

logo



NTDB id 600 KW2 RS01765 WP 011675413.1	MATK.....KKTNFDDITKKYGA	ERDKALADALALIEKD	FGKGSIMRLGEA	.ANQKVS	VSSGSLALDI	ALGAGGYPKGR	74
NTDB id 269 KZH43 RS08665 WP 001085462.1	.MAK.....KPKKLEEISKKFGA	EREKALNDALKLI	IEKDFGKGSIMRLGER	.AEQKVQVMSSGSLALDI	ALGSGGYPKGR	73	
NTDB id 228 SPD RS09265 WP 001085462.1	.MAK.....KPKKLEEISKKFGA	EREKALNDALKLI	IEKDFGKGSIMRLGER	.AEQKVQVMSSGSLALDI	ALGSGGYPKGR	73	
NTDB id 194 SPR RS08825 WP 001085462.1	.MAK.....KPKKLEEISKKFGA	EREKALNDALKLI	IEKDFGKGSIMRLGER	.AEQKVQVMSSGSLALDI	ALGSGGYPKGR	73	
NTDB id 159 SP RS09750 WP 001085462.1	.MAK.....KPKKLEEISKKFGA	EREKALNDALKLI	IEKDFGKGSIMRLGER	.AEQKVQVMSSGSLALDI	ALGSGGYPKGR	73	
NTDB id 499 SM12261 RS08315 WP 078228268.1	.MAK.....KPKKLDEISKKFGA	EREKALNDALKLI	IEKDFGKGSIMRLGER	.AEQKVQVMSSGSLALDI	ALGSGGYPKGR	73	
NTDB id 527 SMSK321 RS11065 WP 001085454.1	.MAK.....KPKKLDEISKKFGA	EREKALNDALKLI	IEKDFGKGSIMRLGER	.AEQKVQVMSSGSLALDI	ALGSGGYPKGR	73	
NTDB id 453 Spy49 1753c ACI62003.1	.MAK.....KLKKNEEITKKFGD	ERRKALDDALKN	IEKDFGKGAVMRLGER	.AEQKVQVMSSGSLALDI	ALGAGGYPKGR	73	
NTDB id 408 SMU RS09530 WP 002262392.1	.MAK.....RIKKTEEITKKFGD	ERRKALDDALKN	IEKDFGKGAVMRLGER	.AEQKVQVMSSGSLALDI	ALGAGGYPKGR	73	
NTDB id 115 BSU 16940 NP 389576.2	.....MSDRQAALDMALKQ	IEKQFGKGSIMKLG	EK.TDTRISTVPSGSLALDI	TALGIGGYPRGR	58	
NTDB id 625 LCA RS02525 WP 011374196.1	.....MAKDERQAALDAALKK	IEKNFGKGSIMRMGEK	.VDTQVSTVSSGSLALDEALGVGGYPRGR	60		
NTDB id 1313 DR RS12030 WP 010888966.1	.....MSKDATKEISAPTD	AKERSKATETAM	SQIEKAFGKGSIMKLGAE	.SKLDVQVVSTGSLSLDLALGVGGIPRGR	72	
NTDB id 1245 Cj1673c YP 002345041.1	.....MDDNKRKSLDAALKS	LDKTFGKGTILRLGDK	.EVEQIDSIGTGSVGLDLALGIGGVPKGR	59		
