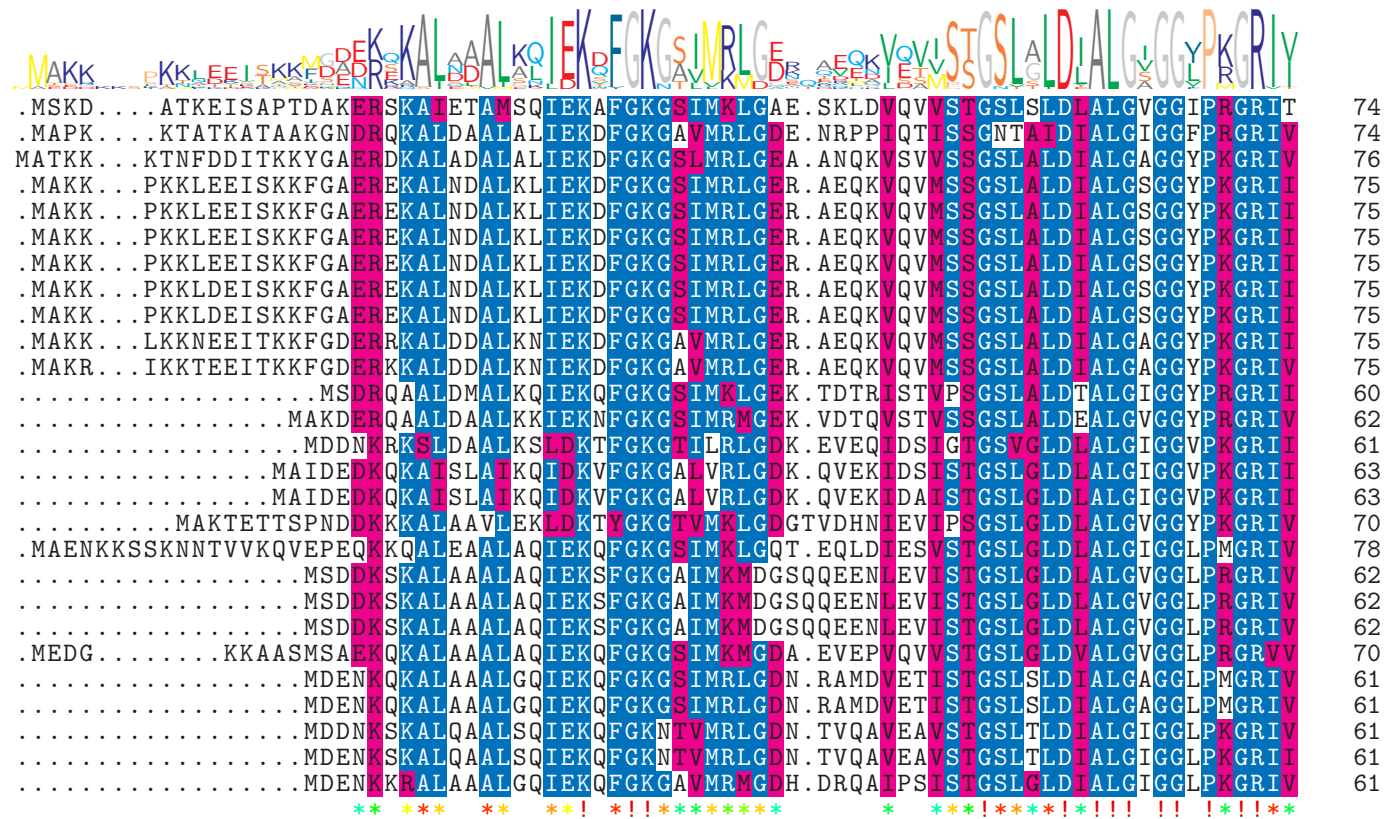


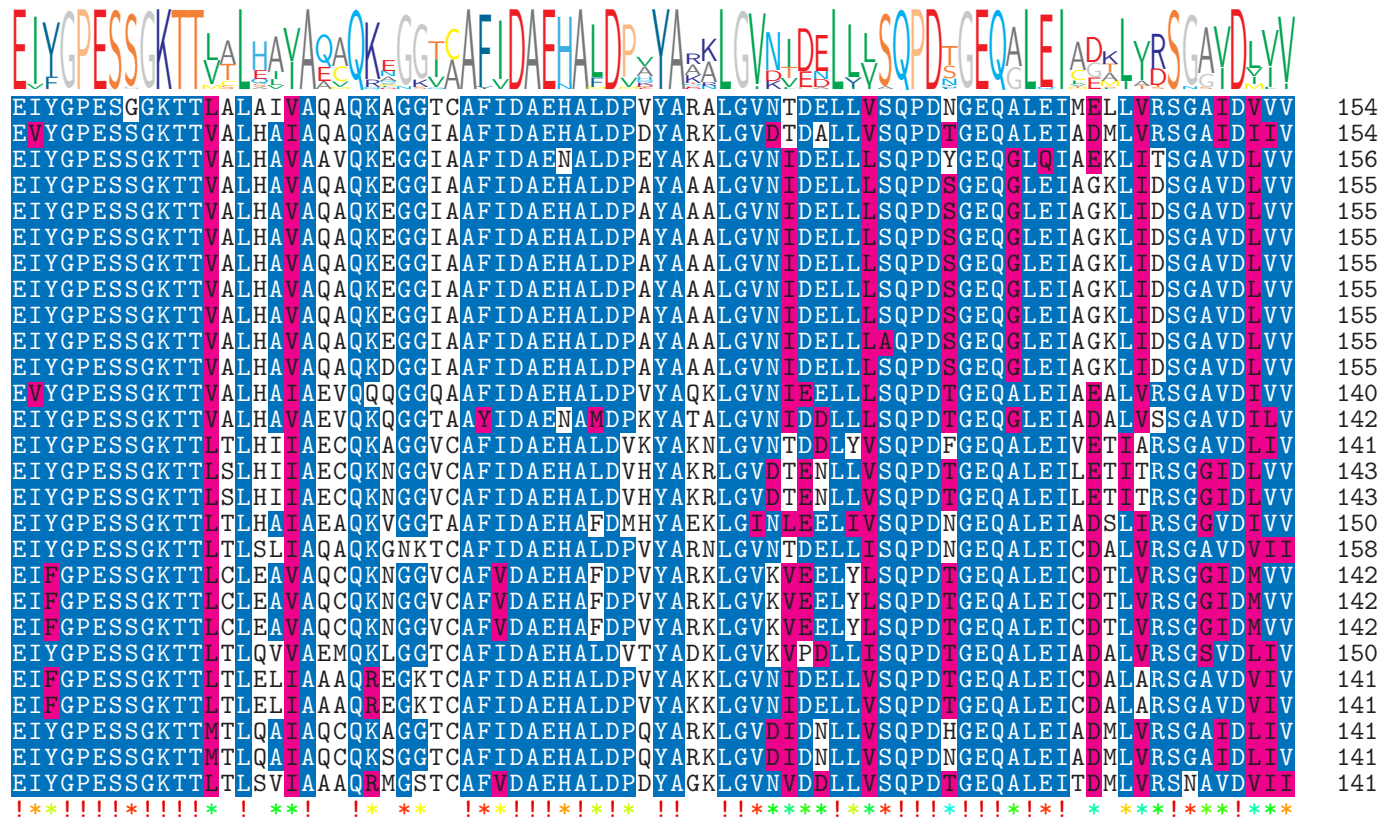
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consensus

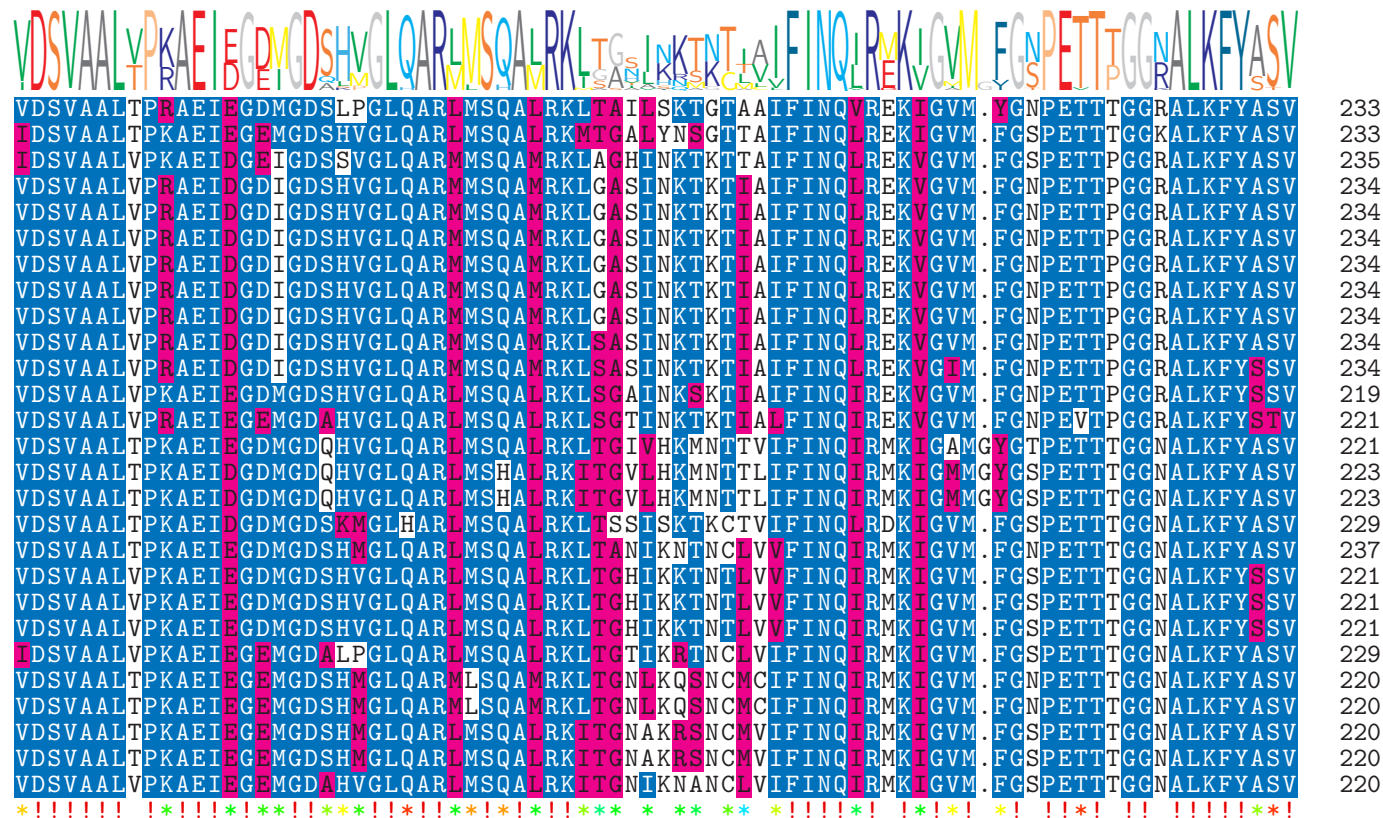
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NTDB id 1022 ACIAD RS06390 WP 004925639.1
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NTDB id 1205 PSJM300 05545 AFN77183.1
consensus



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consensus



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NTDB id 1313 DR RS12030 WP 010888966.1	RLDVRKIGQ...PTKVGND	AVANTV	KIKTVKNKVA	APPFKE	VELALVY	GKGFD	QLSD	DLVGLA	ADMDI	IKKAGS	FYSY	GD	309			
NTDB id 112096 C627 RS09475 WP 060564694.1	RCDIRRIQTLKDGQ....DA	IGNRTRL	KVVKNKV	SPPFK	IAEFD	IMYGEGIS	RESS	VIDL	AVDNGI	VKKSGS	WFTY	E	308			
NTDB id 600 KW2 RS01765 WP 011675413.1	RLDVRGSTKIEEGS.GDNKTQ	IGKITK	IKVVKNKV	APPFK	VALVD	IMFGEGIS	STGELL	NIAVEE	GI	IKKSGA	WFAY	N	314			
