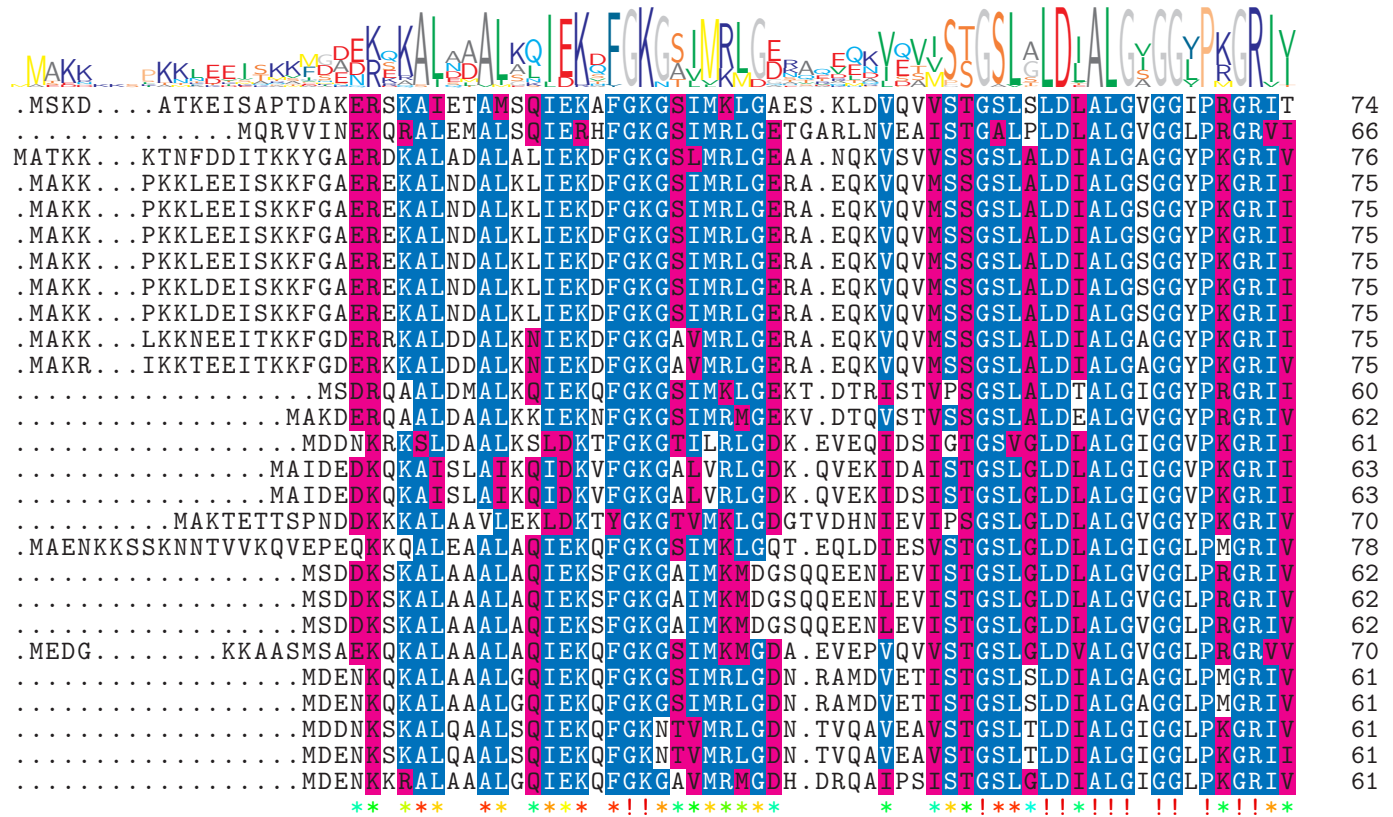


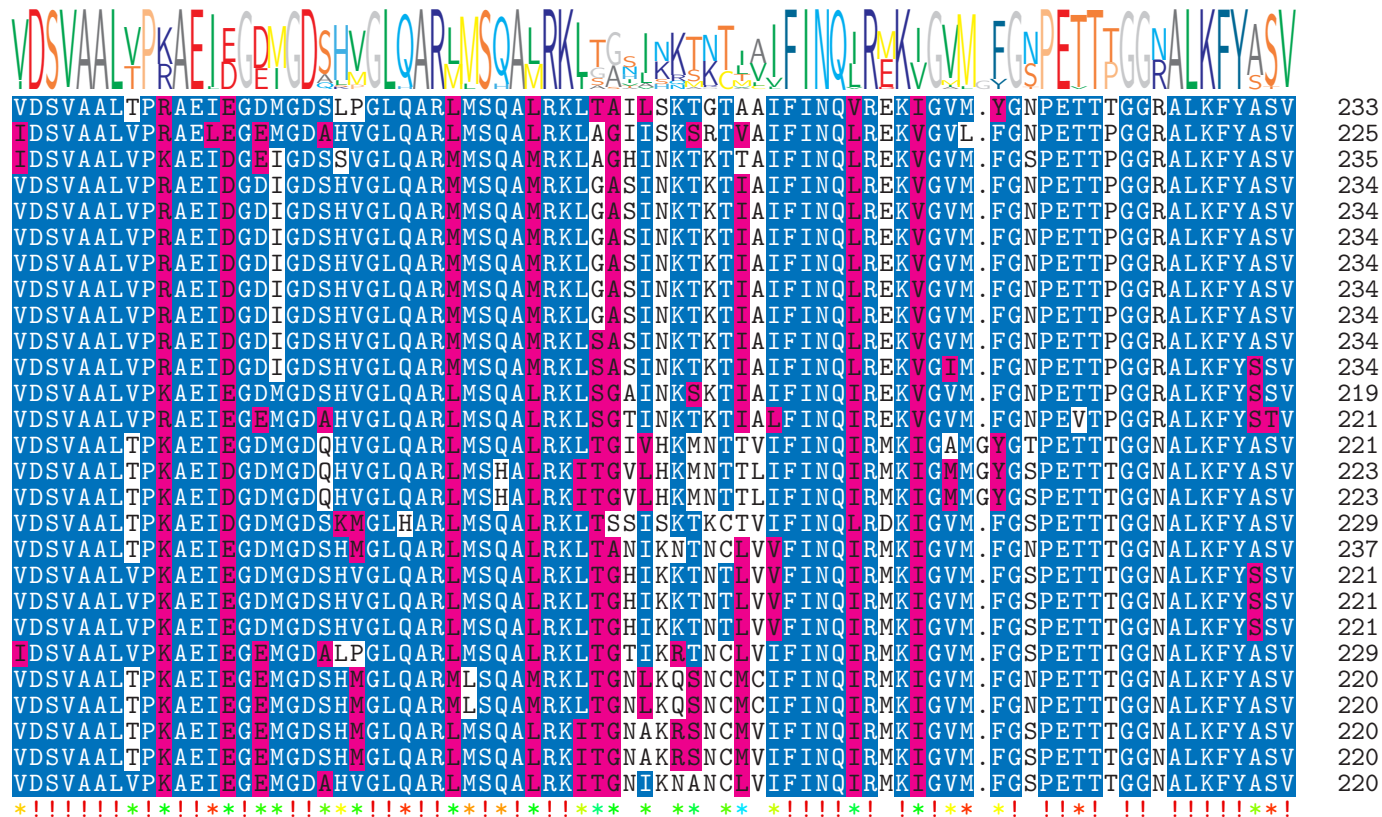
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NTDB id 228 SPD RS09265 WP 001085462.1
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NTDB id 499 SM12261 RS08315 WP 078228268.1
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NTDB id 408 SMU RS09530 WP 002262392.1
NTDB id 115 BSU 16940 NP 389576.2
NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 1245 Cj1673c YP 002345041.1
NTDB id 1214 NCTC11637 00359 SQJ03206.1
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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
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NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus



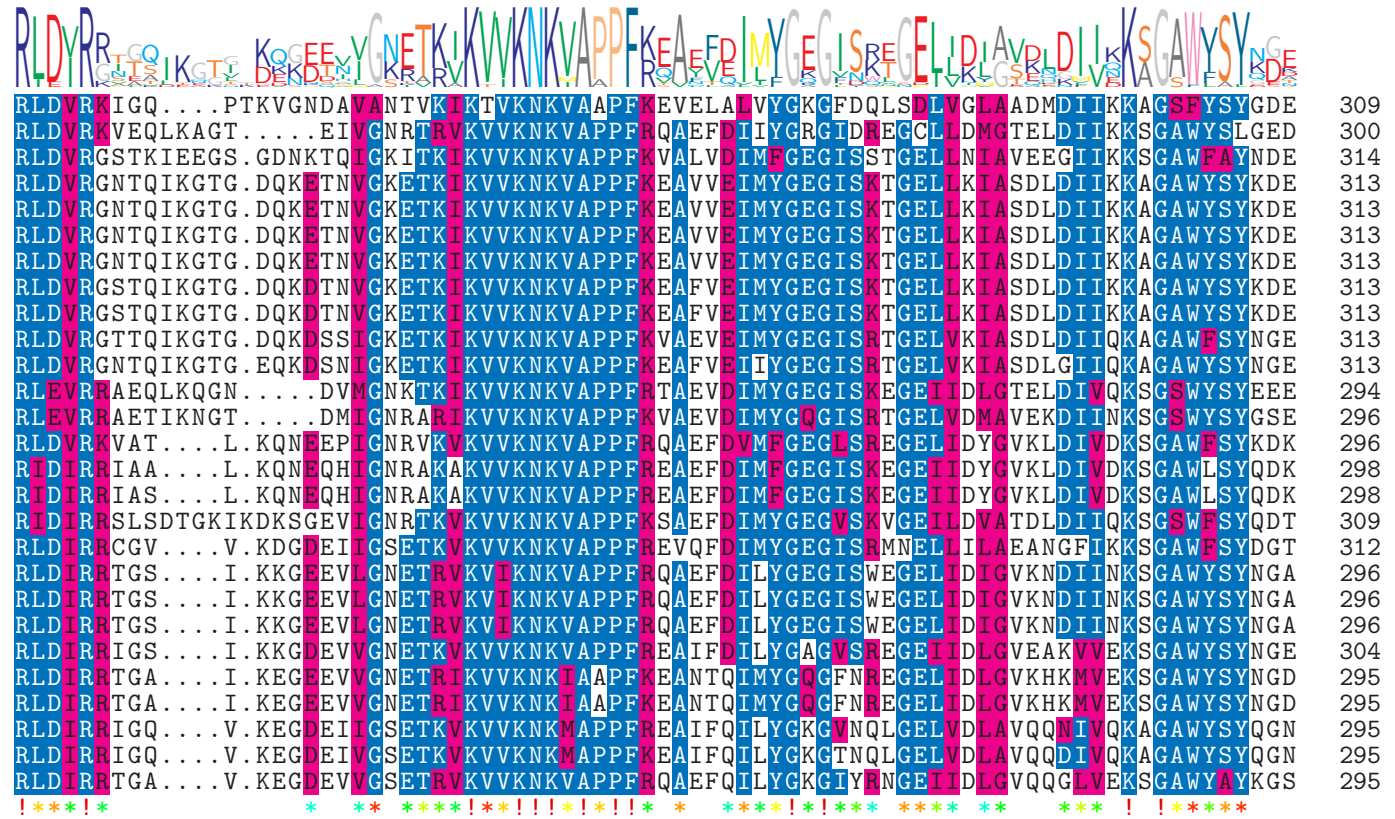
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NTDB id 302933 MothHH RS05745 WP 011392593.1	EIFGPESGKTTVALHVTAEARAGGTA	AFIDAEHALDPVYAHNLGVNTDNLV	SQPD	GEQALEIAEALV	RSGAIDVIV	146	
NTDB id 600 KW2 RS01765 WP 011675413.1	EIYGPESSGKTTVALHAVA	AAVQKEGGIAAFIDAEHALDPEYAKALGVNTDELLV	SQPDY	GEQGLEIAEKLIT	SGAVDLVV	156	
NTDB id 269 KZH43 RS08665 WP 001085462.1	EIYGPESSGKTTVALHAVAQAQKEGGIA	AFIDAEHALDPAYAAALGVNTDELLV	SQPDS	GEQGLEIAGKLID	SGAVDLVV	155	
NTDB id 228 SPD RS09265 WP 001085462.1	EIYGPESSGKTTVALHAVAQAQKEGGIA	AFIDAEHALDPAYAAALGVNTDELLV	SQPDS	GEQGLEIAGKLID	SGAVDLVV	155	
