

NTDB id 85	BSU 00860 NP 387967.1	..MMFGRF	T	E	R	A	Q	K	V	L	A	L	A	Q	E	E	A	L	R	L	G	H	N	N	I	G	T	E	H	I	L	L	G	L	V	R	E	G	E	I	A	A	K	A	L	Q	A	L	G	L	G	S	E	K	I	Q	K	E	V	E	S	L	I	G	R	G		71									
NTDB id 610	V4T04 RS10165 WP 012897346.1	M	K	F	E	N	I	K	Y	T	P	T	L	D	R	I	L	E	K	A	E	E	Y	A	H	Q	Y	Q	Y	G	T	E	S	A	H	L	A	A	M	A	T	T	S	G	S	I	A	Y	S	L	L	A	G	M	N	V	D	S	S	D	L	L	I	D	L	E	D	L	S		SH	72					
NTDB id 377	SMU RS09275 WP 002262344.1	...	M	T	D	Y	S	L	K	M	Q	E	V	F	R	L	A	Q	F	E	A	A	R	F	E	S	S	Y	L	E	S	W	H	V	L	L	A	M	V	E	I	D	S	V	A	G	L	S	F	A	E	F	E	A	D	V	R	F	E	D	Y	Q	A	A	I	L	A	I	G	K	K	P	K	S	S	76	
NTDB id 329	STU RS10020 WP 011225298.1	...	M	T	I	Y	S	R	K	M	Q	A	I	F	H	R	A	Q	L	E	A	R	F	E	S	P	E	L	T	W	H	V	L	L	A	M	V	E	P	D	S	V	A	Y	L	T	F	T	D	F	E	D	R	I	H	S	E	E	I	E	T	A	A	V	L	A	M	E	K	R	P	K	D	L	S	76	
NTDB id 297	STER RS00545 WP 011680614.1	...	M	T	I	Y	S	R	K	M	Q	A	I	F	H	R	A	Q	L	E	A	R	F	E	S	P	E	L	T	W	H	V	L	L	A	M	V	E	V	I	G	S	V	A	Y	L	T	F	T	D	F	E	D	R	I	H	S	E	E	I	E	T	A	A	V	L	A	M	E	K	R	P	K	D	L	S	76
NTDB id 1155646	QNH80 RS08800 WP 074390078.1	...	M	K	I	S	T	G	L	Q	R	V	F	E	D	A	Q	L	V	A	Q	R	Y	A	C	D	Y	L	E	T	W	H	V	L	L	S	F	V	I	N	H	D	T	V	A	G	A	V	L	A	E	Y	P	I	S	I	S	..	D	Y	E	H	A	T	F	V	V	T	D	K	V	Y	..	RE	71		
NTDB id 287	SP RS11210 WP 001109712.1	...	M	N	Y	S	K	A	L	N	E	C	I	E	S	A	Y	M	V	A	G	H	F	G	A	R	Y	L	E	S	W	H	L	L	I	A	M	S	N	H	S	Y	S	V	A	G	A	T	L	N	D	P	Y	E	M	D	..	R	L	E	E	V	A	E	L	T	E	T	D	Y	..	SQ	71				
NTDB id 290	KZH43 RS10025 WP 001109677.1	...	M	N	Y	S	K	A	L	N	E	C	I	E	S	A	Y	M	V	A	G	H	F	G	A	R	Y	L	E	S	W	H	L	L	I	A	M	S	N	H	S	Y	S	V	A	G	A	T	L	N	D	P	Y	E	M	D	..	R	L	E	E	V	A	E	L	T	E	T	D	Y	..	SQ	71				
NTDB id 289	SPD RS10700 WP 001109677.1	...	M	N	Y	S	K	A	L	N	E	C	I	E	S	A																																																													

NTDB id	85	BSU 00860 NP 387967.1	.QEMSQTTHYTPRAKKVIELSMDEARKLGHSYVGTEHILLGLIREGEGVAARVLNNLGVSLNKAQQVQLQ..L.....	142
NTDB id	610	V4T04 RS10165 WP 012897346.1	VKVKRSTLRFSPPRAEEVMTAASFLAIHNNSSEAVGTEHLLYALLQVEDGFGLQLKL.....QKINIVSLRKELEKR	143
NTDB id	377	SMU RS09275 WP 002262344.1	N..DIMLLEQSHALKRTLAEAAAISQVTHAKEVGTEHVLFAMLLNPPLLATRILELVGFHAKDDGESIRLLDLRKVIERY	154
NTDB id	329	STU RS10020 WP 011225298.1	ESDIIDLRAQSPALEAMLQAQGIASVTGAVEVGESEHVLMAFLHLHKDLMVCRLLEVAGFQYKDSDDKPRIIDLRSSLERN	156
NTDB id	297	STER RS00545 WP 011680614.1	ESDIIDLRAQSPALEAMIQAEGEIASVTGAIVEVGESEHVLMAFLHLKXDLMVCRILLEVAGFYKKDDSKDPRIIDLRSSLERN	156
NTDB id	1155646	QNH80 RS08800 WP 074390078.1	ELDSFRILPSSKRRLDETASFARKIAEVVKAKELGTETHLFMAMLLDKRSTASQILDKVGFCEDESDDKFRFLDLRKNLEAR	151
NTDB id	287	SP RS11210 WP 001109712.1	D.ETFTTELPSRRLLQVLFDEAEYVASVVHAKVLGTEHVLYAILHDGNALATRILERAGFSYEDKKDQVKIIAALRRNLEER	150
NTDB id	290	KZH43 RS10025 WP 001109677.1	D.ETFTTELPSRRLLQILFD EAEYVASVVHAKVLGTEHVLYAILHDGNALATRILERAGFSYEDKKDQVKIIAALRRNLEER	150
NTDB id	289	SPD RS10700 WP 001109677.1	D.ETFTTELPSRRLLQILFDEAEYVASVVHAKVLGTEHVLYAILHDGNALATRILERAGFSYEDKKDQVKIIAALRRNLEER	150
consensus			* * * * *	

