WP 004925639.1	GNKIGQCKNNVIRYLEENPCISTEIEAVIREQLLTKASD...QTAA..HDETEE..EPDLL..ES.....	349
NTDB id 1074 ABD1 RS10195 WP 000344167.1	GNKIGQCKNNVIRYFEENNCIAEIERNTREQLLTTGTN...GAVQ..I..EDEE..EPDLL..LES.....	349
NTDB id 1205 PSJM300 05545 AFN77183.1	GSKIGQGGKANAAKYLEENPEIGQEIEQQIRAKLLVTSAN...TKATPVAEDLA..DADI.....	347
consensus	**!!!** ** * ** ** ** **	

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NTDB id 115 BSU 16940 NP 389576.2      ... 348
NTDB id 1150608 KJA80 RS05200 WP 002354860.1 ... 348
NTDB id 625 LCA RS02525 WP 011374196.1 ... 355
NTDB id 600 KW2 RS01765 WP 011675413.1 ... 387
NTDB id 269 KZH43 RS08665 WP 001085462.1 IEE 388
NTDB id 228 SPD RS09265 WP 001085462.1 IEE 388
NTDB id 194 SPR RS08825 WP 001085462.1 IEE 388
NTDB id 159 SP RS09750 WP 001085462.1 IEE 388
NTDB id 527 SMSK321 RS11065 WP 001085454.1 IEE 384
NTDB id 499 SM12261 RS08315 WP 078228268.1 IEE 384
NTDB id 453 Spy49 1753c ACI62003.1      D.. 378
NTDB id 408 SMU RS09530 WP 002262392.1  D.. 383
NTDB id 1313 DR RS12030 WP 010888966.1 ... 363
NTDB id 1245 Cj1673c YP 002345041.1    ... 343
NTDB id 1211 C694 RS00795 WP 000963128.1 ... 347
NTDB id 1214 NCTC11637 00359 SQJ03206.1 ... 347
NTDB id 1334 RA0C RS04870 WP 004918236.1 ... 343
NTDB id 1389 A4U84 RS07560 WP 021112712.1 ... 372
NTDB id 1130 NGFG RS03960 WP 003688695.1 ... 348
NTDB id 1124 NGFG RS03960 WP 003688695.1 ... 348
NTDB id 1123 OK783 RS03845 WP 003688695.1 ... 348
NTDB id 1427 RS RS02760 WP 011000510.1 ... 352
NTDB id 1165 A1552VC RS01565 WP 000344154.1 ... 354
NTDB id 1142 GTF74 RS11550 WP 000344154.1 ... 354
NTDB id 1022 ACIAD RS06390 WP 004925639.1 ... 349
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NTDB id 1205 PSJM300 05545 AFN77183.1 ... 347
consensus
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 ≥ 50% conserved