NTDB id 269 KZH43 RS08665 WP 001085462.1	RLDVRGNTQIKGTG.DQKETN	VGKETK	IKVVKNKV	APPFKE	AVVEI	IMYGEGIS	KTGELL	KIASDL	DI	IKKAGA	WYSY	K	313			
NTDB id 228 SPD RS09265 WP 001085462.1	RLDVRGNTQIKGTG.DQKETN	VGKETK	IKVVKNKV	APPFKE	AVVEI	IMYGEGIS	KTGELL	KIASDL	DI	IKKAGA	WYSY	K	313			
NTDB id 194 SPR RS08825 WP 001085462.1	RLDVRGNTQIKGTG.DQKETN	VGKETK	IKVVKNKV	APPFKE	AVVEI	IMYGEGIS	KTGELL	KIASDL	DI	IKKAGA	WYSY	K	313			
NTDB id 159 SP RS09750 WP 001085462.1	RLDVRGNTQIKGTG.DQKETN	VGKETK	IKVVKNKV	APPFKE	AVVEI	IMYGEGIS	KTGELL	KIASDL	DI	IKKAGA	WYSY	K	313			
NTDB id 499 SM12261 RS08315 WP 078228268.1	RLDVRGSTQIKGTG.DQKDTN	VGKETK	IKVVKNKV	APPFKE	AFVEI	IMYGEGIS	KTGELL	KIASDL	DI	IKKAGA	WYSY	K	313			
NTDB id 527 SMSK321 RS11065 WP 001085454.1	RLDVRGSTQIKGTG.DQKDTN	VGKETK	IKVVKNKV	APPFKE	AFVEI	IMYGEGIS	KTGELL	KIASDL	DI	IKKAGA	WYSY	K	313			
