

Logo



NTDB id 600 KW2 RS01765 WP 011675413.1	I	D	S	V	A	A	L	V	P	K	A	E	I	D	G	E	I	G	D	S	S	V	G	L	Q	A	R	M	S	Q	A	M	R	K	L	A	G	H	I	N	K	T	K	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	S	V	235	
NTDB id 269 KZH43 RS08665 WP 001085462.1	V	D	S	V	A	A	L	V	P	R	A	E	I	D	G	D	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	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	S	V	234	
NTDB id 228 SPD RS09265 WP 001085462.1	V	D	S	V	A	A	L	V	P	R	A	E	I	D	G	D	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	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	S	V	234	
NTDB id 194 SPR RS08825 WP 001085462.1	V	D	S	V	A	A	L	V	P	R	A	E	I	D	G	D	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	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	S	V	234	
NTDB id 159 SP RS09750 WP 001085462.1	V	D	S	V	A	A	L	V	P	R	A	E	I	D	G	D	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	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	S	V	234	
NTDB id 499 SM12261 RS08315 WP 078228268.1	V	D	S	V	A	A	L	V	P	R	A	E	I	D	G	D	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	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	S	V	234	
NTDB id 527 SMSK321 RS11065 WP 001085454.1	V	D	S	V	A	A	L	V	P	R	A	E	I	D	G	D	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	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	S	V	234	
NTDB id 408 SMU RS09530 WP 002262392.1	V	D	S	V	A	A	L	V	P	R	A	E	I	D	G	D	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	A	I	F	I	N	Q	L	R	E	K	V	G	I	M	.	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	S	S	V	234	
NTDB id 453 Spy49 1753c ACI62003.1	V	D	S	V	A	A	L	V	P	R	A	E	I	D	G	D	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	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	S	V	234	
NTDB id 115 BSU 16940 NP 389576.2	V	D	S	V	A	A	L	V	P	K	A	E	I	E	G	D	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	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	S	V	219
NTDB id 625 LCA RS02525 WP 011374196.1	V	D	S	V	A	A	L	V	P	R	A	E	I	E	G	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	A	I	L	F	I	N	Q	L	R	E	K	V	G	V	M	.	F	G	N	P	E	V	T	P	G	G	R	A	L	K	F	Y	S	T	V	221
NTDB id 1313 DR RS12030 WP 010888966.1	V	D	S	V	A	A	L	T	P	R	A	E	I	E	G	M	G	D	S	L	P	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	I	G	V	M	.	Y	G	N	P	E	T	T	T	G	G	R	A	L	K	F	Y	A	S	V	233	
NTDB id 418651 SynROS8604 RS02855 WP 006854833.1	V	D	S	V	A	A	L	T	P	R	A	E	I	E	G	M	G	D	L	A	V	G	A	Q	A	R	L	M	S	Q	A	M	R	K	I	T	G	N	I	G	K	S	G	C	T	V	I	F	L	N	Q	L	R	L	K	I	G	V	T	.	Y	G	N	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	S	V	234
NTDB id 1245 Cj1673c YP 002345041.1	V	D	S	V	A	A	L	T	P	K	A	E	I	E	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	T	V	I	F	I	N	Q	I	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	S	V	221
