

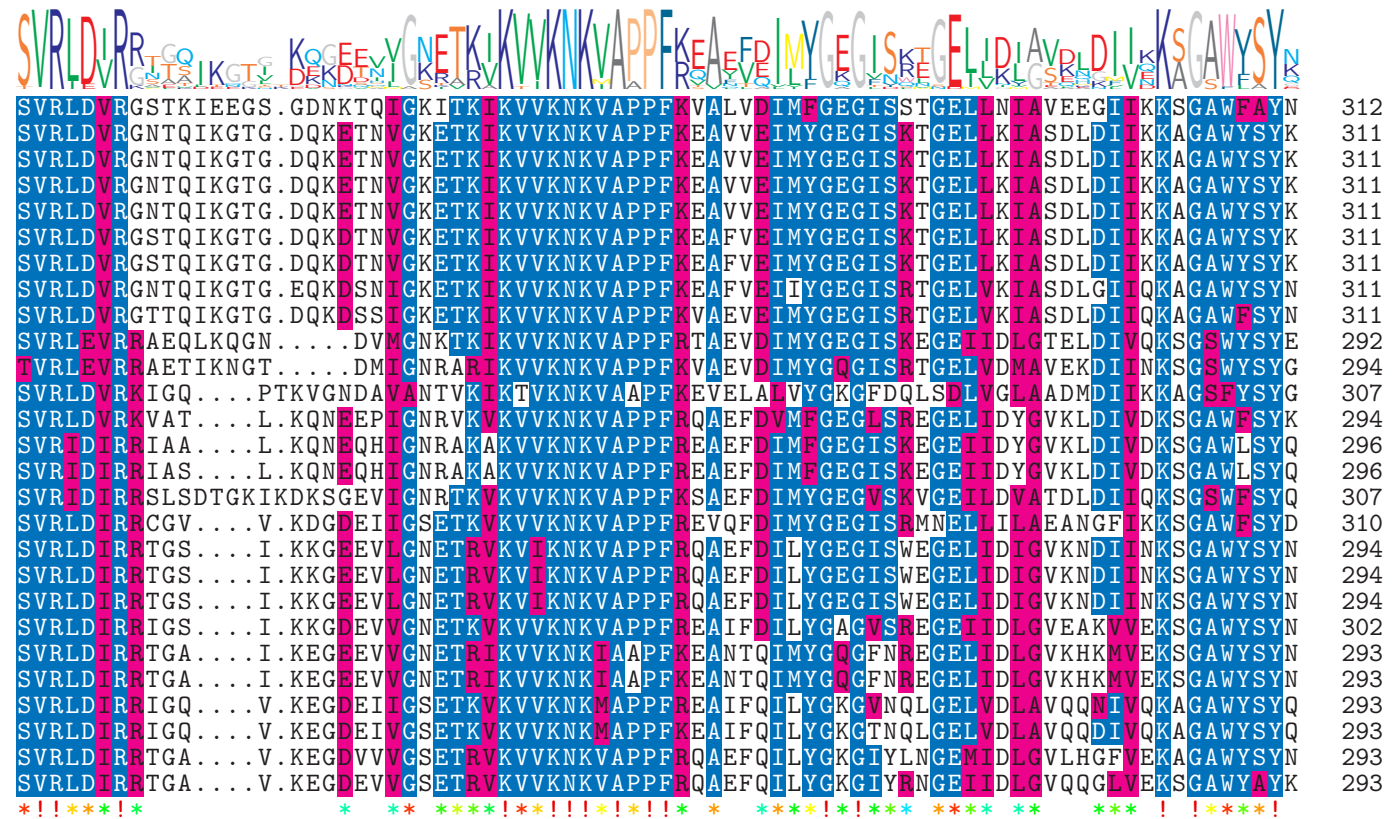
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NTDB id 600 KW2 RS01765 WP 011675413.1	MATKK.....KTNFDDITKKYGA	ERDKALADALALIEKD	FGKGSIMRLGE	.AANQKVSV	VSSGSLALDI	I	ALGAGGY	PKGR	74	
NTDB id 269 KZH43 RS08665 WP 001085462.1	.MAKK.....PKKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGE	.RAEQKVQV	MSSGSLALDI	I	ALGSGGY	PKGR	73	
NTDB id 228 SPD RS09265 WP 001085462.1	.MAKK.....PKKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGE	.RAEQKVQV	MSSGSLALDI	I	ALGSGGY	PKGR	73	
NTDB id 194 SPR RS08825 WP 001085462.1	.MAKK.....PKKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGE	.RAEQKVQV	MSSGSLALDI	I	ALGSGGY	PKGR	73	
NTDB id 159 SP RS09750 WP 001085462.1	.MAKK.....PKKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGE	.RAEQKVQV	MSSGSLALDI	I	ALGSGGY	PKGR	73	
NTDB id 499 SM12261 RS08315 WP 078228268.1	.MAKK.....PKKLDEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGE	.RAEQKVQV	MSSGSLALDI	I	ALGSGGY	PKGR	73	
NTDB id 527 SMSK321 RS11065 WP 001085454.1	.MAKK.....PKKLDEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGE	.RAEQKVQV	MSSGSLALDI	I	ALGSGGY	PKGR	73	
NTDB id 408 SMU RS09530 WP 002262392.1	.MAKR.....IKKTEEITKKFG	DERKKALDDALKNIEKD	FGKGA	VMR	GE	.RAEQKVQV	MSSGSLALDI	ALGAGGY	PKGR	73
NTDB id 453 Spy49 1753c ACI62003.1	.MAKK.....LKKNEEITKKFG	DERRKALDDALKNIEKD	FGKGA	VMR	GE	.RAEQKVQV	MSSGSLALDI	ALGAGGY	PKGR	73
NTDB id 115 BSU 16940 NP 389576.2	MSDRQAALDMALK	QIEKQFGKGSIM	KLGE	.KTDTR	ISTVPSGSLALD	T	ALGIGGY	PRGR	58	
NTDB id 625 LCA RS02525 WP 011374196.1	MAKDERQAALDA	ALKKIEKNFGKGSIM	RMGE	.KVD	TQVSTVSSGSLALDE	ALGVGGY	PRGR		60	
NTDB id 1313 DR RS12030 WP 010888966.1	MSKDATKEISAPTD	AKERSKATET	AMSQIEKA	FGKGSIMKLGA	.ESKLDVQV	VSTGSLSLDL	ALGVGGI	PRGR	72	
NTDB id 1245 Cj1673c YP 002345041.1	MDDNKRKSLDA	ALKSLDKT	FGKGTIL	RLGD	.KEVEQIDS	IGTGSVGLDL	ALGIGGV	PKGR	59	
NTDB id 1214 NCTC11637 00359 SQJ03206.1	MAIDEDKQKAI	SLAIKQIDKVF	FGKGA	LVR	LDG	.KQVEKIDA	ISTGSLGLDL	ALGIGGV	PKGR	61