NTDB id 453 Spy49 1753c ACI62003.1	RLDVRGTTQIKGTG.DQKDSN	IGKETK	IKVVKNKV	APPFK	VAEVEI	IMYGEGIS	RTEGEL	VKIASDL	DI	IKKAGA	WFSY	N	313			
NTDB id 408 SMU RS09530 WP 002262392.1	RLDVRGNTQIKGTG.EQKDSN	IGKETK	IKVVKNKV	APPFKE	AFVEI	IYEGIS	RTEGEL	VKIASDL	GI	IKKAGA	WYSY	N	313			
NTDB id 115 BSU 16940 NP 389576.2	RLEVRRAEQLKQGN.....DV	MGNKTK	IKVVKNKV	APPFRT	AEVD	IMYGEGIS	KEGEI	IDL	GTELD	IVQKSG	SWSY	E	294			
NTDB id 625 LCA RS02525 WP 011374196.1	RLEVRRAETIKNGT.....DM	IGNRARI	IKVVKNKV	APPFK	VAEVD	IMYGG	QISRT	GELVDM	AVEKDI	INKSGS	WYSY	G	296			
NTDB id 1245 Cj1673c YP 002345041.1	RLDVRKVAT....L.KQNEEP	IGNRVK	VVVKNKV	APPFRR	QAEFD	VMFGEGL	SREGE	LIDY	GVKLD	IVDKSG	AWFSY	K	296			
NTDB id 1211 C694 RS00795 WP 000963128.1	RIDIRRIAS....L.KQNEQH	IGNRAKA	VVVKNKV	APPFRE	AEFD	IMFGEGIS	KEGEI	IDY	GVKLD	IVDKSG	AWLSY	Q	298			
