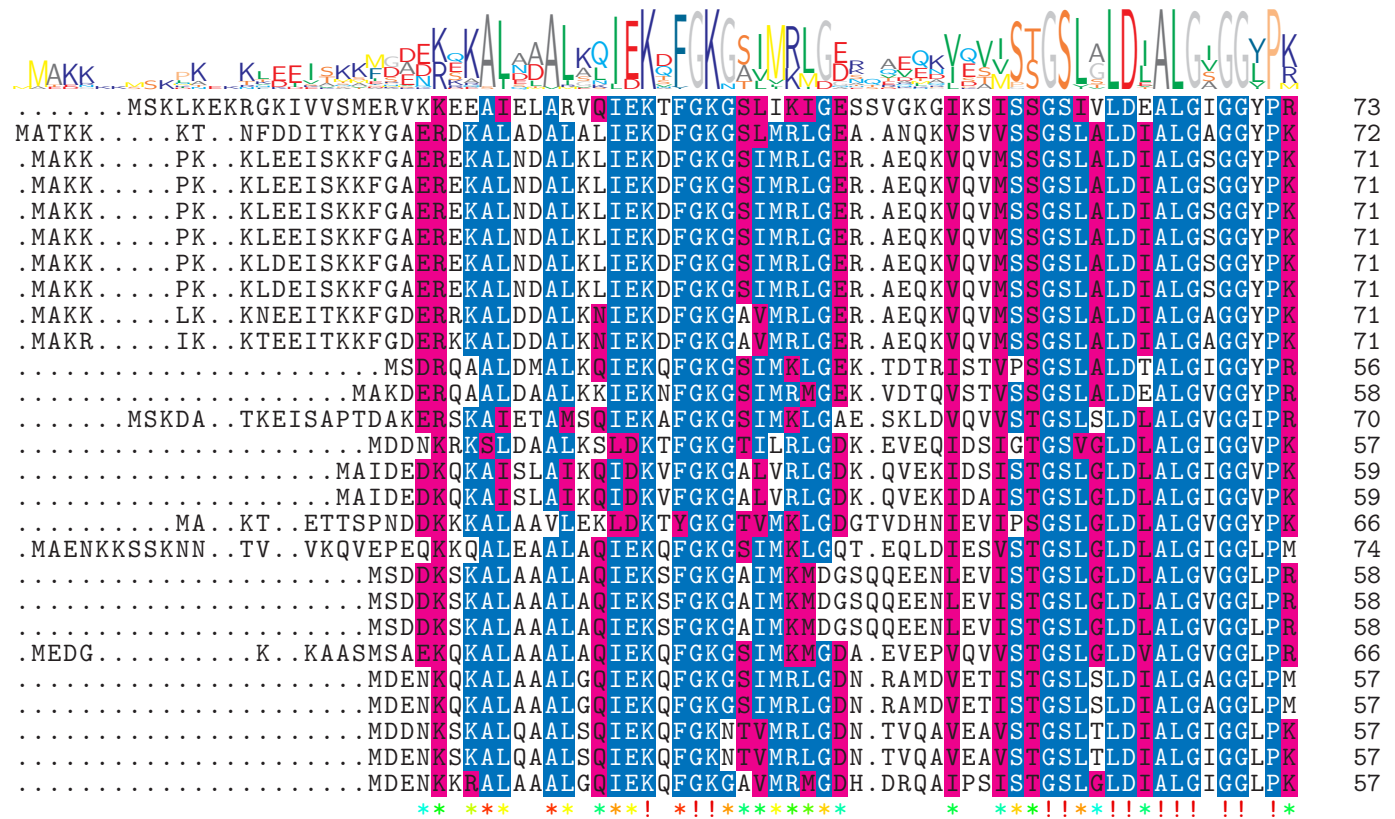
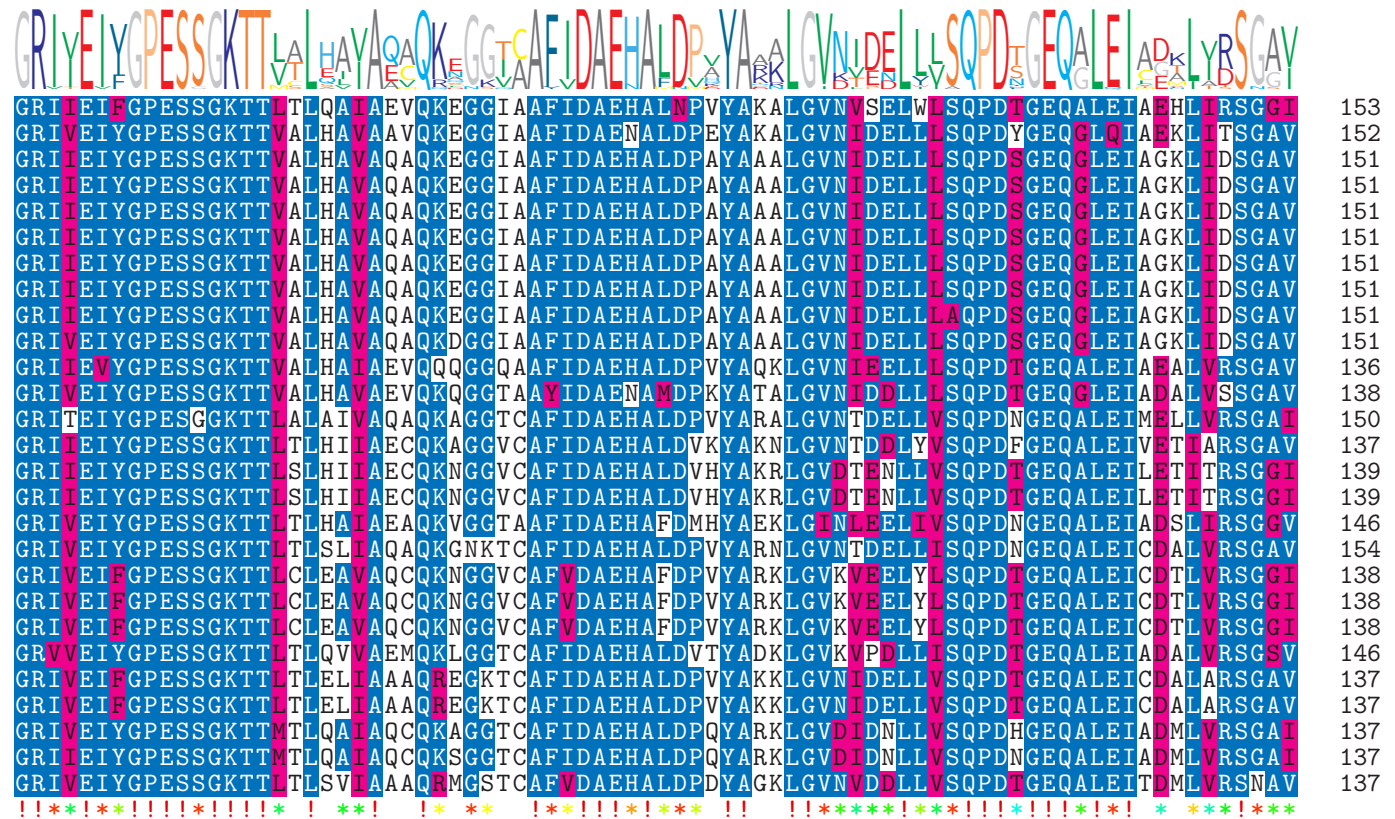


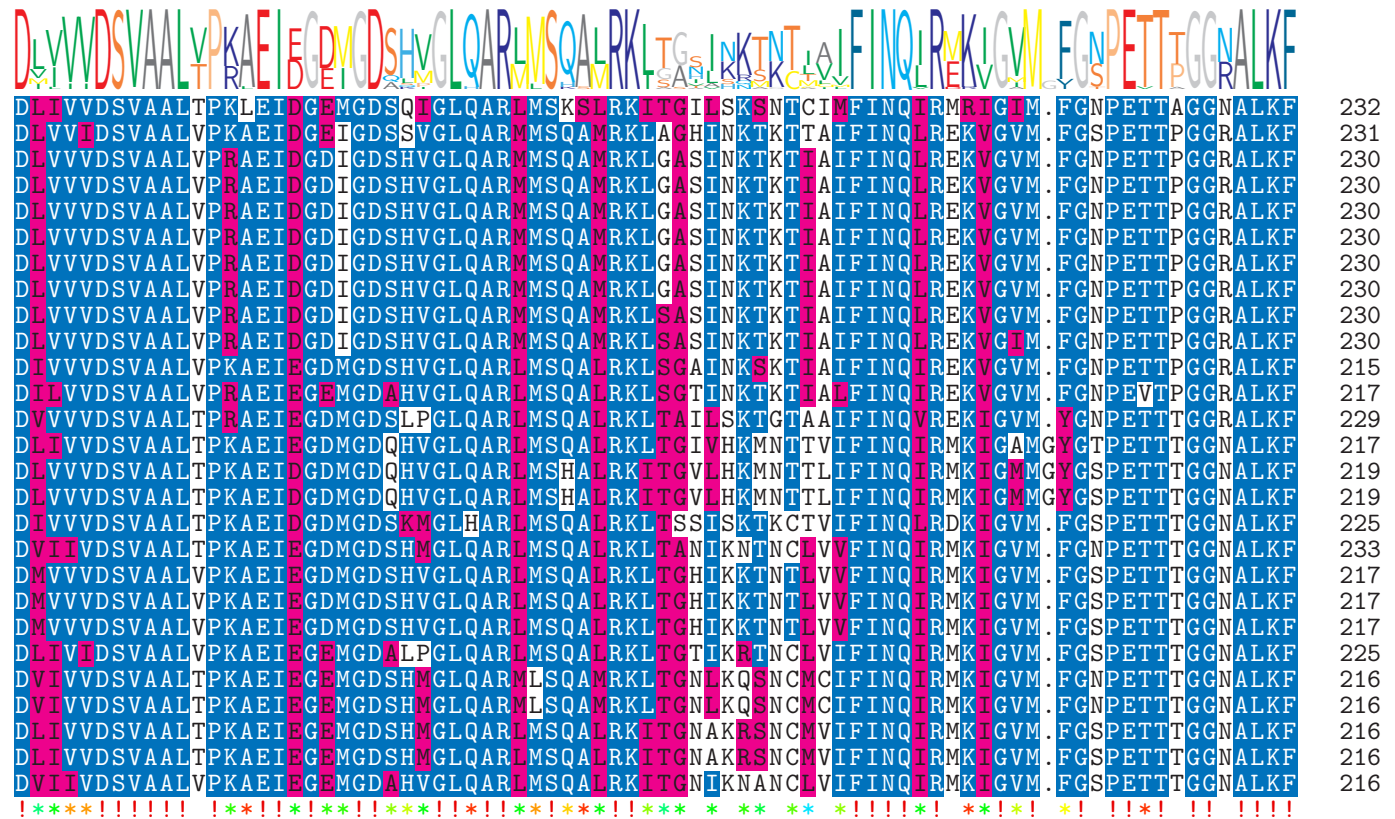
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NTDB id 453 Spy49 1753c ACI62003.1
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NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 1313 DR RS12030 WP 010888966.1
NTDB id 1245 Cj1673c YP 002345041.1
NTDB id 1211 C694 RS00795 WP 000963128.1
NTDB id 1214 NCTC11637 00359 SQJ03206.1
NTDB id 1334 RA0C RS04870 WP 004918236.1
NTDB id 1389 A4U84 RS07560 WP 021112712.1
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NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus



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NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 269 KZH43 RS08665 WP 001085462.1
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NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1205 PSJM300 05545 AFN77183.1
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NTDB id 23519 BG RS00640 WP 011193484.1	YSSLRLEVRKIEQITRS..GSSDDVIGNKIRVKIVKKNKVAPPFRKVELVIYFGKGISREAGILDAALKHNLIIQKTGSWYS	310
NTDB id 600 KW2 RS01765 WP 011675413.1	YASVRLDVRGSTKIEEGS.GDNKTQIGKITIKVVKNKVAPPFKVALVDIMFGEGISSTGELLNTAVEEGTIKKSGAWFA	310
NTDB id 269 KZH43 RS08665 WP 001085462.1	YASVRLDVRGNTQIKGTG.DQKETNVGKETKIKVVKNKVAPPFKEAVVEIMYGEGISKTGELLKIASDLDIIKKAGAWYS	309