NTDB id 1211 C694 RS00795 WP 000963128.1	MAIDEDKQKAI	SLAIKQIDKVF	FGKGA	LVR	LDG	.KQVEKIDS	ISTGSLGLDL	ALGIGGV	PKGR	61
NTDB id 1334 RAOC RS04870 WP 004918236.1	MAKT..ETTSPN	DDKKKALAAVLEK	LDKT	YGKGTVMK	LGDTVDHN	IEVIPS	GSLGLDL	ALGVGGY	PKGR	68
NTDB id 1389 A4U84 RS07560 WP 021112712.1	.MAENKKSSKNNTV..VKQVEP	EQKKQALEAALA	QIEKQFGKGSIM	KL	GQ	.TEQLDIES	VSTGSLGLDL	ALGIGGL	PMGR	76
NTDB id 1130 NGFG RS03960 WP 003688695.1	MSDDKSKALAA	AALQIEKS	FGKGA	AIMKMDGS	Q	Q	Q	Q	Q	60
NTDB id 1124 NGFG RS03960 WP 003688695.1	MSDDKSKALAA	AALQIEKS	FGKGA	AIMKMDGS	Q	Q	Q	Q	Q	60
NTDB id 1123 OK783 RS03845 WP 003688695.1	MSDDKSKALAA	AALQIEKS	FGKGA	AIMKMDGS	Q	Q	Q	Q	Q	60
NTDB id 1427 RS RS02760 WP 011000510.1	.MEDG.....K..KAASMS	AEKQKALAAALA	QIEKQFGKGSIM	KMGD	.AEVEPVQV	VSTGSLGLD	VALGVGG	LP	PRGR	68
NTDB id 1165 A1552VC RS01565 WP 000344154.1	MDENKQKALAA	ALGQIEKQFGKGSIM	RLGD	.NRAMD	VETISTGSLSLD	I	ALGAGGL	PMGR	59	
NTDB id 1142 GTF74 RS11550 WP 000344154.1	MDENKQKALAA	ALGQIEKQFGKGSIM	RLGD	.NRAMD	VETISTGSLSLD	I	ALGAGGL	PMGR	59	
NTDB id 1022 ACIAD RS06390 WP 004925639.1	MDDNKSKALQA	ALSQIEKQFGKNTVM	RLGD	.NTVQA	VEAVSTGSLTLD	I	ALGIGGL	PKGR	59	
NTDB id 1074 ABD1 RS10195 WP 000344167.1	MDDNKSKALQA	ALSQIEKQFGKNTVM	RLGD	.NTVQA	VEAVSTGSLTLD	I	ALGIGGL	PKGR	59	
NTDB id 94377 AOC04 RS02170 WP 060690953.1	MDDNKKKALAA	ALGQIERQFGKGA	VMLMGD	.QERQA	VPAISTGSLGLD	I	ALGIGGL	PKGR	59	
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consensus	***	***	**	*****	!!*****	*	*****!!*!!*!!*!!	!!	!!*!!	


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NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 269 KZH43 RS08665 WP 001085462.1
NTDB id 228 SPD RS09265 WP 001085462.1
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 408 SMU RS09530 WP 002262392.1
NTDB id 453 Spy49 1753c ACI62003.1
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 1214 NCTC11637 00359 SQJ03206.1
NTDB id 1211 C694 RS00795 WP 000963128.1
