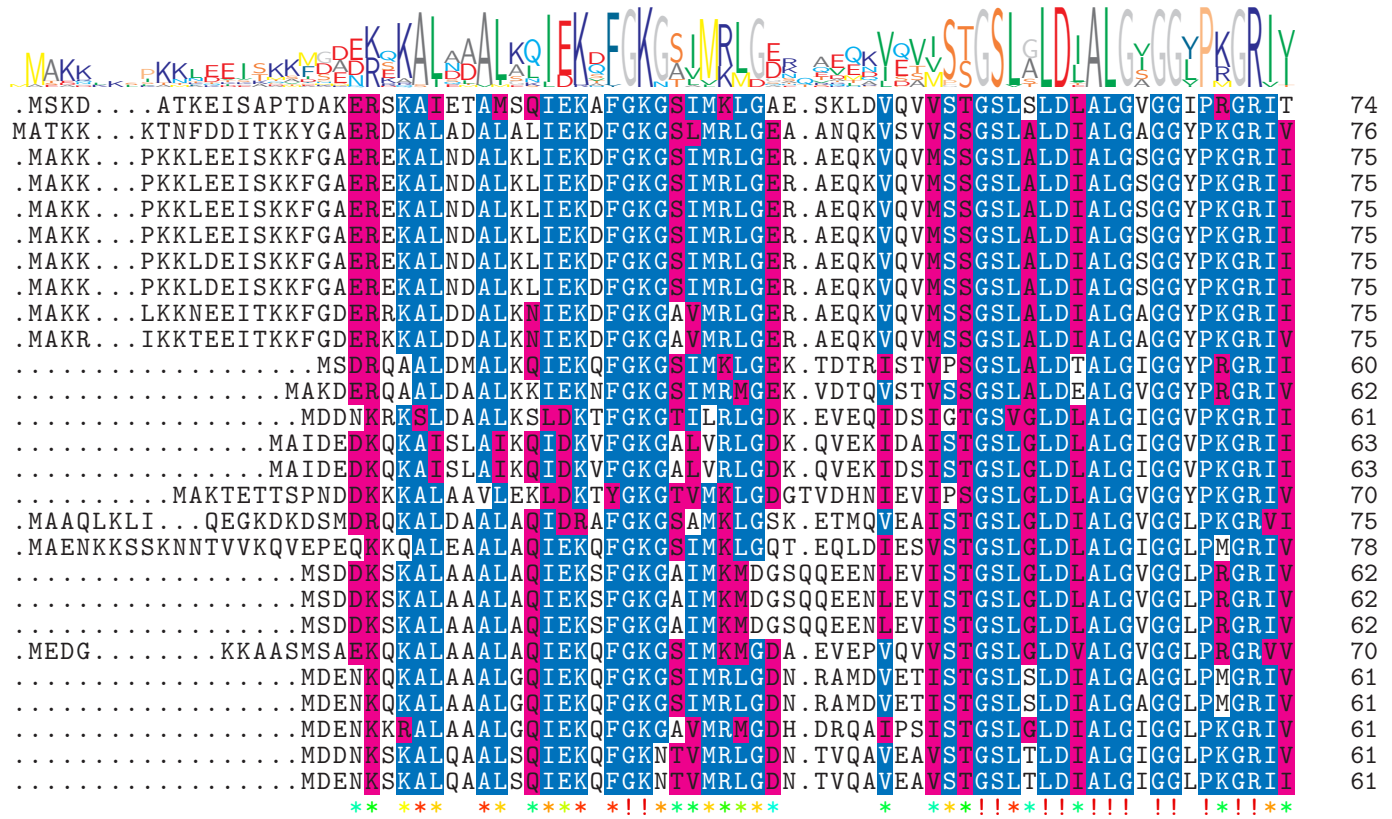


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NTDB id 269 KZH43 RS08665 WP 001085462.1
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NTDB id 194 SPR RS08825 WP 001085462.1
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NTDB id 499 SM12261 RS08315 WP 078228268.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
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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
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NTDB id 1211 C694 RS00795 WP 000963128.1
NTDB id 1334 RAOC RS04870 WP 004918236.1
NTDB id 128320 JI59 RS01125 WP 007014750.1
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 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
consensus

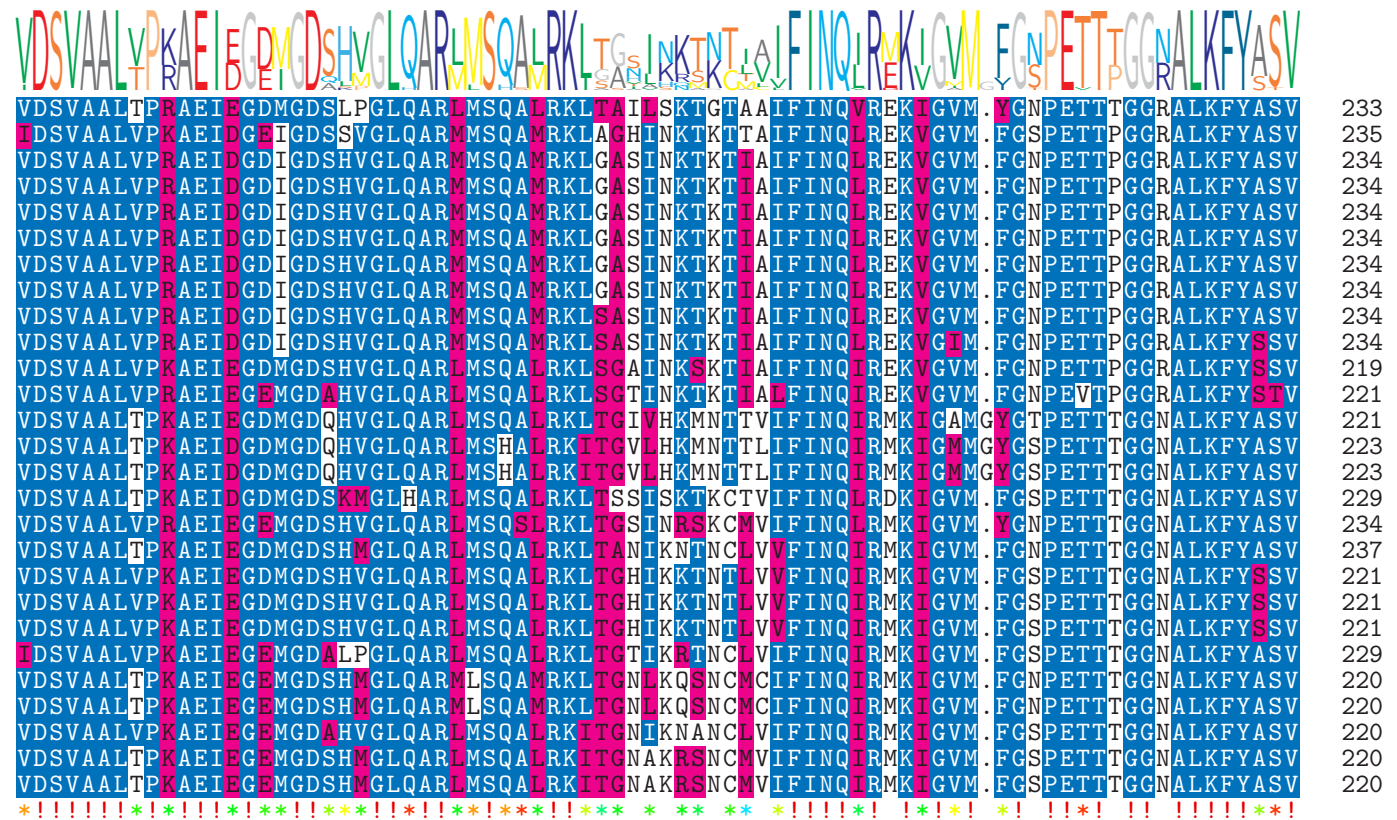
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NTDB id 228 SPD RS09265 WP 001085462.1
NTDB id 194 SPR RS08825 WP 001085462.1
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NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
consensus

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NTDB id 600 KW2 RS01765 WP 011675413.1	RLDVRGSTKIEEGS.GDNKTQIGKITIKVVKNKVAPPFKVALVDIMFGEGISSTGELLNIAVEEGIITKKSGAWFAYNDE	314