NTDB id	85	BSU 00860 NP 387967.1	.G.....SNETIGSSAAGTNSNANTPTLDSLARDLTAAKEDSLDPVIGRSKEIQRVTEVLSRRTKN	202
NTDB id	610	V4T04 RS10165 WP 012897346.1	TGLKVPESEKAVTPMSKRKMA.....KGVAENSTPTLDSVSDDLTEEARELGKLDPMIGREAEIDRLIHILSRRTKN	215
NTDB id	377	SMU RS09275 WP 002262344.1	AGFSKEDIKAIFEMRKPKKVKNSSFSDLMKPP.SVTGELADFTDLTELARQGRLEPVIGREQEISRMVQILSRKTKN	232
NTDB id	329	STU RS10020 WP 011225298.1	AGLSKQDLKAI.HDLRKPKKSKASANFANMMQPQQSGTGELADYTKDALTALAESGNLDPPIGRDEIERSMIQVLsrktkn	235
NTDB id	297	STER RS00545 WP 011680614.1	AGLSKQDLKAI.HDLRKPKKSKASANFANMMQPQQSGTGELADYTKDALTALAESGNLDPPIGRDEIERSMIQVLsrktkn	235
NTDB id	1155646	QNH80 RS08800 WP 074390078.1	AGFTKEDLKAI.RSVMKGGKAKPTNMGMQMMPAPQSGGLEDYTRDLTALAREGKIIEPVGIRDAEIARMIIQLSRKTKN	230
NTDB id	287	SP RS11210 WP 001109712.1	AGWTREDLKAL.RQRHRTVADKQNSMANMGMGPQTPTSGGLEDYTHDLTEQARSCKLEPVIGRDKEISRMIIQLSRKTKN	228
NTDB id	290	KZH43 RS10025 WP 001109677.1	AGWTREDLKAL.RQRHRTVADKQNSMANMGMGPQTPTSGGLEDYTHDLTEQARSCKLEPVIGRDKEISRMIIQLSRKTKN	228
NTDB id	289	SPD RS10700 WP 001109677.1	AGWTREDLKAL.RQRHRTVADKQNSMANMGMGPQTPTSGGLEDYTHDLTEQARSCKLEPVIGRDKEISRMIIQLSRKTKN	228
consensus			*!***** * * * * *	

NTDB id 85	BSU 00860 NP 387967.1	NPVLIGEPGVGKTAIAEGLAQQTINNEVPEILRDKRVMTLDMGTIVVAGTKYRGEFEDRLKKVMDIEIRQAGNIILFIDELH	282
NTDB id 610	V4T04 RS10165 WP 012897346.1	NPVLVGEPGVGKSAIIIEGLAQRIVNGQVPIGLMNSRIMALNMTATVVAGTKFRGEFEDRLTAIVEEVSSDPDVIIFIDELH	295
NTDB id 377	SMU RS09275 WP 002262344.1	NPVLVGDAVGKGTALAYGLAQRIVDSAVPFELADMKVLELDMMSSVVAGTRFRGDFEERMNQIITADIEADGHTVLFIDELH	312
NTDB id 329	STU RS10020 WP 011225298.1	NPVLVGEAGVGKGTALGLAQRIASGEVVPFELADMRILELDMMSSVVAGTRFRGDFEERMNQIIDEIADGKHTVLFIDELH	315
NTDB id 297	STER RS00545 WP 011680614.1	NPVLVGEAGVGKGTALGLAQRIASGEVVPFELADMRILELDMMSSVVAGTRFRGDFEERMNQIIDEIADGKHTVLFIDELH	315
NTDB id 1155646	QNH80 RS08800 WP 074390078.1	NPVLVGDAVGKGTALGLAQRIASGVDPVSLAKMRVLELDLMNVITAGTRFRGDFEERMNNIINDIEEDGQVILFIDELH	310
NTDB id 287	SP RS11210 WP 001109712.1	NPVLVGDAVGKGTALGLAQRIASGDVPAEAMAKMRVLELDLMNVVAGTRFRGDFEERMNNIIKDIEEDGQVILFIDELH	308
NTDB id 290	KZH43 RS10025 WP 001109677.1	NPVLVGDAVGKGTALGLAQRIASGDVPAEAMAKMRVLELDLMNVVAGTRFRGDFEERMNNIIKDIEEDGQVILFIDELH	308
NTDB id 289	SPD RS10700 WP 001109677.1	NPVLVGDAVGKGTALGLAQRIASGDVPAEAMAKMRVLELDLMNVVAGTRFRGDFEERMNNIIKDIEEDGQVILFIDELH	308
consensus		NPVLIGEPGVGKTAIAEGLAQQTINNEVPEILRDKRVMTLDMGTIVVAGTKYRGEFEDRLKKVMDIEIRQAGNIILFIDELH	