NTDB id 1214 NCTC11637 00359 SQJ03206.1	RIDIRRIAA....L.KQNEQH	IGNRAKA	VVVKNKV	APPFRE	AEFD	IMFGEGIS	KEGEI	IDY	GVKLD	IVDKSG	AWLSY	Q	298			
NTDB id 1334 RAOC RS04870 WP 004918236.1	RIDIRRSLSDTGKIKDKSGEV	IGNRTK	VVVKNKV	APPFKS	AEFD	IMYGEGV	SKVGE	ILDV	ATDLD	IIQKSG	SWFSY	Q	309			
NTDB id 1389 A4U84 RS07560 WP 021112712.1	RLDIRRCGV....V.KDGEI	IGSETK	VVVKNKV	APPFREV	QFD	IMYGEGIS	RMNELL	ILAE	ANGFI	IKKSGA	WFSY	D	312			
NTDB id 1130 NGFG RS03960 WP 003688695.1	RLDIRRTGS....I.KKGEVL	GNETRV	KVIVKNKV	APPFRA	AEFD	DILYEGIS	WEGEL	IDIG	VKNDI	INKSGA	WYSY	N	296			
NTDB id 1124 NGFG RS03960 WP 003688695.1	RLDIRRTGS....I.KKGEVL	GNETRV	KVIVKNKV	APPFRA	AEFD	DILYEGIS	WEGEL	IDIG	VKNDI	INKSGA	WYSY	N	296			
NTDB id 1123 OK783 RS03845 WP 003688695.1	RLDIRRTGS....I.KKGEVL	GNETRV	KVIVKNKV	APPFRA	AEFD	DILYEGIS	WEGEL	IDIG	VKNDI	INKSGA	WYSY	N	296			
