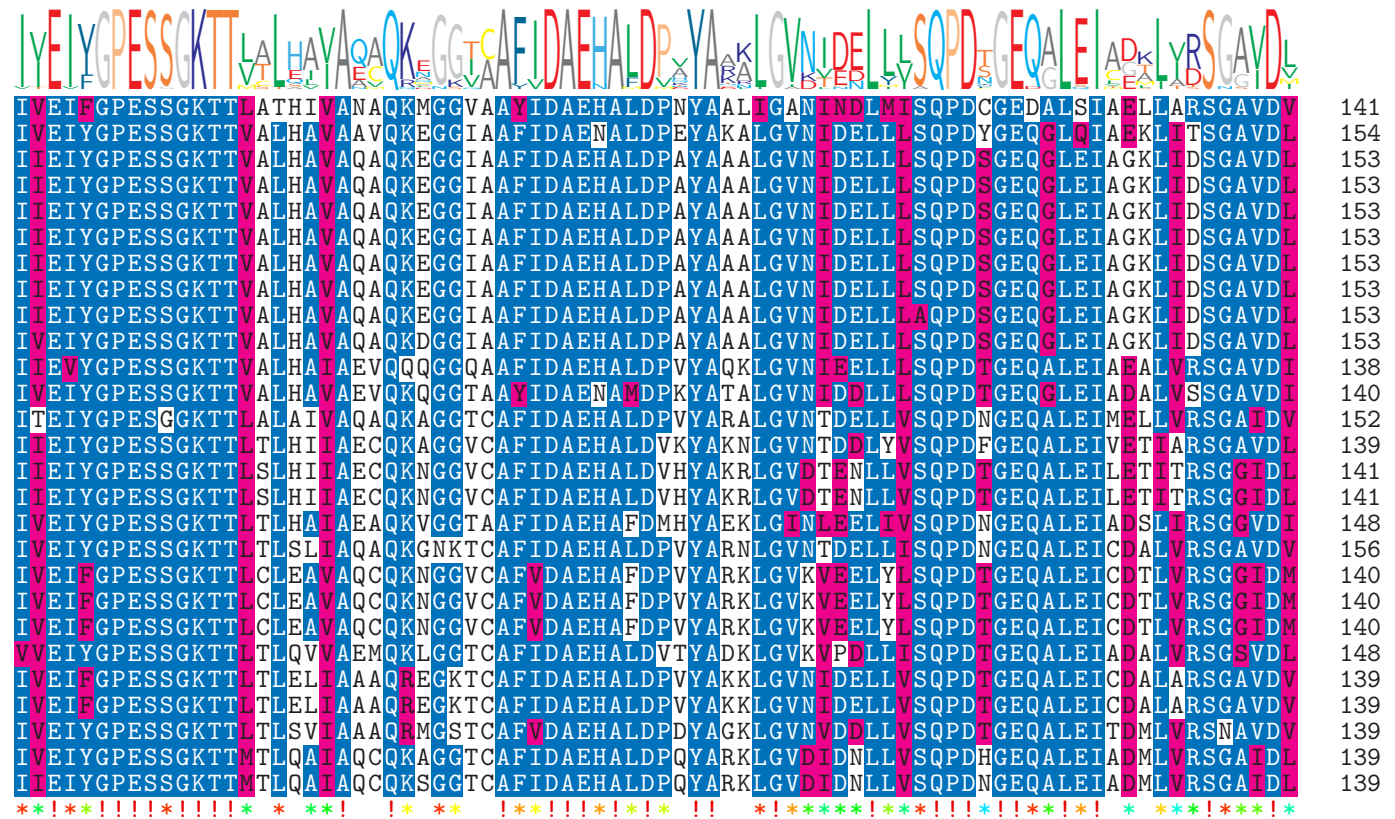


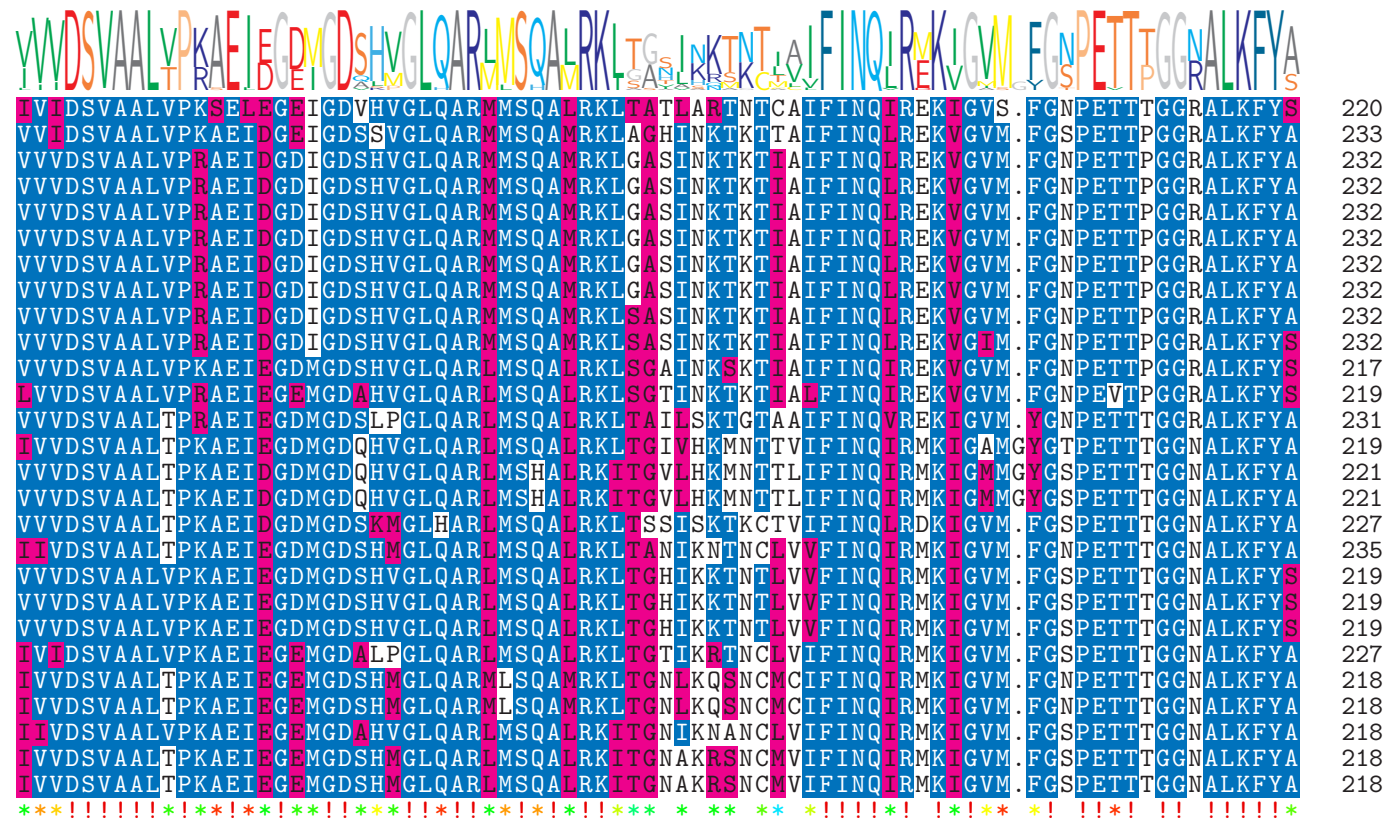
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NTDB id 600 KW2 RS01765 WP 011675413.1	MATKK....KTNFDDITKKYGA	ERDKALADALALIEKDFGKGSLMRLGEA	.ANQKVSV	VSSGSLALDIALGAGGY	PKGR	74	
NTDB id 269 KZH43 RS08665 WP 001085462.1	.MAKK....PKKLEEISKKFGA	EREKALNDALKLIEKDFGKGSIMRLGER	.AEQKVQV	MSSGSLALDIALGSGGY	PKGR	73	
NTDB id 228 SPD RS09265 WP 001085462.1	.MAKK....PKKLEEISKKFGA	EREKALNDALKLIEKDFGKGSIMRLGER	.AEQKVQV	MSSGSLALDIALGSGGY	PKGR	73	
NTDB id 194 SPR RS08825 WP 001085462.1	.MAKK....PKKLEEISKKFGA	EREKALNDALKLIEKDFGKGSIMRLGER	.AEQKVQV	MSSGSLALDIALGSGGY	PKGR	73	
NTDB id 159 SP RS09750 WP 001085462.1	.MAKK....PKKLEEISKKFGA	EREKALNDALKLIEKDFGKGSIMRLGER	.AEQKVQV	MSSGSLALDIALGSGGY	PKGR	73	
NTDB id 499 SM12261 RS08315 WP 078228268.1	.MAKK....PKKLDEISKKFGA	EREKALNDALKLIEKDFGKGSIMRLGER	.AEQKVQV	MSSGSLALDIALGSGGY	PKGR	73	
NTDB id 527 SMSK321 RS11065 WP 001085454.1	.MAKK....PKKLDEISKKFGA	EREKALNDALKLIEKDFGKGSIMRLGER	.AEQKVQV	MSSGSLALDIALGSGGY	PKGR	73	
NTDB id 453 Spy49 1753c ACI62003.1	.MAKK....LKKNEEITKKFGD	ERRKALDDALKNIEKDFGKGAVMRLGER	.AEQKVQV	MSSGSLALDIALGAGGY	PKGR	73	
NTDB id 408 SMU RS09530 WP 002262392.1	.MAKR....IKKTEEITKKFGD	ERKKALDDALKNIEKDFGKGAVMRLGER	.AEQKVQV	MSSGSLALDIALGAGGY	PKGR	73	
NTDB id 115 BSU 16940 NP 389576.2	MS	DRQAALDMALKQIEKQFGKGSIMKLGEK	.TDTRIST	VPSSGSLALDTALGIGGY	PKGR	58	
