

logo



NTDB id 600 KW2 RS01765 WP 011675413.1	VV	I	D	S	V	A	A	L	V	P	K	A	E	I	D	G	E	I	G	D	S	V	G	L	Q	A	R	M	S	Q	A	M	R	K	L	A	G	H	I	N	K	T	K	T	T	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	F	G	S	P	E	T	T	P	G	G	R	A	L	K	F	Y	A	233			
NTDB id 269 KZH43 RS08665 WP 001085462.1	V	V	V	D	S	V	A	A	L	V	P	K	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	S	Q	A	M	R	K	L	G	A	S	I	N	K	T	K	T	T	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	A	232		
NTDB id 228 SPD RS09265 WP 001085462.1	V	V	V	D	S	V	A	A	L	V	P	K	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	S	Q	A	M	R	K	L	G	A	S	I	N	K	T	K	T	T	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	A	232		
NTDB id 194 SPR RS08825 WP 001085462.1	V	V	V	D	S	V	A	A	L	V	P	K	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	S	Q	A	M	R	K	L	G	A	S	I	N	K	T	K	T	T	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	A	232		
NTDB id 159 SP RS09750 WP 001085462.1	V	V	V	D	S	V	A	A	L	V	P	K	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	S	Q	A	M	R	K	L	G	A	S	I	N	K	T	K	T	T	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	A	232		
NTDB id 499 SM12261 RS08315 WP 078228268.1	V	V	V	D	S	V	A	A	L	V	P	K	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	S	Q	A	M	R	K	L	G	A	S	I	N	K	T	K	T	T	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	A	232		
NTDB id 527 SMSK321 RS11065 WP 001085454.1	V	V	V	D	S	V	A	A	L	V	P	K	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	S	Q	A	M	R	K	L	G	A	S	I	N	K	T	K	T	T	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	A	232		
NTDB id 408 SMU RS09530 WP 002262392.1	V	V	V	D	S	V	A	A	L	V	P	K	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	S	Q	A	M	R	K	L	S	A	S	I	N	K	T	K	T	T	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	S	232		
NTDB id 453 Spy49 1753c ACI62003.1	V	V	V	D	S	V	A	A	L	V	P	K	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	S	Q	A	M	R	K	L	S	A	S	I	N	K	T	K	T	T	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	A	232		
NTDB id 115 BSU 16940 NP 389576.2	V	V	V	D	S	V	A	A	L	V	P	K	A	E	I	D	G	M	G	D	S	H	V	G	L	Q	A	R	L	M	S	Q	A	L	R	K	L	S	G	A	I	N	K	S	K	T	T	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	S	217	
NTDB id 1116095 E7X43 RS06630 WP 002821753.1	L	V	I	D	S	V	A	A	L	V	P	K	A	E	I	D	G	E	M	G	D	S	H	V	G	L	Q	A	R	L	M	S	Q	A	L	R	K	L	A	G	T	L	N	R	T	G	T	T	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	S	218
NTDB id 625 LCA RS02525 WP 011374196.1	L	V	V	D	S	V	A	A	L	V	P	K	A	E	I	D	G	E	M	G	D	A	H	V	G	L	Q	A	R	L	M	S	Q	A	L	R	K	L	S	G	T	I	N	K	T	K	T	T	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	S	219