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NTDB id 228 SPD RS09265 WP 001085462.1	RLDVRGNTQIKGTG.DQKETNVGKETKIKVVKNKVAPPFKAEAVVEIMYEGEGISKTGELLKIASDLDIITKKAGAWYSYKDE	313
NTDB id 194 SPR RS08825 WP 001085462.1	RLDVRGNTQIKGTG.DQKETNVGKETKIKVVKNKVAPPFKAEAVVEIMYEGEGISKTGELLKIASDLDIITKKAGAWYSYKDE	313
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NTDB id 527 SMSK321 RS11065 WP 001085454.1	RLDVRGSTQIKGTG.DQKDTNVGKETKIKVVKNKVAPPFKAEAFVEIMYEGEGISKTGELLKIASDLDIITKKAGAWYSYKDE	313
NTDB id 453 Spy49 1753c ACI62003.1	RLDVRGTTQIKGTG.DQKDSSIGKETKIKVVKNKVAPPFKVAEVEIMYEGEGISRTGELVKIASDLDIITKKAGAWFSYNGE	313
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NTDB id 115 BSU 16940 NP 389576.2	RLEVRRAEQLKQGN.....DVMGNKTKIKVVKNKVAPPFRTAEVDIMYEGEGISKEGEIIDLGTELDIVQKSGSWYSYEEE	294
NTDB id 625 LCA RS02525 WP 011374196.1	RLEVRRAETIKNGT.....DMIGNRARIKVVKNKVAPPFKVAEVDIMYGGQGISRTGELVDMAVEKDIITKSGSWYSYGSE	296
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NTDB id 1211 C694 RS00795 WP 000963128.1	RIDIRRIA...SLK.QNEQHIGNRAKAKVVKNKVAPPFREAEFDIMFGEGISKEGEIIDYGVKLDIVDKSGAWLSYQDK	298
NTDB id 1334 RAOC RS04870 WP 004918236.1	RIDIRRSLSDTGKIKDKSGEVIGNRTKVVVKNKVAPPFKSAEFDIMYEGEGVSKVGEILDVATDLDIITQKSGSWFSYQDT	309