[illegible][illegible]

NTDB id 85 BSU 00860 NP 387967.1	L R D T E Q R L R E Q V E D T K K S W K . E K Q G Q N S E V T V D D I A M V V S S W T G P V S K I A Q T E T D K L L N M E N I L H S R V I G Q D E A V V A V	520
NTDB id 610 V4T04 RS10165 WP 012897346.1	K E K A V E K I A D K I Y K F S V K E D K R Q E V T D Q A V V A V A S T L T G V P I T Q M T K S E S D R L I N L E K E L H K R V V G Q E E A I S A V	529
NTDB id 377 SMU RS09275 WP 002262344.1	L L K K E K K P L L K K R A E V K E E D I L A T L S K L S G I P V K K L T Q A D S K K Y L N L E R E L H K R V I G Q D D A V S S I	527
NTDB id 329 STU RS10020 WP 011225298.1	Q Y K A N Q K A K F P K P A L V D A D Q I M Q T L S R L S G I P V E K M T Q D S K R Y L N L E S E L H K R V I G Q D E A V S A I	530
NTDB id 297 STER RS00545 WP 011680614.1	Q Y K A N Q A K F P K P A L V D A D Q I M Q T L S R L S G I P V E K M T Q D S K R Y L N L E S E L H K R V I G Q D E A V S A I	530
NTDB id 1155646 QNH80 RS08800 WP 074390078.1	L L I K T K E D A E A S Q N Y D L E V T E E D V L E T L S R L S G I P V A K L S S D T K K Y L N L E A E L H K R V I G Q E E A I S A V	529
NTDB id 287 SP RS11210 WP 001109712.1	L I A K E E E V P V Y K D L V T E S D I L T T L S R L S G I P V Q K L T Q T D A K K Y L N L E A E L H K R V I G Q D Q A V S S I	524
NTDB id 290 KZH43 RS10025 WP 001109677.1	L I A K E E E V P V Y K D L V T E S D I L T T L S R L S G I P V Q K L T Q T D A K K Y L N L E A E L H K R V I G Q D Q A V S S I	524
NTDB id 289 SPD RS10700 WP 001109677.1	L I A K E E E V P V Y K D L V T E S D I L T T L S R L S G I P V Q K L T Q T D A K K Y L N L E A E L H K R V I G Q D Q A V S S I	524
consensus	* * * * *	

[illegible]

NTDB id 85 BSU 00860 NP 387967.1
NTDB id 610 V4T04 RS10165 WP 012897346.1
NTDB id 377 SMU RS09275 WP 002262344.1
NTDB id 329 STU RS10020 WP 011225298.1
NTDB id 297 STER RS00545 WP 011680614.1
NTDB id 1155646 QNH80 RS08800 WP 074390078.1
NTDB id 287 SP RS11210 WP 001109712.1
NTDB id 290 KZH43 RS10025 WP 001109677.1
NTDB id 289 SPD RS10700 WP 001109677.1
consensus



NTDB id 85 BSU 00860 NP 387967.1
NTDB id 610 V4T04 RS10165 WP 012897346.1
NTDB id 377 SMU RS09275 WP 002262344.1
NTDB id 329 STU RS10020 WP 011225298.1
NTDB id 297 STER RS00545 WP 011680614.1
NTDB id 1155646 QNH80 RS08800 WP 074390078.1
NTDB id 287 SP RS11210 WP 001109712.1
NTDB id 290 KZH43 RS10025 WP 001109677.1
NTDB id 289 SPD RS10700 WP 001109677.1
consensus



NTDB id 85 BSU 00860 NP 387967.1
NTDB id 610 V4T04 RS10165 WP 012897346.1
NTDB id 377 SMU RS09275 WP 002262344.1
NTDB id 329 STU RS10020 WP 011225298.1
NTDB id 297 STER RS00545 WP 011680614.1
NTDB id 1155646 QNH80 RS08800 WP 074390078.1
NTDB id 287 SP RS11210 WP 001109712.1
NTDB id 290 KZH43 RS10025 WP 001109677.1
NTDB id 289 SPD RS10700 WP 001109677.1
consensus



- X non conserved
- X similar
- X >50% conserved