NTDB id 1211 C694 RS00795 WP 000963128.1	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	I	T	G	V	L	H	K	M	N	T	T	L	I	F	I	N	Q	I	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	S	V	223
NTDB id 1214 NCTC11637 00359 SQJ03206.1	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	I	T	G	V	L	H	K	M	N	T	T	L	I	F	I	N	Q	I	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	S	V	223
NTDB id 1334 RAOC RS04870 WP 004918236.1	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	S	V	229
NTDB id 1389 A4U84 RS07560 WP 021112712.1	V	D	S	V	A	A	L	T	P	K	A	E	I	E	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	I	R	M	K	I	G	V	M	.	F	G	N	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	S	V	237
NTDB id 1130 NGFG RS03960 WP 003688695.1	V	D	S	V	A	A	L	V	P	K	A	E	I	E	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	I	R	M	K	I	G	V	M	.	F	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	S	S	V	221
NTDB id 1124 NGFG RS03960 WP 003688695.1	V	D	S	V	A	A	L	V	P	K	A	E	I	E	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	I	R	M	K	I	G	V	M	.	F	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	S	S	V	221
NTDB id 1123 OK783 RS03845 WP 003688695.1	V	D	S	V	A	A	L	V	P	K	A	E	I	E	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	I	R	M	K	I	G	V	M	.	F	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	S	S	V	221
NTDB id 1427 RS RS02760 WP 011000510.1	I	D	S	V	A	A	L	V	P	K	A	E	I	E	G	M	G	D	A	L	P	L	Q	A	R	L	M	S	Q	A	L	R	K	L	T	G	T	I	K	R	T	N	C	L	V	I	F	I	N	Q	I	R	M	K	I	G	V	M	.	F	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	S	V	229	
NTDB id 1165 A1552VC RS01565 WP 000344154.1	V	D	S	V	A	A	L	T	P	K	A	E	I	E	G	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	I	R	M	K	I	G	V	M	.	F	G	N	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	S	V	220
NTDB id 1142 GTF74 RS11550 WP 000344154.1	V	D	S	V	A	A	L	T	P	K	A	E	I	E	G	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	I	R	M	K	I	G	V	M	.	F	G	N	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	S	V	220
NTDB id 1022 ACIAD RS06390 WP 004925639.1	V	D	S	V	A	A	L	T	P	K	A	E	I	E	G	M	G	D	S	H	M	G	L	Q	A	R	L	M	S	Q	A	L	R	K	I	T	G	N	A	K	R	S	N	C	M	V	I	F	I	N	Q	I	R	M	K	I	G	V	M	.	F	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	S	V	220
NTDB id 1074 ABD1 RS10195 WP 000344167.1	V	D	S	V	A	A	L	T	P	K	A	E	I	E	G	M	G	D	S	H	M	G	L	Q	A	R	L	M	S	Q	A	L	R	K	I	T	G	N	A	K	R	S	N	C	M	V	I	F	I	N	Q	I	R	M	K	I	G	V	M	.	F	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	S	V	220
NTDB id 1205 PSJM300 05545 AFN77183.1	V	D	S	V	A	A	L	V	P	K	A	E	I	E	G	M	G	D	A	H	V	G	L	Q	A	R	L	M	S	Q	A	L	R	K	I	T	G	N	I	K	N	A	N	C	L	V	I	F	I	N	Q	I	R	M	K	I	G	V	M	.	F	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	S	V	220