NTDB id 1211 C694 RS00795 WP 000963128.1	.....MAIDEDKQKATISLAIKQ	IDKVF	FGKGAIVRLGDK.QVEKIDSISTGSLGLDLALGIGGVPKGR	61		
NTDB id 1214 NCTC11637 00359 SQJ03206.1	.....MAIDEDKQKATISLAIKQ	IDKVF	FGKGAIVRLGDK.QVEKIDAISTGSLGLDLALGIGGVPKGR	61		
NTDB id 1334 RAOC RS04870 WP 004918236.1	.....MAK..TETTSPND	DKKALA	AAVLEKLDKTYGKGTVMKLG	DGTVDHNI	IEVIPSGSLGLDLALGVGGYPKGR	68
NTDB id 44297 COCOR RS06720 WP 014394194.1	.....MSRLTEK	LKAVAAAVAS	IEKQFGRGAVMTLGAD	APQKVA	IPITGSVGLDRALGVGGYPRGR	62
NTDB id 1389 A4U84 RS07560 WP 021112712.1	.MAENKKS	SKNNT.VVKQVEPEQKQ	ALEAALAQIEKQFGKGSIMKLGQT	.EQLDIESVSTGSLGLDLALGIGGLPMGR	76		
NTDB id 1130 NGFG RS03960 WP 003688695.1	.....MSDDKSKALAAALAQ	IEKSFGKGAIMKMDGSQ	QEENLEVISTGSLGLDLALGVGGLPRGR	60		
NTDB id 1124 NGFG RS03960 WP 003688695.1	.....MSDDKSKALAAALAQ	IEKSFGKGAIMKMDGSQ	QEENLEVISTGSLGLDLALGVGGLPRGR	60		
NTDB id 1123 OK783 RS03845 WP 003688695.1	.....MSDDKSKALAAALAQ	IEKSFGKGAIMKMDGSQ	QEENLEVISTGSLGLDLALGVGGLPRGR	60		
NTDB id 1427 RS RS02760 WP 011000510.1	.MEDG.....KKAASMSA	EKQKALAAALAQ	IEKQFGKGSIMKMGDA	.EVEPVQVVSTGSLGLDVALGVGGLPRGR	68		
NTDB id 1165 A1552VC RS01565 WP 000344154.1	.....MDENKQKALAAALGQ	IEKQFGKGSIMRLGDN	.RAMDVETISTGSLSLDI	ALGAGGLPMGR	59	
NTDB id 1142 GTF74 RS11550 WP 000344154.1	.....MDENKQKALAAALGQ	IEKQFGKGSIMRLGDN	.RAMDVETISTGSLSLDI	ALGAGGLPMGR	59	
NTDB id 1205 PSJM300 05545 AFN77183.1	.....MDENKKRALAAALGQ	IEKQFGKGAVMRMDH	.DRQAIP	ISTGSLGLDI	ALGIGGLPKGR	59
NTDB id 1022 ACIAD RS06390 WP 004925639.1	.....MDDNKS	KALQAALSQIEKQFGKNTVMRLGDN	.TVQAVEAVSTGSLTLDI	ALGIGGLPKGR	59	
NTDB id 1074 ABD1 RS10195 WP 000344167.1	.....MDENKS	KALQAALSQIEKQFGKNTVMRLGDN	.TVQAVEAVSTGSLTLDI	ALGIGGLPKGR	59	
consensus		** **	**	**!	*****	*	***!!**!!*!!*!!*!!*!!*!!*!!*!!