NTDB id 1313 DR RS12030 WP 010888966.1	V	V	V	D	S	V	A	A	L	T	P	K	A	E	I	D	G	M	G	D	S	L	P	G	L	Q	A	R	L	M	S	Q	A	L	R	K	L	T	A	I	L	S	K	T	G	T	A	A	I	F	I	N	Q	V	R	E	K	V	G	V	M	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	A	231	
NTDB id 1245 Cj1673c YP 002345041.1	I	V	V	D	S	V	A	A	L	T	P	K	A	E	I	D	G	M	G	D	Q	H	V	G	L	Q	A	R	L	M	S	Q	A	L	R	K	L	T	G	I	V	H	K	M	N	T	V	I	F	I	N	Q	L	R	M	K	I	G	A	M	G	Y	G	T	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	219	
NTDB id 1214 NCTC11637 00359 SQJ03206.1	V	V	V	D	S	V	A	A	L	T	P	K	A	E	I	D	G	M	G	D	Q	H	V	G	L	Q	A	R	L	M	S	H	A	L	R	K	I	T	G	V	L	H	K	M	N	T	L	I	F	I	N	Q	L	R	M	K	I	G	M	M	G	Y	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	221	
NTDB id 1211 C694 RS00795 WP 000963128.1	V	V	V	D	S	V	A	A	L	T	P	K	A	E	I	D	G	M	G	D	Q	H	V	G	L	Q	A	R	L	M	S	H	A	L	R	K	I	T	G	V	L	H	K	M	N	T	L	I	F	I	N	Q	L	R	M	K	I	G	M	M	G	Y	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	221	
NTDB id 1334 RA0C RS04870 WP 004918236.1	V	V	V	D	S	V	A	A	L	T	P	K	A	E	I	D	G	M	G	D	S	K	M	G	L	H	A	R	L	M	S	Q	A	L	R	K	L	T	S	S	I	S	K	T	K	C	T	V	I	F	I	N	Q	L	R	D	K	I	G	V	M	F	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	227	
NTDB id 1389 A4U84 RS07560 WP 021112712.1	I	I	V	D	S	V	A	A	L	T	P	K	A	E	I	D	G	M	G	D	S	H	M	G	L	Q	A	R	L	M	S	Q	A	L	R	K	L	T	A	N	I	K	N	T	N	C	L	V	V	F	I	N	Q	L	R	M	K	I	G	V	M	F	G	N	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	235	
NTDB id 1130 NGFG RS03960 WP 003688695.1	V	V	V	D	S	V	A	A	L	V	P	K	A	E	I	D	G	M	G	D	S	H	V	G	L	Q	A	R	L	M	S	Q	A	L	R	K	L	T	G	H	I	K	K	T	N	T	L	V	V	F	I	N	Q	L	R	M	K	I	G	V	M	F	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	S	219	
NTDB id 1124 NGFG RS03960 WP 003688695.1	V	V	V	D	S	V	A	A	L	V	P	K	A	E	I	D	G	M	G	D	S	H	V	G	L	Q	A	R	L	M	S	Q	A	L	R	K	L	T	G	H	I	K	K	T	N	T	L	V	V	F	I	N	Q	L	R	M	K	I	G	V	M	F	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	S	219	
NTDB id 1123 OK783 RS03845 WP 003688695.1	V	V	V	D	S	V	A	A	L	V	P	K	A	E	I	D	G	M	G	D	S	H	V	G	L	Q	A	R	L	M	S	Q	A	L	R	K	L	T	G	H	I	K	K	T	N	T	L	V	V	F	I	N	Q	L	R	M	K	I	G	V	M	F	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	S	219	
NTDB id 1427 RS RS02760 WP 011000510.1	I	V	I	D	S	V	A	A	L	V	P	K	A	E	I	D	G	E	M	G	D	A	L	P	G	L	Q	A	R	L	M	S	Q	A	L	R	K	L	T	G	T	I	K	E	T	N	C	L	V	I	F	I	N	Q	L	R	M	K	I	G	V	M	F	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	227
NTDB id 1165 A1552VC RS01565 WP 000344154.1	I	V	V	D	S	V	A	A	L	T	P	K	A	E	I	D	G	E	M	G	D	S	H	M	G	L	Q	A	R	L	M	S	Q	A	M	R	K	L	T	G	N	L	K	Q	S	N	C	M	C	I	F	I	N	Q	L	R	M	K	I	G	V	M	F	G	N	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	218
NTDB id 1142 GTF74 RS11550 WP 000344154.1	I	V	V	D	S	V																																																																										