NTDB id 1334 RAOC 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 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 94377 AOC04 RS02170 WP 060690953.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus

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NTDB id 600 KW2 RS01765 WP 011675413.1	DEKIGQGA	EKAKNYLKEHQDV	FDEIDHKVRAAHGL	LDDSEVAETEEETT	ASKTKAKAKKEEK	AVETEEIELELED		387		
NTDB id 269 KZH43 RS08665 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTEN	KKDE....PKKEEA	..VNEEVPLDLG	DELEIE	385		
NTDB id 228 SPD RS09265 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTEN	KKDE....PKKEEA	..VNEEVPLDLG	DELEIE	385		
NTDB id 194 SPR RS08825 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTEN	KKDE....PKKEEA	..VNEEVPLDLG	DELEIE	385		
NTDB id 159 SP RS09750 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTEN	KKDE....PKKEEA	..VNEEVPLDLG	DELEIE	385		
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NTDB id 527 SMSK321 RS11065 WP 001085454.1	DEKIGQGS	ENAKKYLADNPEV	FAEIDHQVRVQFGL	IDGEEAAES....	KKDE....VAQVDS	..VNEEVTLDLG	DELEIE	381		
NTDB id 408 SMU RS09530 WP 002262392.1	GEKIGQGS	ENAKKFLADNPEIF	DDIDHKVVRVQYGL	IEEDNTEEKQSS	KEK.....ETDEK	..ADKNLVLELDD	TIELE	382		
NTDB id 453 Spy49 1753c ACI62003.1	GEKIGQGS	ENAKRYLADHPQL	FDEIDRKVRVKFGL	LEESEEEESAM	AVASE.....E	TDDLALD	LDNGIEIE	377		
NTDB id 115 BSU 16940 NP 389576.2	EERLGGG	RENAKQFLKENK	DIIMLIQEQIRE	HYGLDNNGVVQ	QAEETQEEL	..EFE.E.....		348		
NTDB id 625 LCA RS02525 WP 011374196.1	SERIGQG	RENAKNYLADH	EDVEDEVRLKVR	AAYGISDVP	PEEDLPTTEDE	..QI.NILPDDST	EE	355		
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NTDB id 1245 Cj1673c YP 002345041.1	DKKLGGG	RENSKAFLEN	PEIADEITKAI	QNSMGT	EGMISGSED	DEGEE.....		343		
NTDB id 1214 NCTC11637 00359 SQJ03206.1	DKKLGGG	RENAKALLKED	KALADEITLKI	KESIGSNEE	IMPLPDEPLE	EME.....		347		
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NTDB id 1334 RAOC RS04870 WP 004918236.1	DTKLGGQ	RDITVKELIK	DNPELAEELE	AKIREKLQAK				343		
NTDB id 1389 A4U84 RS07560 WP 021112712.1	GTKIGQG	KNNAVKWLKEN	PEIADKLEQEI	RNTLASNP	NSVLKATASDS	NDDES.DVEEF	SEE....E.L	372		
