

logo

NTDB id 600 KW2 RS01765 WP 011675413.1	MATKKK....TNFDDITKKYGA	ERDKALADALALIEKD	FGKGSIMRLGEA	.ANQKVS	VSSGSLALD	I	ALGAGGY	PKGR	74
NTDB id 269 KZH43 RS08665 WP 001085462.1	.MAKKP....KKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQVM	SSGSLALD	I	ALGSGGY	PKGR	73
NTDB id 228 SPD RS09265 WP 001085462.1	.MAKKP....KKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQVM	SSGSLALD	I	ALGSGGY	PKGR	73
NTDB id 194 SPR RS08825 WP 001085462.1	.MAKKP....KKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQVM	SSGSLALD	I	ALGSGGY	PKGR	73
NTDB id 159 SP RS09750 WP 001085462.1	.MAKKP....KKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQVM	SSGSLALD	I	ALGSGGY	PKGR	73
NTDB id 527 SMSK321 RS11065 WP 001085454.1	.MAKKP....KKLDEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQVM	SSGSLALD	I	ALGSGGY	PKGR	73
NTDB id 499 SM12261 RS08315 WP 078228268.1	.MAKKP....KKLDEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQVM	SSGSLALD	I	ALGSGGY	PKGR	73
NTDB id 453 Spy49 1753c ACI62003.1	.MAKKL....KKNEEITKKFG	DERRKALDDALKNIEKD	FGKGAVMRLGER	.AEQKVQVM	SSGSLALD	I	ALGAGGY	PKGR	73
NTDB id 408 SMU RS09530 WP 002262392.1	.MAKRI....KKTEEITKKFG	DERKKALDDALKNIEKD	FGKGAVMRLGER	.AEQKVQVM	SSGSLALD	I	ALGAGGY	PKGR	73
NTDB id 115 BSU 16940 NP 389576.2	MSDRQAALDMALK	QIEKQFGKGSIMKLGEK	.TDTRISTV	PSGSLALD	T	ALGIGGY	PRGR		58
NTDB id 625 LCA RS02525 WP 011374196.1	MAKDERQAALDAALK	KIEKNFGKGSIMRMGEK	.VDTQVSTV	SSGSLALD	E	ALGVGGY	PRGR		60
NTDB id 1313 DR RS12030 WP 010888966.1	MSKDATKEISAPTD	AKERSKATETAM	SQIEKAFGKGSIMKLGAE	.SKLDVQVV	STGSLSLD	I	ALGVGGI	PRGR	72
NTDB id 1245 Cj1673c YP 002345041.1	MDDNKRKSLDAALK	SLDKTFGKGTILRLGDK	.EVEQIDS	IGTGSVGLD	I	ALGIGGV	PKGR		59
NTDB id 1214 NCTC11637 00359 SQJ03206.1	MAIDEDKQKAI	SLAIKQIDKVF	FGKGALVRLGDK	.QVEKIDA	ISTGSLGLD	I	ALGIGGV	PKGR	61
NTDB id 1211 C694 RS00795 WP 000963128.1	MAIDEDKQKAI	SLAIKQIDKVF	FGKGALVRLGDK	.QVEKIDS	ISTGSLGLD	I	ALGIGGV	PKGR	61
NTDB id 1334 RAOC RS04870 WP 004918236.1	MAKTE..TTSPN	DDKKKALAAVLEKLDKT	YGKGTVMKLG	DGTVDHNI	EVIPSGSLGLD	I	ALGVGGY	PKGR	68
NTDB id 1389 A4U84 RS07560 WP 021112712.1	.MAENKKSSKNNTVV..KQVEP	EQKKQALEAALA	QIEKQFGKGSIMKLGQT	.EQLDIES	VSTGSLGLD	I	ALGIGGL	PMGR	76
NTDB id 1130 NGFG RS03960 WP 003688695.1	MSDDKSKALAAALA	QIEKSFGKGAIMKMDGSQ	QEEENLEVISTGSLGLD	I	ALGVGGL	PRGR			60
NTDB id 1124 NGFG RS03960 WP 003688695.1	MSDDKSKALAAALA	QIEKSFGKGAIMKMDGSQ	QEEENLEVISTGSLGLD	I	ALGVGGL	PRGR			60
NTDB id 1123 OK783 RS03845 WP 003688695.1	MSDDKSKALAAALA	QIEKSFGKGAIMKMDGSQ	QEEENLEVISTGSLGLD	I	ALGVGGL	PRGR			60
NTDB id 1427 RS RS02760 WP 011000510.1	.MEDG.....KK..AASMS	AEKQKALAAALA	QIEKQFGKGSIMKMDA	.EVEPVQVV	STGSLGLD	I	ALGVGGL	PRGR	68
NTDB id 1165 A1552VC RS01565 WP 000344154.1	MDENKQKALAAALG	QIEKQFGKGSIMRLGDN	.RAMDVET	ISTGSLSLD	I	ALGAGGL	PMGR		59
NTDB id 1142 GTF74 RS11550 WP 000344154.1	MDENKQKALAAALG	QIEKQFGKGSIMRLGDN	.RAMDVET	ISTGSLSLD	I	ALGAGGL	PMGR		59
NTDB id 1022 ACIAD RS06390 WP 004925639.1	MDDNKSKALQAALS	QIEKQFGKNTVMRLGDN	.TVQAVEAV	STGSLTLD	I	ALGIGGL	PKGR		59
NTDB id 1074 ABD1 RS10195 WP 000344167.1	MDENKSKALQAALS	QIEKQFGKNTVMRLGDN	.TVQAVEAV	STGSLTLD	I	ALGIGGL	PKGR		59
NTDB id 55368 B479 RS06255 WP 015269214.1	MDDNKKRALAAALG	QIERQFGKGAVMRMGDH	.ERQAIPA	ISTGSLGLD	I	ALGIGGL	PKGR		59
NTDB id 1205 PSJM300 05545 AFN77183.1	MDENKKRALAAALG	QIEKQFGKGAVMRMGDH	.DRQAIPS	ISTGSLGLD	I	ALGIGGL	PKGR		59
consensus	*** **	***	***	***	***	***	***	***	