NTDB id 625 LCA RS02525 WP 011374196.1	MAKD	ERQAALDAALKKIEKNFGKGSIMRMGEK	.VDTQVST	VSSGSLALDEALGVGGY	PKGR	60	
NTDB id 1313 DR RS12030 WP 010888966.1	MSKDATKEISAPTD	AKERSKATETAMSQIEKAFGKGSIMKLGAE	.SKLDVQV	VSTGSLSLDIALGVGGI	PKGR	72	
NTDB id 1245 Cj1673c YP 002345041.1	MDDN	KRKSLDAALKSLDKTTFGKGTILRLGDK	.EVEQID	ISTGTSVGLDLALGIGGV	PKGR	59	
NTDB id 1211 C694 RS00795 WP 000963128.1	MAIDE	DKQKATISLAIKQIDKVF	FGKGA	LVR LGDK.QVEKID	ISTGSLGLDLALGIGGV	PKGR	61
NTDB id 1214 NCTC11637 00359 SQJ03206.1	MAIDE	DKQKATISLAIKQIDKVF	FGKGA	LVR LGDK.QVEKID	ISTGSLGLDLALGIGGV	PKGR	61
NTDB id 1334 RAOC RS04870 WP 004918236.1	MAKT..ETTSPND	DKKKALAAVLEKLDKTYGKGTVMKLG	DTVDHNI	IEVIPS	GSLGLDLALGVGGY	PKGR	68
NTDB id 1389 A4U84 RS07560 WP 021112712.1	.MAENKKSSKNNTV..VKQVEPEQ	KKQALEAALAAQIEKQFGKGSIMKLGQT	.EQLDIE	SVSTGSLGLDLALGIGGL	PMGR	76	
NTDB id 1130 NGFG RS03960 WP 003688695.1	MSD	DKSKALAAALAAQIEKSFGKGAIMKMDGSQ	QEE	NEVISTGSLGLDLALGVGGL	PKGR	60	
NTDB id 1124 NGFG RS03960 WP 003688695.1	MSD	DKSKALAAALAAQIEKSFGKGAIMKMDGSQ	QEE	NEVISTGSLGLDLALGVGGL	PKGR	60	
NTDB id 1123 OK783 RS03845 WP 003688695.1	MSD	DKSKALAAALAAQIEKSFGKGAIMKMDGSQ	QEE	NEVISTGSLGLDLALGVGGL	PKGR	60	
NTDB id 1427 RS RS02760 WP 011000510.1	.MEDG.....K..KAASMSA	EKQKALAAALAAQIEKQFGKGSIMKMGDA	.EVEPVQV	VSTGSLGLDVALGVGGL	PKGR	68	