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	S	V	G	L	Q	A	R	M	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	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	R	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	M	S	Q	A	M	R	K	L	G	A	S	I	N	K	T	K	T	I	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	R	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	M	S	Q	A	M	R	K	L	G	A	S	I	N	K	T	K	T	I	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	R	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	M	S	Q	A	M	R	K	L	G	A	S	I	N	K	T	K	T	I	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	R	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	M	S	Q	A	M	R	K	L	G	A	S	I	N	K	T	K	T	I	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	R	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	M	S	Q	A	M	R	K	L	G	A	S	I	N	K	T	K	T	I	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	R	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	M	S	Q	A	M	R	K	L	G	A	S	I	N	K	T	K	T	I	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 453 Spy49 1753c ACI62003.1	V	V	V	D	S	V	A	A	L	V	P	R	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	M	S	Q	A	M	R	K	L	S	A	S	I	N	K	T	K	T	I	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	R	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	M	S	Q	A	M	R	K	L	S	A	S	I	N	K	T	K	T	I	A	I	F	I	N	Q	L	R	E	K	V	G	T	M	.	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	S	.	232	
NTDB id 115 BSU 16940 NP 389576.2	V	V	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	I	A	I	F	I	N	Q	I	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 625 LCA RS02525 WP 011374196.1	L	V	V	D	S	V	A	A	L	V	P	R	A	E	I	E	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	I	A	L	F	I	N	Q	I	R	E	K	V	G	V	M	.	F	G	N	P	E	V	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	R	A	E	I	E	G	D	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	.	231	
NTDB id 1245 Cj1673c YP 002345041.1	I	V	V	D	S	V	A	A	L	T	P	K	A	E	I	E	G	D	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	.	219
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	D	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	T	L	I	F	I	N	Q	I	R	M	K	I	G	M	G	Y	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	.	221	
NTDB id 1214 NCTC11637 00359 SQJ03206.1	V	V	V	D	S	V	A	A	L	T	P	K	A	E	I	D	G	D	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	T	L	I	F	I	N	Q	I	R	M	K	I	G	M	G	Y	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	.	221	
NTDB id 1334 RAOC RS04870 WP 004918236.1	V	V	V	D	S	V	A	A	L	T	P	K	A	E	I	D	G	D	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	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 44297 COCOR RS06720 WP 014394194.1	I	V	V	D	S	V	A	A	L	V	P	R	A	E	I	E	G	E	M	G	D	A	H	M	G	V	Q	A	R	L	M	S	Q	A	L	R	K	L	T	G	A	V	S	R	S	G	T	C	I	I	F	I	N	Q	V	R	M	K	I	G	V	M	.	F	G	N	P	E	T	T	T	G	G	N	A	L	K	F	Y	S	.	221
NTDB id 1389 A4U84 RS07560 WP 021112712.1	I	I	V	D	S	V	A	A	L	T	P	K	A	E	I	E	G	D	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	.	235
NTDB id 1130 NGFG RS03960 WP 003688695.1	V	V	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	T	G	H	I	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	.	219	
NTDB id 1124 NGFG RS03960 WP 003688695.1	V	V	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	T	G	H	I	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	.	219	
NTDB id 1123 OK783 RS03845 WP 003688695.1	V	V	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	T	G	H	I	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	.	219	
NTDB id 1427 RS RS02760 WP 011000510.1	I	V	I	D	S	V	A	A	L	V	P	K	A	E	I	E	G	E	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	.	227	
NTDB id 1165 A1552VC RS01565 WP 000344154.1	I	V	V	D	S	V	A	A	L	T	P	K	A	E	I	E	G	E	M	G	D	S	H	M	G	L	Q	A	R	M	L	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	.	218
NTDB id 1142 GTF74 RS11550 WP 000344154.1	I	V	V	D	S	V	A	A	L	T	P	K	A	E	I	E	G	E	M	G	D	S	H	M	G	L	Q	A	R	M	L	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	.	218
NTDB id 1205 PSJM300 05545 AFN77183.1	I	I	V	D	S	V	A	A	L	V	P	K	A	E	I	E	G	E	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	.	218
NTDB id 1022 ACIAD RS06390 WP 004925639.1	I	V	V	D	S	V	A	A	L	T	P	K	A	E	I	E	G	E	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	.	218
NTDB id 1074 ABD1 RS10195 WP 000344167.1	I	V	V	D	S	V	A	A	L	T	P	K	A	E	I	E	G	E	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																		

logo

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 453 Spy49 1753c ACI62003.1	D..	378
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NTDB id 625 LCA RS02525 WP 011374196.1	...	355
NTDB id 1313 DR RS12030 WP 010888966.1	...	363
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NTDB id 1211 C694 RS00795 WP 000963128.1	...	347
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NTDB id 1142 GTF74 RS11550 WP 000344154.1	...	354
NTDB id 1205 PSJM300 05545 AFN77183.1	...	347
NTDB id 1022 ACIAD RS06390 WP 004925639.1	...	349
NTDB id 1074 ABD1 RS10195 WP 000344167.1	...	349

consensus

 non conserved
 similar
 ≥ 50% conserved