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NTDB id 600 KW2 RS01765 WP 011675413.1	SVRLDVRG	STKIEEGS	.GDNKTQ	IGKITK	IKVVKNKVAPPF	KVALV	DIMF	GEGIS	STGEL	INIAVEEG	ITKKSGAW	FAYN	312					
NTDB id 269 KZH43 RS08665 WP 001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKNKVAPPF	KEAVV	EIMY	GEGIS	KTGEL	LKIASD	DIKKAGAW	YSYK	311					
NTDB id 228 SPD RS09265 WP 001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKNKVAPPF	KEAVV	EIMY	GEGIS	KTGEL	LKIASD	DIKKAGAW	YSYK	311					
NTDB id 194 SPR RS08825 WP 001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKNKVAPPF	KEAVV	EIMY	GEGIS	KTGEL	LKIASD	DIKKAGAW	YSYK	311					
NTDB id 159 SP RS09750 WP 001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKNKVAPPF	KEAVV	EIMY	GEGIS	KTGEL	LKIASD	DIKKAGAW	YSYK	311					
NTDB id 527 SMSK321 RS11065 WP 001085454.1	SVRLDVRG	STQIKGTG	.DQKDTN	VGKETK	IKVVKNKVAPPF	KEAFV	EIMY	GEGIS	KTGEL	LKIASD	DIKKAGAW	YSYK	311					
NTDB id 499 SM12261 RS08315 WP 078228268.1	SVRLDVRG	STQIKGTG	.DQKDTN	VGKETK	IKVVKNKVAPPF	KEAFV	EIMY	GEGIS	KTGEL	LKIASD	DIKKAGAW	YSYK	311					
NTDB id 453 Spy49 1753c ACI62003.1	SVRLDVRG	TTQIKGTG	.DQKDSN	IGKETK	IKVVKNKVAPPF	KVAEV	EIMY	GEGIS	RTGEL	VKIASD	DIQKAGAW	FSYN	311					
NTDB id 408 SMU RS09530 WP 002262392.1	SVRLDVRG	NTQIKGTG	.EQKDSN	IGKETK	IKVVKNKVAPPF	KEAFV	EIIY	GEGIS	RTGEL	VKIASD	LGIIQKAGAW	YSYN	311					
NTDB id 115 BSU 16940 NP 389576.2	SVRLEVRRA	EAQLKQGN		DVMGNKTK	IKVVKNKVAPPF	RTAEV	DIMY	GEGIS	KEGE	IIDLGT	ELDIVQKSG	SWYSYE	292					
NTDB id 625 LCA RS02525 WP 011374196.1	TVRLEVRRA	ETIKNGT		DMIGNRARI	IKVVKNKVAPPF	KVAEV	DIMY	GQGIS	RTGEL	VDMAVEK	DIINKSGS	WYSYG	294					
NTDB id 1313 DR RS12030 WP 010888966.1	SVRLDVRK	IGQ....	PTKVG	ND	AVANTV	KIKTV	KNKVA	APFKE	VEL	ELALV	YGKG	FDQLSDL	VGLA	ADMDI	IKKAGS	FSYSYG	307	
NTDB id 1245 Cj1673c YP 002345041.1	SVRLDVRK	VAT....	L.KQNE	EEP	IGNRVKV	VVKNKVAPPF	RQAEF	DVMF	GEG	LSR	EGEL	IDYGV	KL	DIV	DKSGAW	FSYK	294	
NTDB id 1214 NCTC11637 00359 SQJ03206.1	SVRIDIRRI	AA....	L.KQNE	EQH	IGNRAKA	VVKNKVAPPF	REAEF	DIMF	GEGIS	KEGE	IIDYGV	KL	DIV	DKSGAW	LSYQ	296		
NTDB id 1211 C694 RS00795 WP 000963128.1	SVRIDIRRI	AS....	L.KQNE	EQH	IGNRAKA	VVKNKVAPPF	REAEF	DIMF	GEGIS	KEGE	IIDYGV	KL	DIV	DKSGAW	LSYQ	296		
NTDB id 1334 RAOC RS04870 WP 004918236.1	SVRIDIRRS	LSDTGKIK	DKSGEV	IGNRTKV	VVKNKVAPPF	KSAEF	DIMY	GEGV	SKVGE	ILDV	ATD	LDI	I	QKSGS	WFSYQ	307		
NTDB id 1389 A4U84 RS07560 WP 021112712.1	SVRLDIRR	CGV....	V.KDG	DEI	IGSETKV	VVKNKVAPPF	REVQF	DIMY	GEGIS	RMNELL	ILAE	ANGF	ITKKSGAW	FSYD	310			