NTDB id 1165 A1552VC RS01565 WP 000344154.1	MDEN	KKKALAAALGQIEKQFGKGSIMRLGDN	.RAMDVET	ISTGSLSLDIALGAGGL	PMGR	59	
NTDB id 1142 GTF74 RS11550 WP 000344154.1	MDEN	KKKALAAALGQIEKQFGKGSIMRLGDN	.RAMDVET	ISTGSLSLDIALGAGGL	PMGR	59	
NTDB id 1205 PSJM300 05545 AFN77183.1	MDEN	KKRALAAALGQIEKQFGKGAVMRMGDH	.DRQAIP	SISTGSLGLDIALGIGGL	PKGR	59	
NTDB id 1022 ACIAD RS06390 WP 004925639.1	MDDN	KSALQAALSQIEKQFGKNTVMRLGDN	.TVQAVEA	VSTGSLTLDIALGIGGL	PKGR	59	
NTDB id 1074 ABD1 RS10195 WP 000344167.1	MDEN	KSALQAALSQIEKQFGKNTVMRLGDN	.TVQAVEA	VSTGSLTLDIALGIGGL	PKGR	59	
consensus		* * * * *	* * * * *	* * * * *	* * * * *		

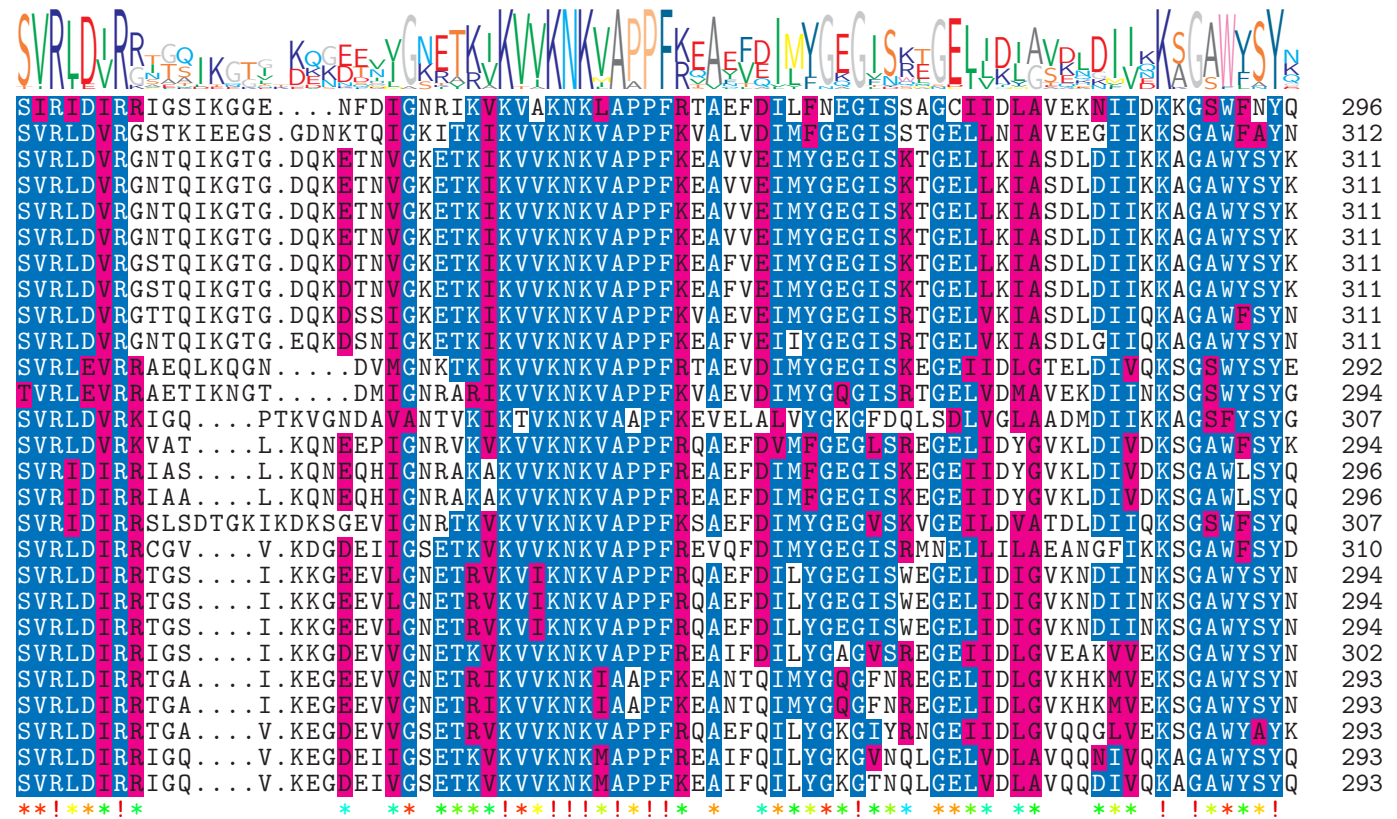
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NTDB id 194 SPR RS08825 WP 001085462.1
NTDB id 159 SP RS09750 WP 001085462.1
NTDB id 499 SM12261 RS08315 WP 078228268.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 453 Spy49 1753c ACI62003.1
NTDB id 408 SMU RS09530 WP 002262392.1
NTDB id 115 BSU 16940 NP 389576.2
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 00Q963128.1
NTDB id 1214 NCTC11637 00359 SQ003206.1
NTDB id 1334 RA0C RS04870 WP 004918236.1
NTDB id 1389 A4U84 RS07560 WP 021112712.1
NTDB id 1130 NGFG RS03960 WP 003688695.1
NTDB id 1124 NGFG RS03960 WP 003688695.1
NTDB id 1123 OK783 RS03845 WP 003688695.1
NTDB id 1427 RS RS02760 WP 011000510.1
NTDB id 1165 A1552VC RS01565 WP 000344154.1