NTDB id 1130 NGFG RS03960 WP 003688695.1	GAKIGQG	KDNVRVWLKEN	PEISDEIDAKI	RALNGVEMH	ITEGTQDET	DGE.....RPEE		348		
NTDB id 1124 NGFG RS03960 WP 003688695.1	GAKIGQG	KDNVRVWLKEN	PEISDEIDAKI	RALNGVEMH	ITEGTQDET	DGE.....RPEE		348		
NTDB id 1123 OK783 RS03845 WP 003688695.1	GAKIGQG	KDNVRVWLKEN	PEISDEIDAKI	RALNGVEMH	ITEGTQDET	DGE.....RPEE		348		
NTDB id 1427 RS RS02760 WP 011000510.1	GERIGQG	RDNCREFLRE	NAELAREIEN	KVREHLGV	TPMGA.VTLA	EEVEED.....		352		
NTDB id 1165 A1552VC RS01565 WP 000344154.1	GDKIGQG	KANACKYLEN	PEIAKTLDKKL	REMLLNPN	MQLIAETSSA	ADDV.EFGAVP	EEF	354		
NTDB id 1142 GTF74 RS11550 WP 000344154.1	GDKIGQG	KANACKYLEN	PEIAKTLDKKL	REMLLNPN	MQLIAETSSA	ADDV.EFGAVP	EEF	354		
NTDB id 1022 ACIAD RS06390 WP 004925639.1	GNKIGQG	KNNVIRYLE	ENPQISTEIE	AVIREQLLT	TKASDQTA	AHDETEEEP	D.LLES	349		
NTDB id 1074 ABD1 RS10195 WP 000344167.1	GNKIGQG	KNNVIRYFE	ENNQIAEEI	ERNIREQLLT	TGTNGAVQI	..EDEE	EPD.LLLES	349		
NTDB id 94377 AOC04 RS02170 WP 060690953.1	GSKIGQG	KANSAKFLD	DNPDIKDALE	KQLREKLLG	PKTDSELA	EM..KTMPK	..LSKAAKEAAA	LAEAEEMENATD	GDN..	368
NTDB id 1205 PSJM300 05545 AFN77183.1	GSKIGQG	KANAACYLE	ENPEIGQIE	EQQLRAKLL	VTSANTKAT	PV..AE	DLADADI		347	
consensus	***!!!	*****	**	*****	*****	**	**			

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		IEE	
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 499 SM12261 RS08315 WP 078228268.1	IEE		384
NTDB id 527 SMSK321 RS11065 WP 001085454.1	IEE		384
NTDB id 408 SMU RS09530 WP 002262392.1	D..		383
NTDB id 453 Spy49 1753c ACI62003.1	D..		378
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 1214 NCTC11637 00359 SQJ03206.1	...		347
NTDB id 1211 C694 RS00795 WP 000963128.1	...		347
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NTDB id 1022 ACIAD RS06390 WP 004925639.1	...		349
NTDB id 1074 ABD1 RS10195 WP 000344167.1	...		349
NTDB id 94377 AOC04 RS02170 WP 060690953.1	...		368
NTDB id 1205 PSJM300 05545 AFN77183.1	...		347
consensus			

-  non conserved
-  similar
-  ≥ 50% conserved