NTDB id 1130 NGFG RS03960 WP 003688695.1	SVRLDIRR	TGS....	I.KKG	EEV	LGNETRV	KVIKNKVAPPF	RQAEF	DILY	GEGIS	WE	GELID	IGV	KN	DIIN	KSGAW	YSYN	294	
NTDB id 1124 NGFG RS03960 WP 003688695.1	SVRLDIRR	TGS....	I.KKG	EEV	LGNETRV	KVIKNKVAPPF	RQAEF	DILY	GEGIS	WE	GELID	IGV	KN	DIIN	KSGAW	YSYN	294	
NTDB id 1123 OK783 RS03845 WP 003688695.1	SVRLDIRR	TGS....	I.KKG	EEV	LGNETRV	KVIKNKVAPPF	RQAEF	DILY	GEGIS	WE	GELID	IGV	KN	DIIN	KSGAW	YSYN	294	
NTDB id 1427 RS RS02760 WP 011000510.1	SVRLDIRR	IGS....	I.KKG	DEV	VGNETK	VVKNKVAPPF	REAI	FIDILY	GAGV	SREGE	IIDL	GV	EAKV	VVEK	SGAW	YSYN	302	
NTDB id 1165 A1552VC RS01565 WP 000344154.1	SVRLDIRR	TGA....	I.KEG	EEV	VGNETRI	KVVKNKIA	APFKE	ANTQIMY	GQG	FNRE	GELID	LG	VKHK	MVEK	SGAW	YSYN	293	
NTDB id 1142 GTF74 RS11550 WP 000344154.1	SVRLDIRR	TGA....	I.KEG	EEV	VGNETRI	KVVKNKIA	APFKE	ANTQIMY	GQG	FNRE	GELID	LG	VKHK	MVEK	SGAW	YSYN	293	
NTDB id 1022 ACIAD RS06390 WP 004925639.1	SVRLDIRR	IGQ....	V.KEG	DEI	IGSETKV	VVKNKMAPPF	REAI	FI	LYGK	GVN	QLGEL	VD	LAV	QQN	IVQKAGAW	YSYQ	293	
NTDB id 1074 ABD1 RS10195 WP 000344167.1	SVRLDIRR	IGQ....	V.KEG	DEI	VGSETKV	VVKNKMAPPF	KEAI	FI	LYGK	GTN	QLGEL	VD	LAV	QQD	IVQKAGAW	YSYQ	293	
NTDB id 55368 B479 RS06255 WP 015269214.1	SVRLDIRR	TGA....	V.KEG	DEV	VGSETRV	KIVKNKV	SPPFR	QAEFQ	ILY	GKGI	YRN	GE	IIDL	GV	SQGL	LVEKSGAW	YAYQ	293
NTDB id 1205 PSJM300 05545 AFN77183.1	SVRLDIRR	TGA....	V.KEG	DEV	VGSETRV	KVVKNKVAPPF	RQAEFQ	ILY	GKGI	YRN	GE	IIDL	GV	VQGL	LVEKSGAW	YAYK	293	
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 527 SMSK321 RS11065 WP 001085454.1
NTDB id 499 SM12261 RS08315 WP 078228268.1
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 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
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NTDB id 1205 PSJM300 Q5545 AEN77183.1

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consensus



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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 527 SMSK321 RS11065 WP 001085454.1	IEE	384
NTDB id 499 SM12261 RS08315 WP 078228268.1	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
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
NTDB id 1334 RAOC 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 55368 B479 RS06255 WP 015269214.1	...	355
NTDB id 1205 PSJM300 05545 AFN77183.1	...	347

consensus

 non conserved
 similar
 ≥ 50% conserved