NTDB id 128320 JI59 RS01125 WP 007014750.1	RLDIRRTG...QIK.DRDEIIGNATRVKVVKNKVAPPFKQVEFDIMYEGEGISKIGEILDGVKAGIVEKSGAWFSYDSI	309
NTDB id 1389 A4U84 RS07560 WP 021112712.1	RLDIRRCG...VVK.DGDEIIGSETKVVVKNKVAPPFRREVQFDIMYEGEGISRMNELLILAEANGFIITKSGAWFSYDGT	312
NTDB id 1130 NGFG RS03960 WP 003688695.1	RLDIRRTG...SIK.KGEEVLGNETR.VKV.IKNKVAPPFRQAEFDILYEGEGISWEGELIDIGVKNDIITKSGAWYSYNGA	296
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NTDB id 1165 A1552VC RS01565 WP 000344154.1	RLDIRRTG...AIK.EGEEVVGNETRIKVVKNKIAAPFKEANTQIMYGGQGFNREGELIDLGVKHKMVEKSGAWYSYNGD	295
NTDB id 1142 GTF74 RS11550 WP 000344154.1	RLDIRRTG...AIK.EGEEVVGNETRIKVVKNKIAAPFKEANTQIMYGGQGFNREGELIDLGVKHKMVEKSGAWYSYNGD	295
NTDB id 1205 PSJM300 05545 AFN77183.1	RLDIRRTG...AVK.EGDEVVGSETR.VKVVKNKVAPPFRQAEFQILYGKGVIYRNGEIIDLGVQQGLVEKSGAWYAYKGS	295
NTDB id 1022 ACIAD RS06390 WP 004925639.1	RLDIRRIG...QVK.EGDEIIGSETKVVVKNKMAPPFREAIFFQILYGKGVNQLGELVDLAVQQNIVQKAGAWYSYQGN	295
NTDB id 1074 ABD1 RS10195 WP 000344167.1	RLDIRRIG...QVK.EGDEIVGSETKVVVKNKMAPPFKEAIFQILYGKGVTNQLGELVDLAVQQDIVQKAGAWYSYQGN	295
consensus	!***!* * ** *****!*****!*****! * * *****!*!***** ***** ** ***** ! !*****!	