NTDB id 1142 GTF74 RS11550 WP 000344154.1
NTDB id 1205 PSJM300 05545 AFN77183.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
consensus



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NTDB id 1074 ABD1 RS10195 WP 000344167.1
consensus



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NTDB id 1205 PSJM300 05545 AFN77183.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
consensus



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NTDB id 43511 CTR RS03535 WP 009872021.1	DRKIGQGREAVEREELKRNKEIFHELERCIYESVQASQVPAAACVDAESRQ...VA...EAAK.....	352
NTDB id 600 KW2 RS01765 WP 011675413.1	DEKIGQGAEKAKNYLKEHQDVFDDEIDHKVRAAHGLLDDSEVAETEEETTASKTAKAKKEEKAVETEEIELELED....	387
NTDB id 269 KZH43 RS08665 WP 001085462.1	DEKIGQGSSENAKKYLAEHPEIFDEIDKQVRSKFGLIDGEEVSEQDTENKKDE...PKKEEA..VNEEVPLDLGDELEIE	385
NTDB id 228 SPD RS09265 WP 001085462.1	DEKIGQGSSENAKKYLAEHPEIFDEIDKQVRSKFGLIDGEEVSEQDTENKKDE...PKKEEA..VNEEVPLDLGDELEIE	385
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NTDB id 159 SP RS09750 WP 001085462.1	DEKIGQGSSENAKKYLAEHPEIFDEIDKQVRSKFGLIDGEEVSEQDTENKKDE...PKKEEA..VNEEVPLDLGDELEIE	385
NTDB id 499 SM12261 RS08315 WP 078228268.1	DEKIGQGSSENAKKYLADNPEIFDEIDHQVRVQFGLIDGEEIAES...KKDE...AAQVDS..VNEEVTLDLGDLEIE	381
NTDB id 527 SMSK321 RS11065 WP 001085454.1	DEKIGQGSSENAKKYLADNPEVFAEIDHQVRVQFGLIDGEEAAES...KKDE...VAQVDS..VNEEVTLDLGDLEIE	381