NTDB id 228 SPD RS09265 WP 001085462.1	YASVRLDVRGNTQIKGTG.DQKETNVGKETKIKVVKNKVAPPFKEAVVEIMYGEGISKTGELLKIASDLDIIKKAGAWYS	309
NTDB id 194 SPR RS08825 WP 001085462.1	YASVRLDVRGNTQIKGTG.DQKETNVGKETKIKVVKNKVAPPFKEAVVEIMYGEGISKTGELLKIASDLDIIKKAGAWYS	309
NTDB id 159 SP RS09750 WP 001085462.1	YASVRLDVRGNTQIKGTG.DQKETNVGKETKIKVVKNKVAPPFKEAVVEIMYGEGISKTGELLKIASDLDIIKKAGAWYS	309
NTDB id 499 SM12261 RS08315 WP 078228268.1	YASVRLDVRGSTQIKGTG.DQKDTNVGKETKIKVVKNKVAPPFKEAFVEIMYGEGISKTGELLKIASDLDIIKKAGAWYS	309
NTDB id 527 SMSK321 RS11065 WP 001085454.1	YASVRLDVRGSTQIKGTG.DQKDTNVGKETKIKVVKNKVAPPFKEAFVEIMYGEGISKTGELLKIASDLDIIKKAGAWYS	309
NTDB id 453 Spy49 1753c ACI62003.1	YASVRLDVRGTTQIKGTG.DQKDSSIGKETKIKVVKNKVAPPFKVAEVEIMYGEGISRTGELVKIASDLDIIQKAGAWFS	309
NTDB id 408 SMU RS09530 WP 002262392.1	YSSVRLDVRGNTQIKGTG.EQKDSNIGKETKIKVVKNKVAPPFKEAFVEIITYGEGISRTGELVKIASDLGIIQKAGAWYS	309
NTDB id 115 BSU 16940 NP 389576.2	YSSVRLEVRRAEQLKQGN.....DVMGNKTKIKVVKNKVAPPFRTAEVDIMYGEGISKEGEIIDLGTELDIYQKSGSWYS	290
NTDB id 625 LCA RS02525 WP 011374196.1	YSTVRLEVRRAETIKNGT.....DMIGNRARIKVVKNKVAPPFKVAEVDIMYGQGISRTGELVDMAVEKDIINKSGSWYS	292
NTDB id 1313 DR RS12030 WP 010888966.1	YASVRLDVRKIGQ....PTKVGNDAVANTVKIKTVKNKVAAPFKEVELALVYGKGFQDQLSDLVGLAADMDIIKKAGSFYS	305