NTDB id 1427 RS RS02760 WP 011000510.1	RLDIRRIGS....I.KKGEV	GNETK	VVVKNKV	APPFRE	AI	FIDILY	GAGVS	REGEI	IDL	GV	EAKV	VEKSG	AWSY	N	304	
NTDB id 1165 A1552VC RS01565 WP 000344154.1	RLDIRRTGA....I.KEGEEV	VGNETRI	KVVKNK	IAAPFKE	ANTQ	IMYGG	GFNR	REGEL	IDL	GVKHK	MVEKSG	AWSY	N	295		
NTDB id 1142 GTF74 RS11550 WP 000344154.1	RLDIRRTGA....I.KEGEEV	VGNETRI	KVVKNK	IAAPFKE	ANTQ	IMYGG	GFNR	REGEL	IDL	GVKHK	MVEKSG	AWSY	N	295		
NTDB id 1022 ACIAD RS06390 WP 004925639.1	RLDIRRIGQ....V.KEGDEI	IGSETK	VVVKNK	MAPPF	REAI	FQILY	GKGVN	QLGEL	VDL	AVQQ	NIVQ	KAGAW	SY	Q	295	
NTDB id 1074 ABD1 RS10195 WP 000344167.1	RLDIRRIGQ....V.KEGDEI	IGSETK	VVVKNK	MAPPFKE	AI	FQILY	GKGTN	QLGEL	VDL	AVQQ	DIVQ	KAGAW	SY	Q	295	
NTDB id 1205 PSJM300 05545 AFN77183.1	RLDIRRTGA....V.KEGDEV	GSETR	VVVKNKV	APPFRA	AEFQ	ILYGK	GIYR	NGE	IIDL	GV	QQGL	VEKSG	AWY	A	Y	295
consensus	!***!*	*	**	*****!***!!*****!*	*	*****!*	*****	*****	***	***	!	*****!				