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NTDB id 159 SP RS09750 WP 001085462.1	EIYGPESSGKTTVALHAVAQAQKEGGIA	AFIDAEHALDPAYAAALGVNTDELLV	SQPDS	GEQGLEIAGKLID	SGAVDLVV	155	
NTDB id 527 SMSK321 RS11065 WP 001085454.1	EIYGPESSGKTTVALHAVAQAQKEGGIA	AFIDAEHALDPAYAAALGVNTDELLV	SQPDS	GEQGLEIAGKLID	SGAVDLVV	155	
NTDB id 499 SM12261 RS08315 WP 078228268.1	EIYGPESSGKTTVALHAVAQAQKEGGIA	AFIDAEHALDPAYAAALGVNTDELLV	SQPDS	GEQGLEIAGKLID	SGAVDLVV	155	
NTDB id 453 Spy49 1753c ACI62003.1	EIYGPESSGKTTVALHAVAQAQKEGGIA	AFIDAEHALDPAYAAALGVNTDELLV	LAQPD	GEQGLEIAGKLID	SGAVDLVV	155	
NTDB id 408 SMU RS09530 WP 002262392.1	EIYGPESSGKTTVALHAVAQAQKDGGA	AFIDAEHALDPAYAAALGVNTDELLV	SQPDS	GEQGLEIAGKLID	SGAVDLVV	155	
NTDB id 115 BSU 16940 NP 389576.2	EVIYGPESSGKTTVALHATAEVQQQGG	QAFAIDAEHALDPVYAQKLGVMTELLV	SQPD	TEQALEIAEALV	RSGAIDIVV	140	
NTDB id 625 LCA RS02525 WP 011374196.1	EIYGPESSGKTTVALHAVA	EVQKQGGTAAYIDAENAMDPKYAT	ALGVNTDDELLV	SQPD	TEQGLEIADALV	SSGAVDILV	142
NTDB id 1245 Cj1673c YP 002345041.1	EIYGPESSGKTTITLHIIAECQKAGG	VCAFIDAEHALDVKYAKNLGVNTDDELLV	YV	SQPD	FGEQALEIVETIAR	SGAVDLIV	141
NTDB id 1214 NCTC11637 00359 SQJ03206.1	EIYGPESSGKTTITLSHIIAECQKNG	CVCAFIDAEHALDVHYAKRLGVNTENLLV	SQPD	TEQALEILETITR	SGGIDLVV	143	
NTDB id 1211 C694 RS00795 WP 000963128.1	EIYGPESSGKTTITLSHIIAECQKNG	CVCAFIDAEHALDVHYAKRLGVNTENLLV	SQPD	TEQALEILETITR	SGGIDLVV	143	