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NTDB id 600 KW2 RS01765 WP 011675413.1	RLDVRG	STKIEEGS	.GDNKTQ	IGKI	TKIKVV	KNKVAPPF	KVALVD	IMFG	GEGIS	STGEL	INTAVE	EEGI	TKKS	SGAW	FAYN	DE	314																																				
NTDB id 269 KZH43 RS08665 WP 001085462.1	RLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVV	KNKVAPPF	KEAVVE	IMYG	GEGIS	KTGEL	LKIAS	SDLDI	TKK	A	GAWYSY	KDE	313																																				
NTDB id 228 SPD RS09265 WP 001085462.1	RLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVV	KNKVAPPF	KEAVVE	IMYG	GEGIS	KTGEL	LKIAS	SDLDI	TKK	A	GAWYSY	KDE	313																																				
NTDB id 194 SPR RS08825 WP 001085462.1	RLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVV	KNKVAPPF	KEAVVE	IMYG	GEGIS	KTGEL	LKIAS	SDLDI	TKK	A	GAWYSY	KDE	313																																				
NTDB id 159 SP RS09750 WP 001085462.1	RLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVV	KNKVAPPF	KEAVVE	IMYG	GEGIS	KTGEL	LKIAS	SDLDI	TKK	A	GAWYSY	KDE	313																																				
NTDB id 499 SM12261 RS08315 WP 078228268.1	RLDVRG	STQIKGTG	.DQKDTN	VGKETK	IKVV	KNKVAPPF	KEAFVE	IMYG	GEGIS	KTGEL	LKIAS	SDLDI	TKK	A	GAWYSY	KDE	313																																				
NTDB id 527 SMSK321 RS11065 WP 001085454.1	RLDVRG	STQIKGTG	.DQKDTN	VGKETK	IKVV	KNKVAPPF	KEAFVE	IMYG	GEGIS	KTGEL	LKIAS	SDLDI	TKK	A	GAWYSY	KDE	313																																				
NTDB id 408 SMU RS09530 WP 002262392.1	RLDVRG	NTQIKGTG	.EQKDSN	IGKETK	IKVV	KNKVAPPF	KEAFVE	ITYG	GEGIS	R	TGEL	VKIAS	SDLGI	TKK	A	GAWYSY	NGE	313																																			
NTDB id 453 Spy49 1753c ACI62003.1	RLDVRG	TTQIKGTG	.DQKDSI	IGKETK	IKVV	KNKVAPPF	KVAEVE	IMYG	GEGIS	R	TGEL	VKIAS	SDLDI	TKK	A	GAWF	SYNGE	313																																			
NTDB id 115 BSU 16940 NP 389576.2	RLEVRR	AEQLKQGNDVM	GNKTKI	IKVV	KNKVAPPF	R	TAEVD	IMYG	GEGIS	KEGE	I	DLG	TELD	IV	QKSG	SWYSY	EEE	294																																		
NTDB id 625 LCA RS02525 WP 011374196.1	RLEVRR	AETIKNGTDM	IGNRARI	IKVV	KNKVAPPF	KVAEVD	IMYG	GGIS	R	TGEL	VDMA	VEKD	I	INK	SG	SWYSY	GSE	296																																		
NTDB id 1313 DR RS12030 WP 010888966.1	RLDVRK	IGQ....	PTKVG	NDAVANT	VKI	IKTV	VKNVA	APPF	KEVEL	ALVY	GKGF	DLSD	LVGL	A	ADM	DI	TKK	AG	SFYSY	GDE	309																																
NTDB id 418651 SynROS8604 RS02855 WP 006854833.1	RLDIRR	IQT....	L.KRG	TEEY	GIRAK	VVA	KNKVAPPF	R	IAEFD	ILF	GRG	ISTL	GCVL	D	LA	EETG	V	TR	K	GAWYSY	EGD	309																															
NTDB id 1245 Cj1673c YP 002345041.1	RLDVRK	VAT....	L.KQNE	EPI	GNRV	VV	KNKVAPPF	R	QAEFD	DM	F	G	E	L	S	R	E	G	E	L	I	D	Y	G	V	K	L	D	I	V	D	K	S	G	A	W	F	S	Y	K	D	K	296										
NTDB id 1211 C694 RS00795 WP 000963128.1	RDIRR	IAS....	L.KQNE	EQHI	GNRA	KA	VV	KNKVAPPF	R	EA	E	F	D	I	M	F	G	E	G	I	S	K	E	G	E	I	D	Y	G	V	K	L	D	I	V	D	K	S	G	A	W	L	S	Y	Q	D	K	298					