NTDB id 453 Spy49 1753c ACI62003.1	GEKIGQGSSENAKRYLADHPQLFDEIDRKVRVKFGLLEEESEESAMAVASE.....E.....TDDLALDLNGIEIE	377
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NTDB id 115 BSU 16940 NP 389576.2	EERLGQGGRENAKQFLKENKDIMLMIQEQUIREHYGLDNNGVVQQQAETQEEL.EFE.E.....	348
NTDB id 625 LCA RS02525 WP 011374196.1	SERIGQGGRENAKNYLADHEDVEDEVRLKVRAAAYGTSADVPEEDLPTTEDE.QI.NILPD DST.....EE.....	355
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NTDB id 1211 C694 RS00795 WP 000963128.1	DKKLGQGGRENAKALLKEDKALADEITLKI KESIGSNEEI.....MPLPDEP..LE..EME.....	347
NTDB id 1214 NCTC11637 00359 SQJ03206.1	DKKLGQGGRENAKALLKEDKALADEITLKI KESIGSNEEI.....MPLPDEP..LE..EME.....	347
NTDB id 1334 RAOC RS04870 WP 004918236.1	DTKLGQGRD TVKELIKDNPELAEELEAKIREKLQAK.....	343
NTDB id 1389 A4U84 RS07560 WP 021112712.1	GTKIGQGGKNNAVKWLKENPEIADKLEQEIRNTLASNPNS.....VLKATASDSND..ESDVVEEFSEEEL.....	372
NTDB id 1130 NGFG RS03960 WP 003688695.1	GAKIGQGGKDNVRVWLKENPEISDEIDAKIRALNGVEMHI.....TEGT.....Q..DET DGERPEE.....	348
NTDB id 1124 NGFG RS03960 WP 003688695.1	GAKIGQGGKDNVRVWLKENPEISDEIDAKIRALNGVEMHI.....TEGT.....Q..DET DGERPEE.....	348
NTDB id 1123 OK783 RS03845 WP 003688695.1	GAKIGQGGKDNVRVWLKENPEISDEIDAKIRALNGVEMHI.....TEGT.....Q..DET DGERPEE.....	348
NTDB id 1427 RS RS02760 WP 011000510.1	GERIGQGRDNCREFLRENAELAREIENKVREHLGVTPMG....AV.TLAEVEVEE..D.....	352