NTDB id 1334 RA0C RS04870 WP 004918236.1	EIYGPESSGKTTITLHATAEAQKVGG	TAAFAIDAEHALFDMHYAEKLCITN	LELLV	SQPDN	GEQALEIADSLIR	SGGVDIVV	150
NTDB id 1389 A4U84 RS07560 WP 021112712.1	EIYGPESSGKTTITLSLIAQAQKGNK	TCAFIDAEHALDPVYARNLGVMTELLV	SQPDN	GEQALEICDALV	RSGAVDVII	158	
NTDB id 1130 NGFG RS03960 WP 003688695.1	EIFGPESGKTTITCLEAVAQCCQKNG	CVCAFVDAEHA	FDPVYARKLGVKVEELYL	SQPD	TEQALEICDTLVR	SGGIDMVV	142
NTDB id 1124 NGFG RS03960 WP 003688695.1	EIFGPESGKTTITCLEAVAQCCQKNG	CVCAFVDAEHA	FDPVYARKLGVKVEELYL	SQPD	TEQALEICDTLVR	SGGIDMVV	142
NTDB id 1123 OK783 RS03845 WP 003688695.1	EIFGPESGKTTITCLEAVAQCCQKNG	CVCAFVDAEHA	FDPVYARKLGVKVEELYL	SQPD	TEQALEICDTLVR	SGGIDMVV	142
NTDB id 1427 RS RS02760 WP 011000510.1	EIYGPESSGKTTITLQVVAEMQKLGG	TCAFIDAEHALDVTYADKLGVKVPD	LLV	SQPD	TEQALEIADALV	RSGSVDLIV	150
NTDB id 1165 A1552VC RS01565 WP 000344154.1	EIFGPESGKTTITLELIAAAQREBK	TCAFIDAEHALDPVYAKKLGVMTELLV	SQPD	TEQALEICDALAR	SGAVDVIV	141	
NTDB id 1142 GTF74 RS11550 WP 000344154.1	EIFGPESGKTTITLELIAAAQREBK	TCAFIDAEHALDPVYAKKLGVMTELLV	SQPD	TEQALEICDALAR	SGAVDVIV	141	
NTDB id 1022 ACIAD RS06390 WP 004925639.1	EIYGPESSGKTTMTLQATAAQCQKAG	GTCAFIDAEHALDPQYARKLGVDID	NLLV	SQPDH	GEQALEIADMLV	RSGAIDLIV	141
NTDB id 1074 ABD1 RS10195 WP 000344167.1	EIYGPESSGKTTMTLQATAAQCQKSG	GTCAFIDAEHALDPQYARKLGVDID	NLLV	SQPDN	GEQALEIADMLV	RSGAIDLIV	141
NTDB id 1205 PSJM300 05545 AFN77183.1	EIYGPESSGKTTITLSVIAAAQRMG	STCAFVDAEHALDPDYAGKLGVMV	DDLLV	SQPD	TEQALEITDMLV	RSNAVDVII	141