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NTDB id 1334 RAOC RS04870 WP 004918236.1	YASVRIDIRRLSDTGKIKDKSGEVIGNRTKVVVKNKVAPPFKSAEFDIMYGEGVSKVGEILDVATDLDIIQKSGSWFS	305
NTDB id 1389 A4U84 RS07560 WP 021112712.1	YASVRDIRRRCGV....V.KDGDIEIGSETKVVKNKVAPPFREVQFDIMYGEGISRMNELLILAEANGFIKKSGAWFS	308
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NTDB id 1142 GTF74 RS11550 WP 000344154.1	YASVRDIRRRTGA....I.KEGEEVVGNETRIKVVKNKIAAPFKEANTQIMYGQGFNREGELIDLGVKHKMVEKSGAWYS	291
NTDB id 1022 ACIAD RS06390 WP 004925639.1	YASVRDIRRIGQ....V.KEGDEIVGSETKVVKNKMAAPPFREAIFFQILYGKGVNQLGELVDLAVQQDIVQKAGAWYS	291
NTDB id 1074 ABD1 RS10195 WP 000344167.1	YASVRDIRRIGQ....V.KEGDEIVGSETKVVKNKMAAPPFREAIFFQILYGKGTNQLGELVDLAVQQDIVQKAGAWYS	291
NTDB id 1205 PSJM300 05545 AFN77183.1	YASVRDIRRRTGA....V.KEGDEVVGSSETRVKVVKNKVAPPFRQAEDFQILYGKGIYRNGEIIDLGVQQGLVEKSGAWYA	291
consensus	!***!***!* * * * * !*! !*! !*! !* * * * * !*!*** * * * * !*!***	

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NTDB id 23519 BG RS00640 WP 011193484.1	LGNNKLGQGR	ESVVEYLNKEVELANDL	DKRLRK	IIFN	NFDQEDVNF	IKLKED		362		
NTDB id 600 KW2 RS01765 WP 011675413.1	YNDEKIGQGA	EAKAKNYLKEHQDV	FDEIDHKV	VRAAHGL	LD	DDSEVAETEEETT	ASKTKAKAKKEEKAVETEEIELELED...	387		
NTDB id 269 KZH43 RS08665 WP 001085462.1	YKDEKIGQGS	ENAKKYLAEHPEIF	DEIDKQV	RSKFGL	LIDG	EEVSEQDTENKKDE...	PKKEEA..VNEEVPLDLGDELE	383		