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NTDB id 1313 DR RS12030 WP 010888966.1	RIGQGKEKTIA	YIAERP	MEQEI	RD	RVMAAIRAGNAGEAPALAPAPAA.....PEAAEA.....	363
NTDB id 600 KW2 RS01765 WP 011675413.1	KIGQGA	EAKNYLKEHQDV	FDEID	HKVRAAHG	LLDDSEVAETEEETTAS	387
NTDB id 269 KZH43 RS08665 WP 001085462.1	KIGQGS	ENAKKYLA	EHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTENKKDE....PKKEEA..VNEEVPLDLGDELEIEIE	387
NTDB id 228 SPD RS09265 WP 001085462.1	KIGQGS	ENAKKYLA	EHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTENKKDE....PKKEEA..VNEEVPLDLGDELEIEIE	387
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NTDB id 159 SP RS09750 WP 001085462.1	KIGQGS	ENAKKYLA	EHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTENKKDE....PKKEEA..VNEEVPLDLGDELEIEIE	387
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NTDB id 625 LCA RS02525 WP 011374196.1	RIGQGR	ENAKNYLA	DHEDVE	DEVRLKVRAAYG	ISDVPEEDLPTTEDE.QI.NILPDDST.....EE.....	355
NTDB id 1245 Cj1673c YP 002345041.1	KLGGQGR	ENSKAFLKENPEI	ADEITKA	IQNSMG	IEGMISGSE..DDEGEF.....	343
NTDB id 1214 NCTC11637 00359 SQJ03206.1	KLGGQGR	ENAKALLKEDKALA	DEITLKI	KESIGSNEEIMPLP..DEPLEEME.....		347
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NTDB id 1389 A4U84 RS07560 WP 021112712.1	KIGQGG	KNNAVKWLKENPEI	ADKLEQE	IRNTLASNPNSVLKATASDSNDES	SD.VEEFS.....EEEL.....	372
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NTDB id 1165 A1552VC RS01565 WP 000344154.1	KIGQGG	KANACKYLLKENPEI	AKTLDKKL	REMLLNPNENMLIAETSSAAD	DVE.FGAVP.....EEF.....	354
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NTDB id 1205 PSJM300 05545 AFN77183.1	KIGQGG	KANAACKYLEENPEI	GIEEQ	IRAKLLVTSANTKATPVAEDLADAD.I.....		347
NTDB id 1022 ACIAD RS06390 WP 004925639.1	KIGQGG	KNNVIRYLEENPQ	ISTEIEAV	IREQLLT	KASDQTAA.HDETEEPD.LL..E.....S.....	349
NTDB id 1074 ABD1 RS10195 WP 000344167.1	KIGQGG	KNNVIRYFEEN	NQIAEEIERN	IREQLLT	TGTNGAVQ.I.EDEEPD.LL..L.....ES.....	349
consensus	**!!!***** ** ***** ***** ** ** *					*

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NTDB	id	1313	DR	RS12030	WP	010888966.1	.	363
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NTDB	id	269	KZH43	RS08665	WP	001085462.1	E	388
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NTDB	id	159	SP	RS09750	WP	001085462.1	E	388
NTDB	id	499	SM12261	RS08315	WP	078228268.1	E	384
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NTDB	id	453	Spy49	1753c	ACI62003.1	.	.	378
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NTDB	id	1334	RAOC	RS04870	WP	004918236.1	.	343
NTDB	id	128320	JI59	RS01125	WP	007014750.1	.	358
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
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consensus								

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