

logo



NTDB id 625 LCA RS02525 WP 011374196.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	V	A	L	H	A	V	A	E	V	Q	K	Q	G	G	T	A	A	Y	I	D	A	E	H	A	L	D	P	Y	A	K	N	L	G	V	M	I	D	E	L	L	S	Q	P	D	T	G	E	Q	A	L	E	I	A	D	A	L	V	S	S	G	A	V	D	I	140		
NTDB id 53451 LMOL312 RS07020 WP 003725961.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	V	A	L	H	A	V	A	E	V	Q	K	Q	G	G	T	A	A	Y	I	D	A	E	H	A	L	D	P	Y	A	K	N	L	G	V	M	I	D	E	L	L	S	Q	P	D	T	G	E	Q	A	L	E	I	A	D	A	L	V	R	S	G	A	V	D	M	138		
NTDB id 115 BSU 16940 NP 389576.2	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	V	A	L	H	A	V	A	E	V	Q	K	Q	G	G	T	A	A	Y	I	D	A	E	H	A	L	D	P	Y	A	K	N	L	G	V	M	I	D	E	L	L	S	Q	P	D	T	G	E	Q	A	L	E	I	A	D	A	L	V	R	S	G	A	V	D	I	138		
NTDB id 600 KW2 RS01765 WP 011675413.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	V	A	L	H	A	V	A	A	V	Q	K	E	G	G	I	A	A	F	I	D	A	E	H	A	L	D	P	E	Y	A	K	A	L	G	V	M	I	D	E	L	L	S	Q	P	D	Y	G	E	Q	L	I	A	E	K	L	I	T	S	G	A	V	D	L	154			
NTDB id 269 KZH43 RS08665 WP 001085462.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	V	A	L	H	A	V	A	Q	A	Q	K	E	G	G	I	A	A	F	I	D	A	E	H	A	L	D	P	Y	A	A	A	L	G	V	M	I	D	E	L	L	S	Q	P	D	S	G	E	Q	L	E	I	A	G	K	L	I	D	S	G	A	V	D	L	153			
NTDB id 228 SPD RS09265 WP 001085462.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	V	A	L	H	A	V	A	Q	A	Q	K	E	G	G	I	A	A	F	I	D	A	E	H	A	L	D	P	Y	A	A	A	L	G	V	M	I	D	E	L	L	S	Q	P	D	S	G	E	Q	L	E	I	A	G	K	L	I	D	S	G	A	V	D	L	153			
NTDB id 194 SPR RS08825 WP 001085462.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	V	A	L	H	A	V	A	Q	A	Q	K	E	G	G	I	A	A	F	I	D	A	E	H	A	L	D	P	Y	A	A	A	L	G	V	M	I	D	E	L	L	S	Q	P	D	S	G	E	Q	L	E	I	A	G	K	L	I	D	S	G	A	V	D	L	153			
NTDB id 159 SP RS09750 WP 001085462.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	V	A	L	H	A	V	A	Q	A	Q	K	E	G	G	I	A	A	F	I	D	A	E	H	A	L	D	P	Y	A	A	A	L	G	V	M	I	D	E	L	L	S	Q	P	D	S	G	E	Q	L	E	I	A	G	K	L	I	D	S	G	A	V	D	L	153			
NTDB id 499 SM12261 RS08315 WP 078228268.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	V	A	L	H	A	V	A	Q	A	Q	K	E	G	G	I	A	A	F	I	D	A	E	H	A	L	D	P	Y	A	A	A	L	G	V	M	I	D	E	L	L	S	Q	P	D	S	G	E	Q	L	E	I	A	G	K	L	I	D	S	G	A	V	D	L	153			
NTDB id 527 SMSK321 RS11065 WP 001085454.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	V	A	L	H	A	V	A	Q	A	Q	K	E	G	G	I	A	A	F	I	D	A	E	H	A	L	D	P	Y	A	A	A	L	G	V	M	I	D	E	L	L	S	Q	P	D	S	G	E	Q	L	E	I	A	G	K	L	I	D	S	G	A	V	D	L	153			
NTDB id 453 Spy49 1753c ACI62003.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	V	A	L	H	A	V	A	Q	A	Q	K	E	G	G	I	A	A	F	I	D	A	E	H	A	L	D	P	Y	A	A	A	L	G	V	M	I	D	E	L	L	A	Q	P	D	S	G	E	Q	L	E	I	A	G	K	L	I	D	S	G	A	V	D	L	153			
NTDB id 408 SMU RS09530 WP 002262392.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	V	A	L	H	A	V	A	Q	A	Q	K	D	G	G	I	A	A	F	I	D	A	E	H	A	L	D	P	Y	A	A	A	L	G	V	M	I	D	E	L	L	S	Q	P	D	S	G	E	Q	L	E	I	A	G	K	L	I	D	S	G	A	V	D	L	153			