NTDB id 228 SPD RS09265 WP 001085462.1	YKDEKIGQGS	ENAKKYLAEHPEIF	DEIDKQV	RSKFGL	LIDG	EEVSEQDTENKKDE...	PKKEEA..VNEEVPLDLGDELE	383		
NTDB id 194 SPR RS08825 WP 001085462.1	YKDEKIGQGS	ENAKKYLAEHPEIF	DEIDKQV	RSKFGL	LIDG	EEVSEQDTENKKDE...	PKKEEA..VNEEVPLDLGDELE	383		
NTDB id 159 SP RS09750 WP 001085462.1	YKDEKIGQGS	ENAKKYLAEHPEIF	DEIDKQV	RSKFGL	LIDG	EEVSEQDTENKKDE...	PKKEEA..VNEEVPLDLGDELE	383		
NTDB id 499 SM12261 RS08315 WP 078228268.1	YKDEKIGQGS	ENAKKYLA	DNPEIF	DEIDHQV	RVVQFGL	LIDG	EEIAES...KKDE...AAQVDS..VNEEVTLDL	GDELE	379	
NTDB id 527 SMSK321 RS11065 WP 001085454.1	YKDEKIGQGS	ENAKKYLA	DNPEVFAE	IDHQV	RVVQFGL	LIDG	EEAAES...KKDE...VAQVDS..VNEEVTLDL	GDELE	379	
NTDB id 453 Spy49 1753c ACI62003.1	YNGEKIGQGS	ENAKRYLA	DHPQLF	DEIDRK	V	RVKFG	LEESEESAMAVASE.....E.....TDDLALD	L	DNGIE	375
NTDB id 408 SMU RS09530 WP 002262392.1	YNGEKIGQGS	ENAKKFLA	DNPEIF	DDIDHK	V	RVQYGL	LIEEDNTEEEKQSSKEK.....ETDEK..ADKNL	V	LELDDTIE	380
NTDB id 115 BSU 16940 NP 389576.2	YEEERL	LGQGR	ENAKQFL	KENKDIM	LMIQEQ	IREHYGL	DNNGVVQQQAETQEEL.EFE.E.....	348		
NTDB id 625 LCA RS02525 WP 011374196.1	YGSERIGQGR	ENAKNYLA	DHEDVE	DEVRLK	VRAAYG	ISDV	PEEDLPTTEDE.QI.NILPDDST.....EE.....	355		
NTDB id 1313 DR RS12030 WP 010888966.1	YGDERIGQGR	KEKTIA	YIAERP	EME	QEI	RDVMAA	IRAGNAGEAPALAPAPAAPEAAE..A.....	363		