consensus	!***!!!!*!!!!*!	***!	!* **	!***!!!!*!* *!	!!	!!*****!***!!!!*!!!!*!*!	* ****!***!***

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NTDB id 499 SM12261 RS08315 WP 078228268.1
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NTDB id 1205 PSJM300 05545 AFN77183.1
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consensus



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NTDB id 1313 DR RS12030 WP 010888966.1	RIGQCKEKTIAVIAERPEMEQEIRDRVMAAIRAGNAGEAPALAPAPA.....APEAAEA.....	363
NTDB id 302933 MothHH RS05745 WP 011392593.1	RLGQGREAAKDFLRHPDLAAALETKIREKACINFTAGKEDATSGED.....	348
NTDB id 600 KW2 RS01765 WP 011675413.1	KIGQGAEKAKNYLKEHQDVDFEIDHKVRAAHGILLDDSEVAETEEETTASKTAKAKKEEKAVETEEIELELED.....	387
NTDB id 269 KZH43 RS08665 WP 001085462.1	KIGQGSSENAKKYLAEHPEIFDEIDKQVRSKFCILDGEEVSEQDTENKKDE...PKKEEA..VNEEVPLDLGDELEIEIE	387
NTDB id 228 SPD RS09265 WP 001085462.1	KIGQGSSENAKKYLAEHPEIFDEIDKQVRSKFCILDGEEVSEQDTENKKDE...PKKEEA..VNEEVPLDLGDELEIEIE	387
NTDB id 194 SPR RS08825 WP 001085462.1	KIGQGSSENAKKYLAEHPEIFDEIDKQVRSKFCILDGEEVSEQDTENKKDE...PKKEEA..VNEEVPLDLGDELEIEIE	387
NTDB id 159 SP RS09750 WP 001085462.1	KIGQGSSENAKKYLAEHPEIFDEIDKQVRSKFCILDGEEVSEQDTENKKDE...PKKEEA..VNEEVPLDLGDELEIEIE	387
NTDB id 527 SMSK321 RS11065 WP 001085454.1	KIGQGSSENAKKYLADNPEVFAEIDHQVVRVQFCILDGEEAAE...SKKDE...VAQVDS..VNEEVTLDLGDELEIEIE	383