NTDB id 1313 DR RS12030 WP 010888966.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	V	A	L	H	A	V	A	Q	A	Q	K	A	G	G	T	C	A	F	I	D	A	E	H	A	L	D	P	V	Y	A	R	A	L	G	V	M	I	D	E	L	L	V	S	Q	P	D	N	G	E	Q	A	L	E	I	M	E	L	L	V	R	S	G	A	T	D	V	152
NTDB id 1245 Cj1673c YP 002345041.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	V	A	L	H	A	V	A	Q	A	Q	K	A	G	G	V	C	A	F	I	D	A	E	H	A	L	D	P	V	Y	A	K	N	L	G	V	M	I	D	E	L	L	V	S	Q	P	D	F	G	E	Q	A	L	E	I	V	E	T	I	A	R	S	G	A	V	D	L	139
NTDB id 1211 C694 RS00795 WP 000963128.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	V	A	L	H	A	V	A	E	C	Q	K	N	G	G	V	C	A	F	I	D	A	E	H	A	L	D	V	H	Y	A	K	R	L	G	V	D	E	N	L	L	V	S	Q	P	D	T	G	E	Q	A	L	E	I	L	E	T	I	T	R	S	G	G	I	D	L	141	
NTDB id 1214 NCTC11637 00359 SQJ03206.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	V	A	L	H	A	V	A	E	C	Q	K	N	G	G	V	C	A	F	I	D	A	E	H	A	L	D	V	H	Y	A	K	R	L	G	V	D	E	N	L	L	V	S	Q	P	D	T	G	E	Q	A	L	E	I	L	E	T	I	T	R	S	G	G	I	D	L	141	
NTDB id 1334 RA0C RS04870 WP 004918236.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	V	A	L	H	A	V	A	E	A	Q	K	V	G	G	T	A	A	F	I	D	A	E	H	A	L	D	P	M	H	Y	A	E	K	L	C	T	N	L	E	L	L	V	S	Q	P	D	N	G	E	Q	A	L	E	I	A	D	S	L	I	R	S	G	V	D	I	148	
NTDB id 1389 A4U84 RS07560 WP 021112712.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	V	A	L	H	A	V	A	Q	A	Q	K	G	N	K	T	C	A	F	I	D	A	E	H	A	L	D	P	V	Y	A	R	N	L	G	V	M	I	D	E	L	L	S	Q	P	D	N	G	E	Q	A	L	E	I	C	D	A	L	V	R	S	G	A	V	D	V	156	
NTDB id 1130 NGFG RS03960 WP 003688695.1	I	V	E	I	F	G	P	E	S	S	G	K	T	T	L	C	L	E	A	V	A	Q	C	K	N	G	G	V	C	A	F	V	D	A	E	H	A	F	D	P	V	Y	A	R	K	L	G	V	K	V	E	E	L	Y	L	S	Q	P	D	T	G	E	Q	A	L	E	I	C	D	T	L	V	R	S	G	G	I	D	M	140	
NTDB id 1124 NGFG RS03960 WP 003688695.1	I	V	E	I	F	G	P	E	S	S	G	K	T	T	L	C	L	E	A	V	A	Q	C	K	N	G	G	V	C	A	F	V	D	A	E	H	A	F	D	P	V	Y	A	R	K	L	G	V	K	V	E	E	L	Y	L	S	Q	P	D	T	G	E	Q	A	L	E	I	C	D	T	L	V	R	S	G	G	I	D	M	140	
NTDB id 1123 OK783 RS03845 WP 003688695.1	I	V	E	I	F	G	P	E	S	S	G	K	T	T	L	C	L	E	A	V	A	Q	C	K	N	G	G	V	C	A	F	V	D	A	E	H	A	F	D	P	V	Y	A	R	K	L	G	V	K	V	E	E	L	Y	L	S	Q	P	D	T	G	E	Q	A	L	E	I	C	D	T	L	V	R	S	G	G	I	D	M	140	
NTDB id 1427 RS RS02760 WP 011000510.1	V	V	E	I	Y	G	P	E	S	S	G	K	T	T	L	T	L	Q	V	V	A	E	M	Q	K	L	G	G	T	C	A	F	I	D	A	E	H	A	L	D	V	T	Y	A	D	K	L	G	V	K	V	P	D	L	L	S	Q	P	D	T	G	E	Q	A	L	E	I	A	D	A	L	V	R	S	G	V	D	L	148		
NTDB id 1165 A1552VC RS01565 WP 000344154.1	I	V	E	I	F	G	P	E	S	S	G	K	T	T	L	T	L	E	L	I	A	A	A	Q	R	E	G	K	T	C	A	F	I	D	A	E	H	A	L	D	P	V	Y	A	K	K	L	G	V	M	I	D	E	L	L	V	S	Q	P	D	T	G	E	Q	A	L	E	I	C	D	A	L	A	R	S	G	A	V	D	V	139
NTDB id 1142 GTF74 RS11550 WP 000344154.1	I	V	E	I	F	G	P	E	S	S	G	K	T	T	L	T	L	E	L	I	A	A	A	Q	R	E	G	K	T	C	A	F	I	D	A	E	H	A	L	D	P	V	Y	A	K	K	L	G	V	M	I	D	E	L	L	V	S	Q	P	D	T	G	E	Q	A	L	E	I	C	D	A	L	A	R	S	G	A	V	D	V	139
NTDB id 1074 ABD1 RS10195 WP 000344167.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	M	T	L	Q	A	I	A	Q	C	K	S	G	G	T	C	A	F	I	D	A	E	H	A	L	D	P	Q	Y	A	R	K	L	G	V	D	I	D	N	L	L	V	S	Q	P	D	N	G	E	Q	A	L	E	I	A	D	M	L	V	R	S	G	A	T	D	L	139	