NTDB id 1245 Cj1673c YP 002345041.1	YKDKKL	LGQGR	ENSKAFL	KENPEI	ADEITKAI	QNSMG	IEGMI....SGSEDD..EGE..E.....	343		
NTDB id 1211 C694 RS00795 WP 000963128.1	YQDKKL	LGQGR	ENAKALL	KEDKAL	ADEITLK	IKESIG	SNEEI....MPLPDE..PLE..EME.....	347		
NTDB id 1214 NCTC11637 00359 SQJ03206.1	YQDKKL	LGQGR	ENAKALL	KEDKAL	ADEITLK	IKESIG	SNEEI....MPLPDE..PLE..EME.....	347		
NTDB id 1334 RAOC RS04870 WP 004918236.1	YQDTKL	LGQGR	DTV	KELIK	DNPELA	EEL	EAKIREKLQAK.....	343		
NTDB id 1389 A4U84 RS07560 WP 021112712.1	YDGT	KIGQG	KNNAVKWL	KENPEI	ADKLEQ	EIRNTLA	SNPNS....VLKATASDSND..ESDV	EEFSEEEL.....	372	
NTDB id 1130 NGFG RS03960 WP 003688695.1	YNGAKIGQG	KDNVRVWL	KENPEIS	DEIDAK	IRALNG	VEMHI....TEGTQ	DETDGE..R.....PEE.....	348		
NTDB id 1124 NGFG RS03960 WP 003688695.1	YNGAKIGQG	KDNVRVWL	KENPEIS	DEIDAK	IRALNG	VEMHI....TEGTQ	DETDGE..R.....PEE.....	348		
NTDB id 1123 OK783 RS03845 WP 003688695.1	YNGAKIGQG	KDNVRVWL	KENPEIS	DEIDAK	IRALNG	VEMHI....TEGTQ	DETDGE..R.....PEE.....	348		
NTDB id 1427 RS RS02760 WP 011000510.1	YNGERIGQGR	DNCREFL	RENAEL	AREI	ENKVREHL	GVTPMG....AVTLA	.EEVEE..D.....	352		
NTDB id 1165 A1552VC RS01565 WP 000344154.1	YNGDKIGQG	KANACKYL	KENPEI	AKTLD	KKLREML	LNPNM....QLIA	ETSSAAD..DVEFGAVPEEF.....	354		
NTDB id 1142 GTF74 RS11550 WP 000344154.1	YNGDKIGQG	KANACKYL	KENPEI	AKTLD	KKLREML	LNPNM....QLIA	ETSSAAD..DVEFGAVPEEF.....	354		