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NTDB id 1313 DR RS12030 WP 010888966.1	RIGQGKEKTIAYIAERPMEQEIRDRVMAAIRAGNAGEAPALAPAPA.....APEAAEA.....	363
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NTDB id 600 KW2 RS01765 WP 011675413.1	KIGQGAEKAKNYLKEHQDVFEIDHKVRAAHGLDDSEVAETEEETTASKTAKAKKKEEKAVETEEIELELED.....	387
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NTDB id 453 Spy49 1753c ACI62003.1	KIGQGSENAKRYLADHPQLFDEIDRKVRVKFGLLEEESEESAMAVASE.....E.....TDDLALDLNGIEIED.	378
NTDB id 408 SMU RS09530 WP 002262392.1	KIGQGSENAKKFLADNPEIFDDIDHKVRVQYGLIEEDNTEEKQSSKEK.....ETDEK..ADKNLVLELDDTIELED.	383
NTDB id 115 BSU 16940 NP 389576.2	RLGGGRENAKQFLKENKDIMLMIQEIQREHYGLDNNGVVQQAEETQEEL.EFE.E.....	348
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NTDB id 1245 Cj1673c YP 002345041.1	KLGGGRENSKAFLENPEIADIEITKAIQNSMGIEGMISGSEDD..EGEE.....	343
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NTDB id 1214 NCTC11637 00359 SQJ03206.1	KLGGGRENAKALLKEDKALADEITLKIKESIGSNEEIMPLPDE..PLEEM.E.....	347
NTDB id 1334 RAOC RS04870 WP 004918236.1	KLGGGRDITVKELTKDNPELAEELEAKIREKLQAK.....	343
NTDB id 1389 A4U84 RS07560 WP 021112712.1	KIGQGGKNNAVKWLKENPEIADKLEQEIRNTLASNPNSVLKATASDSNDES.DVE.....EFSEEEL.....	372
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NTDB id 1123 OK783 RS03845 WP 003688695.1	KIGQGGKDNVRVWLKENPEISDEIDAKIRALNGVEMHITEGTQDETGER.....PEE.....	348
NTDB id 1427 RS RS02760 WP 011000510.1	RIGQGRDNCREFLRENAELAREIENKVREHLGVTPMGAVTLA.EEVEED.....	352
NTDB id 1165 A1552VC RS01565 WP 000344154.1	KIGQGGKANACKYLKENPEIAKTLDDKLLREMLLNPENMQLIAETSSAADV.EFG.....AVPEEF.....	354
NTDB id 1142 GTF74 RS11550 WP 000344154.1	KIGQGGKANACKYLKENPEIAKTLDDKLLREMLLNPENMQLIAETSSAADV.EFG.....AVPEEF.....	354
NTDB id 1022 ACIAD RS06390 WP 004925639.1	KIGQGGKNNVIRYLEENPQISTEIEAVIREQLLTKASDQTA..HDETEEEP.DLL.....ES.....	349
NTDB id 1074 ABD1 RS10195 WP 000344167.1	KIGQGGKNNVIRYFEENNQIAEEIERNIREQLLTTGTNGAVQ..I.EDEEEP.DLL.....LES.....	349
NTDB id 1205 PSJM300 05545 AFN77183.1	KIGQGGKANAAKYLEENPEIGQEIEQQIRAKLLVTSANTKATPVAEDLADA.DI.....	347
consensus	**!!!!***** ** ***** ***** ** *	

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NTDB id	DR	RS	WP	010888966.1	.	363
NTDB id	112096	C627	RS09475	WP 060564694.1	.	380
NTDB id	600	KW2	RS01765	WP 011675413.1	.	387
NTDB id	269	KZH43	RS08665	WP 001085462.1	E	388
NTDB id	228	SPD	RS09265	WP 001085462.1	E	388
NTDB id	194	SPR	RS08825	WP 001085462.1	E	388
NTDB id	159	SP	RS09750	WP 001085462.1	E	388
NTDB id	499	SM12261	RS08315	WP 078228268.1	E	384
NTDB id	527	SMSK321	RS11065	WP 001085454.1	E	384
NTDB id	453	Spy49	1753c	ACI62003.1	.	378
NTDB id	408	SMU	RS09530	WP 002262392.1	.	383
NTDB id	115	BSU	16940	NP 389576.2	.	348
NTDB id	625	LCA	RS02525	WP 011374196.1	.	355
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
NTDB id	1074	ABD1	RS10195	WP 000344167.1	.	349
NTDB id	1205	PSJM300	05545	AFN77183.1	.	347
consensus						

- X non conserved
- X similar
- X $\geq 50\%$ conserved