NTDB id 1165 A1552VC RS01565 WP 000344154.1	GDKIGQGGKANACKY LKENPEIAKTLDKKLREMLLPENM.....QLIAETSSAAD..DVEFGAVPEEF.....	354
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NTDB id 1022 ACIAD RS06390 WP 004925639.1	GNKIGQGGKNNVIRYLEENPQISTEIEAVIREQLLTKASD.....QTAA.HDETEE..EPDLL..ES.....	349
NTDB id 1074 ABD1 RS10195 WP 000344167.1	GNKIGQGGKNNVIRYFEENNQIAEEIERNIREQLLTTGTN.....GAVQ.I.EDEE..EPDLL..LES.....	349
consensus	***!!!!***** ** ***** ***** ** **	

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		IEE	
NTDB id 43511 CTR RS03535 WP 009872021.1	...	352	
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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 499 SM12261 RS08315 WP 078228268.1	IEE	384	
NTDB id 527 SMSK321 RS11065 WP 001085454.1	IEE	384	
NTDB id 453 Spy49 1753c ACI62003.1	D..	378	
NTDB id 408 SMU RS09530 WP 002262392.1	D..	383	
NTDB id 115 BSU 16940 NP 389576.2	...	348	
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NTDB id 1313 DR RS12030 WP 010888966.1	...	363	
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NTDB id 1142 GTF74 RS11550 WP 000344154.1	...	354	
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NTDB id 1022 ACIAD RS06390 WP 004925639.1	...	349	
NTDB id 1074 ABD1 RS10195 WP 000344167.1	...	349	
consensus			

- X non conserved
- X similar
- X ≥ 50% conserved