NTDB id 1022 ACIAD RS06390 WP 004925639.1	YQGNKIGQG	KNNVIRY	FEENPQ	ISTE	IEAV	IREQL	LT	TKASD....QTAA.HDETEE..EPDLL..ES.....	349	
NTDB id 1074 ABD1 RS10195 WP 000344167.1	YQGNKIGQG	KNNVIRY	FEENNQ	IAE	EIERN	IREQL	LT	TGTN....GAVQ.I.EDEE..EPDLL..LES.....	349	
NTDB id 1205 PSJM300 05545 AFN77183.1	YKGS	KIGQG	KANA	AKYLEEN	PEIGQ	EIEQQ	IRAKLL	VTSAN....TKATPVAEDLA..DADI.....	347	
consensus	*	***!!!	*****	**	*	***	*****	**	*	

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		IEEE	
NTDB id 23519 BG RS00640 WP 011193484.1			362
NTDB id 600 KW2 RS01765 WP 011675413.1			387
NTDB id 269 KZH43 RS08665 WP 001085462.1	IEIEE		388
NTDB id 228 SPD RS09265 WP 001085462.1	IEIEE		388
NTDB id 194 SPR RS08825 WP 001085462.1	IEIEE		388
NTDB id 159 SP RS09750 WP 001085462.1	IEIEE		388
NTDB id 499 SM12261 RS08315 WP 078228268.1	IEIEE		384
NTDB id 527 SMSK321 RS11065 WP 001085454.1	IEIEE		384
NTDB id 453 Spy49 1753c ACI62003.1	IED..		378
NTDB id 408 SMU RS09530 WP 002262392.1	LED..		383
NTDB id 115 BSU 16940 NP 389576.2	.....		348
NTDB id 625 LCA RS02525 WP 011374196.1	.....		355
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 RAOC 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
NTDB id 1074 ABD1 RS10195 WP 000344167.1	.....		349
NTDB id 1205 PSJM300 05545 AFN77183.1	.....		347
consensus			

- non conserved
- similar
- ≥ 50% conserved