NTDB id 499 SM12261 RS08315 WP 078228268.1	KIGQGSSENAKKYLADNPEIFDEIDHQVVRVQFCILDGEEIAE...SKKDE...AAQVDS..VNEEVTLDLGDELEIEIE	383
NTDB id 453 Spy49 1753c ACI62003.1	KIGQGSSENAKRYLADHPQLFDEIDRKVRVKFCILLEESEEEESAMAVASE.....E.....TDDLALDLDNIEIED.	378
NTDB id 408 SMU RS09530 WP 002262392.1	KIGQGSSENAKKFLADNPEIFDDIDHKVVRVQFCILIEDNTEEKQSSKEK.....ETDEK..ADKNLVLELDDTIELED.	383
NTDB id 115 BSU 16940 NP 389576.2	RIGQCKRENAKQELKENKDIMLMIQEQLREHYCIDNNGVVVQQAEETQEEL.EFE.E.....	348
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NTDB id 1245 Cj1673c YP 002345041.1	KIGQCKRENSKAEIKENPEIADEITKATQNSMCIEGMISGSEDD..EGEE.....	343
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NTDB id 1211 C694 RS00795 WP 000963128.1	KIGQCKRENAKALLKEDKALADEITLKIRESICSNEEIMPLPDE..PLEEM.E.....	347
NTDB id 1334 RAOC RS04870 WP 004918236.1	KIGQCKRDTVKELTKDNPEIAELEAKIREKLQAK.....	343
NTDB id 1389 A4U84 RS07560 WP 021112712.1	KIGQCKKNNAVVKWLKENPEIADKLEQEIRNTLASNPNSVLKATASDSNDSES.DVEEFS.....EEL.....	372
NTDB id 1130 NGFG RS03960 WP 003688695.1	KIGQCKDNVRVWLKENPEISDEIDAKIRALNCVEMHITEGTQDETGER.....P.....EE.....	348
NTDB id 1124 NGFG RS03960 WP 003688695.1	KIGQCKDNVRVWLKENPEISDEIDAKIRALNCVEMHITEGTQDETGER.....P.....EE.....	348
NTDB id 1123 OK783 RS03845 WP 003688695.1	KIGQCKDNVRVWLKENPEISDEIDAKIRALNCVEMHITEGTQDETGER.....P.....EE.....	348
NTDB id 1427 RS RS02760 WP 011000510.1	RIGQCKRDNCREELRENAELAREIENKVRHLCTVTPMGAVTLA.EEVEED.....	352