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NTDB id 600 KW2 RS01765 WP 011675413.1	SVRLDVRGSTKIEEGS.GDNKTKI	GKIKTK	KVVKNKVAPPFK	VALVDIMF	GEGISST	GELLNIA	VEEGTI	KKSGAWF	AYN	312			
NTDB id 269 KZH43 RS08665 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKE	TNMGKETK	KVVKNKVAPPFK	EAVVEIMY	GEGISKT	GELLKIAS	SDLDI	IKKAGAW	YSYK	311			
NTDB id 228 SPD RS09265 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKE	TNMGKETK	KVVKNKVAPPFK	EAVVEIMY	GEGISKT	GELLKIAS	SDLDI	IKKAGAW	YSYK	311			
NTDB id 194 SPR RS08825 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKE	TNMGKETK	KVVKNKVAPPFK	EAVVEIMY	GEGISKT	GELLKIAS	SDLDI	IKKAGAW	YSYK	311			
NTDB id 159 SP RS09750 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKE	TNMGKETK	KVVKNKVAPPFK	EAVVEIMY	GEGISKT	GELLKIAS	SDLDI	IKKAGAW	YSYK	311			
NTDB id 499 SM12261 RS08315 WP 078228268.1	SVRLDVRGNTQIKGTG.DQKE	TNMGKETK	KVVKNKVAPPFK	EAVVEIMY	GEGISKT	GELLKIAS	SDLDI	IKKAGAW	YSYK	311			
NTDB id 527 SMSK321 RS11065 WP 001085454.1	SVRLDVRGNTQIKGTG.DQKE	TNMGKETK	KVVKNKVAPPFK	EAVVEIMY	GEGISKT	GELLKIAS	SDLDI	IKKAGAW	YSYK	311			
NTDB id 408 SMU RS09530 WP 002262392.1	SVRLDVRGNTQIKGTG.EQK	DSNMGKETK	KVVKNKVAPPFK	EAVVEIMY	GEGISRT	GELVKIAS	SDLGI	IQKAGAW	YSYN	311			
NTDB id 453 Spy49 1753c ACI62003.1	SVRLDVRGTTQIKGTG.DQK	SSMGKETK	KVVKNKVAPPFK	EAVVEIMY	GEGISRT	GELVKIAS	SDLDI	IQKAGAW	YSYN	311			
NTDB id 115 BSU 16940 NP 389576.2	SVRLEVRRAEQLKQGN....	DVMGNKTK	KVVKNKVAPPFRT	AEVDIMY	GEGISKE	GEITD	LGTELD	IVQKSG	SWSYE	292			
NTDB id 1116095 E7X43 RS06630 WP 002821753.1	TVRLEVRRSAQIKDGT....	NIVGNNTK	KVVKNKVAPPFK	VAEVDIMY	GKGISQT	GELIDL	AVDKDI	INKSGAW	YAYQ	293			
NTDB id 625 LCA RS02525 WP 011374196.1	TVRLEVRRAETIKNGT....	DMTCNRAR	KVVKNKVAPPFK	VAEVDIMY	GCGISRT	GELVDM	AVEKDI	INKSG	SWSYG	294			
NTDB id 1313 DR RS12030 WP 010888966.1	SVRLDVRKIGQ....PTK	VGNDAVANTV	KIKTVKNKVA	APPFKE	VELALVY	GKGF	QDLS	DLVGLA	ADMDI	IKKAC	SFYSY	307	
NTDB id 1245 Cj1673c YP 002345041.1	SVRLDVRKIVAT...L.K	QNEEPI	GNRVK	KVVKNKVAPPFR	QAEFDV	MFG	EGLS	REGEL	IDYGV	KLDI	VDKSGAW	FYSYK	294
NTDB id 1214 NCTC11637 00359 SQJ03206.1	SVRIDIRRIAA...L.K	QNEQHI	GNRAK	KVVKNKVAPPFR	EAEFDI	MFG	EGLS	KEGEI	IDYGV	KLDI	VDKSGAW	LSYQ	296
NTDB id 1211 C694 RS00795 WP 000963128.1	SVRIDIRRIAS...L.K	QNEQHI	GNRAK	KVVKNKVAPPFR	EAEFDI	MFG	EGLS	KEGEI	IDYGV	KLDI	VDKSGAW	LSYQ	296
NTDB id 1334 RA0C RS04870 WP 004918236.1	SVRIDIRRSLSDTGKIK	DKSGEVI	GNRTK	KVVKNKVAPPFK	SAEFDI	MFG	EGLS	KEGEI	IDYGV	KLDI	VDKSGAW	LSYQ	307
NTDB id 1389 A4U84 RS07560 WP 021112712.1	SVRLDIRRCGV...V.K	GDDEIT	GSETK	KVVKNKVAPPFR	EVQFDI	MFG	EGLS	RMNEL	LILAE	ANGFI	IKKSGAW	FYSYD	310