NTDB id 1214 NCTC11637 00359 SQJ03206.1	RDIRR	IAA....	L.KQNE	EQHI	GNRA	KA	VV	KNKVAPPF	R	EA	E	F	D	I	M	F	G	E	G	I	S	K	E	G	E	I	D	Y	G	V	K	L	D	I	V	D	K	S	G	A	W	L	S	Y	Q	D	K	298					
NTDB id 1334 RAOC RS04870 WP 004918236.1	RDIRR	SLSD	TGKIK	DKS	GEVI	GNRT	TKV	VV	KNKVAPPF	K	SA	E	F	D	I	M	Y	G	E	G	V	S	K	V	G	E	I	D	V	A	T	D	L	D	I	I	Q	K	S	G	S	W	F	S	Y	Q	D	T	309				
NTDB id 1389 A4U84 RS07560 WP 021112712.1	RLDIRR	RCGV....	V.KDG	DEI	IG	SETK	VV	KNKVAPPF	R	E	V	Q	F	D	I	M	Y	G	E	G	I	S	R	M	N	E	L	L	I	L	A	E	A	N	G	F	I	K	K	S	G	A	W	F	S	Y	D	G	T	312			
NTDB id 1130 NGFG RS03960 WP 003688695.1	RLDIRR	TGS....	I.KKG	EEVL	GN	ETRV	VVI	KNKVAPPF	R	Q	A	E	F	D	I	L	Y	G	E	G	I	S	W	E	G	E	L	I	D	I	G	V	K	N	D	I	I	N	K	S	G	A	W	S	Y	N	G	A	296				
NTDB id 1124 NGFG RS03960 WP 003688695.1	RLDIRR	TGS....	I.KKG	EEVL	GN	ETRV	VVI	KNKVAPPF	R	Q	A	E	F	D	I	L	Y	G	E	G	I	S	W	E	G	E	L	I	D	I	G	V	K	N	D	I	I	N	K	S	G	A	W	S	Y	N	G	A	296				
NTDB id 1123 OK783 RS03845 WP 003688695.1	RLDIRR	TGS....	I.KKG	EEVL	GN	ETRV	VVI	KNKVAPPF	R	Q	A	E	F	D	I	L	Y	G	E	G	I	S	W	E	G	E	L	I	D	I	G	V	K	N	D	I	I	N	K	S	G	A	W	S	Y	N	G	A	296				
NTDB id 1427 RS RS02760 WP 011000510.1	RLDIRR	IGS....	I.KKG	DEV	GN	ETK	VV	KNKVAPPF	R	E	A	I	F	D	I	L	Y	G	A	C	V	S	R	E	G	E	I	D	L	G	V	E	A	K	V	V	E	K	S	G	A	W	S	Y	N	G	E	304					
NTDB id 1165 A1552VC RS01565 WP 000344154.1	RLDIRR	TGA....	I.KEG	EEV	GN	ETRI	IKVV	KNKI	A	A	P	F	K	E	A	N	T	Q	I	M	Y	Q	G	F	N	R	E	G	E	L	I	D	L	G	V	K	H	K	M	V	E	K	S	G	A	W	S	Y	N	G	D	295	
NTDB id 1142 GTF74 RS11550 WP 000344154.1	RLDIRR	TGA....	I.KEG	EEV	GN	ETRI	IKVV	KNKI	A	A	P	F	K	E	A	N	T	Q	I	M	Y	Q	G	F	N	R	E	G	E	L	I	D	L	G	V	K	H	K	M	V	E	K	S	G	A	W	S	Y	N	G	D	295	
NTDB id 1022 ACIAD RS06390 WP 004925639.1	RLDIRR	IGQ....	V.KEG	DEI	I	G	SETK	VV	KNKM	A	P	P	F	R	E	A	I	F	Q	I	L	Y	G	K	G	V	N	Q	L	G	E	L	V	D	L	A	V	Q	N	I	V	Q	K	A	G	A	W	S	Y	Q	G	N	295
NTDB id 1074 ABD1 RS10195 WP 000344167.1	RLDIRR	IGQ....	V.KEG	DEI	I	G	SETK	VV	KNKM	A	P	P	F	R	E	A	I	F	Q	I	L	Y	G	K	G	T	N	Q	L	G	E	L	V	D	L	A	V	Q	N	I	V	Q	K	A	G	A	W	S	Y	Q	G	N	295
NTDB id 1205 PSJM300 05545 AFN77183.1	RLDIRR	TGA....	V.KEG	DEV	G	S	ETRV	VV	KNKVAPPF	R	Q	A	E	F	Q	I	L	Y	G	K	G	I	Y	R	N	G	E	I	D	L	G	V	Q	Q	L	V	E	K	S	G	A	W	A	Y	K	G	S	295					

consensus !***!* * ** *****!***!!*!!*!!* * * *****!*!*** ***** ** *** * !*****!

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	LEIELEE	
NTDB id 600 KW2 RS01765 WP 011675413.1	387
NTDB id 269 KZH43 RS08665 WP 001085462.1	LEIEIEE	388
NTDB id 228 SPD RS09265 WP 001085462.1	LEIEIEE	388
NTDB id 194 SPR RS08825 WP 001085462.1	LEIEIEE	388
NTDB id 159 SP RS09750 WP 001085462.1	LEIEIEE	388
NTDB id 499 SM12261 RS08315 WP 078228268.1	LEIEIEE	384
NTDB id 527 SMSK321 RS11065 WP 001085454.1	LEIEIEE	384
NTDB id 408 SMU RS09530 WP 002262392.1	IELED..	383
NTDB id 453 Spy49 1753c ACI62003.1	IEIED..	378
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consensus

- X non conserved
- X similar
- X ≥ 50% conserved