NTDB id 1165 A1552VC RS01565 WP 000344154.1	KIGQCKANACKYLLKENPEIAKTLDKKILREMLLPENMQLIAETSSAADV.EFGAVP.....EEF.....	354
NTDB id 1142 GTF74 RS11550 WP 000344154.1	KIGQCKANACKYLLKENPEIAKTLDKKILREMLLPENMQLIAETSSAADV.EFGAVP.....EEF.....	354
NTDB id 1022 ACIAD RS06390 WP 004925639.1	KIGQCKNNVIRYVLEENPQISTEIEAVIREQLLTKASDQTAA.HDETEEP.DLL..E.....S.....	349
NTDB id 1074 ABD1 RS10195 WP 000344167.1	KIGQCKNNVIRYFEENNQIAEIEIRNIREQLLTTGTNGAVQ.I.EDEEPP.DLL..L.....ES.....	349
NTDB id 1205 PSJM300 05545 AFN77183.1	KIGQCKANAACKYVLEENPEIGQEIEQQIRAKLLVTSANTKATPVAEDLADA.DI.....	347
consensus	***!!!***** * * * * * * * * * * * * * * *	

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NTDB id 1313 DR RS12030 WP 010888966.1	.	363
NTDB id 302933 MothHH RS05745 WP 011392593.1	.	348
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 527 SMSK321 RS11065 WP 001085454.1	E	384
NTDB id 499 SM12261 RS08315 WP 078228268.1	E	384
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NTDB id 1211 C694 RS00795 WP 000963128.1	.	347
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NTDB id 1389 A4U84 RS07560 WP 021112712.1	.	372
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NTDB id 1124 NGFG RS03960 WP 003688695.1	.	348
NTDB id 1123 OK783 RS03845 WP 003688695.1	.	348
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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