NTDB id 1130 NGFG RS03960 WP 003688695.1	SVRLDIRRTGS...I.K	KGEVLI	GNETRV	KVTKNKVAPPFR	QAEFDI	LYG	EGLS	WE	GELID	IGVKN	DIINKSGAW	YSYN	294
NTDB id 1124 NGFG RS03960 WP 003688695.1	SVRLDIRRTGS...I.K	KGEVLI	GNETRV	KVTKNKVAPPFR	QAEFDI	LYG	EGLS	WE	GELID	IGVKN	DIINKSGAW	YSYN	294
NTDB id 1123 OK783 RS03845 WP 003688695.1	SVRLDIRRTGS...I.K	KGEVLI	GNETRV	KVTKNKVAPPFR	QAEFDI	LYG	EGLS	WE	GELID	IGVKN	DIINKSGAW	YSYN	294
NTDB id 1427 RS RS02760 WP 011000510.1	SVRLDIRRIGS...I.K	KEGEVLI	GNETRV	KVVKNKVAPPFR	EAFID	LYG	AGV	SREG	EITD	LGVEAK	VVEKSGAW	YSYN	302
NTDB id 1165 A1552VC RS01565 WP 000344154.1	SVRLDIRRTGA...I.K	KEGEVLI	GNETRV	KVVKNKTA	APPFKE	ANTQIMY	CGFN	REGEL	IDL	GVKHK	MVEKSGAW	YSYN	293
NTDB id 1142 GTF74 RS11550 WP 000344154.1	SVRLDIRRTGA...I.K	KEGEVLI	GNETRV	KVVKNKTA	APPFKE	ANTQIMY	CGFN	REGEL	IDL	GVKHK	MVEKSGAW	YSYN	293
NTDB id 1074 ABD1 RS10195 WP 000344167.1	SVRLDIRRIGQ...V.K	EGDEIV	GSETK	KVVKNKMAPPFK	EAFIFQ	LYG	KGTN	QLGEL	VDLAV	QQNIV	QKAGAW	YSYQ	293
NTDB id 1022 ACIAD RS06390 WP 004925639.1	SVRLDIRRIGQ...V.K	EGDEIV	GSETK	KVVKNKMAPPFK	EAFIFQ	LYG	KGTN	QLGEL	VDLAV	QQNIV	QKAGAW	YSYQ	293
NTDB id 1205 PSJM300 05545 AFN77183.1	SVRLDIRRTGA...V.K	EGDEIV	GSETRV	KVVKNKVAPPFR	QAEFQ	LYG	KGIY	ENGEI	IDL	GVQQ	GLVEKSGAW	YAYK	293
consensus	*!!**!*~	*	**	*****!!*!!*!!*!!*~	*	*****!*!***	*****	***	***	!~	***!~	***!~	***!~

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NTDB id	Accession	Conservation	Length
600	KW2 RS01765 WP 011675413.1	387
269	KZH43 RS08665 WP 001085462.1	IEIEE..	388
228	SPD RS09265 WP 001085462.1	IEIEE..	388
194	SPR RS08825 WP 001085462.1	IEIEE..	388
159	SP RS09750 WP 001085462.1	IEIEE..	388
499	SM12261 RS08315 WP 078228268.1	IEIEE..	384
527	SMSK321 RS11065 WP 001085454.1	IEIEE..	384
408	SMU RS09530 WP 002262392.1	LED....	383
453	Spy49 1753c ACI62003.1	IED....	378
115	BSU 16940 NP 389576.2	.....	348
1116095	E7X43 RS06630 WP 002821753.1	.SDDDIY	376
625	LCA RS02525 WP 011374196.1	.....	355
1313	DR RS12030 WP 010888966.1	.....	363
1245	Cj1673c YP 002345041.1	.....	343
1214	NCTC11637 00359 SQJ03206.1	.....	347
1211	C694 RS00795 WP 000963128.1	.....	347
1334	RA0C RS04870 WP 004918236.1	.....	343
1389	A4U84 RS07560 WP 021112712.1	.....	372
1130	NGFG RS03960 WP 003688695.1	.....	348
1124	NGFG RS03960 WP 003688695.1	.....	348
1123	OK783 RS03845 WP 003688695.1	.....	348
1427	RS RS02760 WP 011000510.1	.....	352
1165	A1552VC RS01565 WP 000344154.1	.....	354
1142	GTF74 RS11550 WP 000344154.1	.....	354
1074	ABD1 RS10195 WP 000344167.1	.....	349
1022	ACIAD RS06390 WP 004925639.1	.....	349
1205	PSJM300 05545 AFN77183.1	.....	347

consensus

 non conserved
 similar
 ≥ 50% conserved