NTDB id 1022 ACIAD RS06390 WP 004925639.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	M	T	L	Q	A	I	A	Q	C	K	A	G	G	T	C	A	F	I	D	A	E	H	A	L	D	P	Q	Y	A	R	K	L	G	V	D	I	D	N	L	L	V	S	Q	P	D	H	G	E	Q	A	L	E	I	A	D	M	L	V	R	S	G	A	T	D	L	139	
NTDB id 1205 PSJM300 05545 AFN77183.1	I	V	E	I	Y	G	P	E	S	S	G	K	T	T	L	T	L	S	V	I	A	A	A	Q	R	M	G	S	T	C	A	F	V	D	A	E	H	A	L	D	P	D	Y	A	G	K	L	G	V	N	V	D	L	L	V	S	Q	P	D	T	G	E	Q	A	L	E	I	T	D	M											

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NTDB id 625 LCA RS02525 WP 011374196.1	SE R I G Q G R E N A K N Y L A D H E D V E D E V R L K V R A A Y C T S D V P E E D L P T T E D E Q I N I L P D D S T E E	355
NTDB id 53451 LMOL312 RS07020 WP 003725961.1	E E R I G Q G R E N A K Q Y L K E H T D I R D E I S K R V R E E Y E I D G S N K E P L D . . E G E E T L S L L D D E	348
NTDB id 115 BSU 16940 NP 389576.2	E E R I G Q G R E N A K Q F L K E N K D I M L M I Q E Q I R E H Y G I D N N G V V Q Q A E E T Q E E L F E E	348
NTDB id 600 KW2 RS01765 WP 011675413.1	D E K I G Q G A E K A K N Y L K E H Q D V F D E I D H K V R A A H C I L D D S E V A E T E E E T T A S K T K A K A K K E E K A V E T E E I E L E L E D	387
NTDB id 269 KZH43 RS08665 WP 001085462.1	D E K I G Q G S E N A K K Y L A E H P E I F D E I D K Q V R S K F C I I D G E E V S E Q D T E N K K D E P K K E E A . . V N E E V P L D L G D E L E I E	385
NTDB id 228 SPD RS09265 WP 001085462.1	D E K I G Q G S E N A K K Y L A E H P E I F D E I D K Q V R S K F C I I D G E E V S E Q D T E N K K D E P K K E E A . . V N E E V P L D L G D E L E I E	385
NTDB id 194 SPR RS08825 WP 001085462.1	D E K I G Q G S E N A K K Y L A E H P E I F D E I D K Q V R S K F C I I D G E E V S E Q D T E N K K D E P K K E E A . . V N E E V P L D L G D E L E I E	385
NTDB id 159 SP RS09750 WP 001085462.1	D E K I G Q G S E N A K K Y L A E H P E I F D E I D K Q V R S K F C I I D G E E V S E Q D T E N K K D E P K K E E A . . V N E E V P L D L G D E L E I E	385
NTDB id 499 SM12261 RS08315 WP 078228268.1	D E K I G Q G S E N A K K Y L A D N P E I F D E I D H Q V R V Q F C I I D G E E I A E S K K D E A A Q V D S . . V N E E V T L D L G D E L E I E	381
NTDB id 527 SMSK321 RS11065 WP 001085454.1	D E K I G Q G S E N A K K Y L A D N P E V F A E I D H Q V R V Q F C I I D G E E A A A E S K K D E V A Q V D S . . V N E E V T L D L G D E L E I E	381
NTDB id 453 Spy49 1753c ACI62003.1	G E K I G Q G S E N A K R Y L A D H P Q L F D E I D R K V R V K F C I L E E S E E E S A M A V A S E E T D D L A L D L D N G I E I E	377
NTDB id 408 SMU RS09530 WP 002262392.1	G E K I G Q G S E N A K K F L A D N P E I F D I D H K V R V Q Y C I I E E D N T E E K Q S S K E K E T D E K . . A D K N L V L E L D D T I E L E	382
NTDB id 1313 DR RS12030 WP 010888966.1	D E R I G Q G K E K T I A Y I A E R P E M E Q E I R D R V M A A T R A G N A G E A P A L A P A P A A P A E A A E A	363
NTDB id 1245 Cj1673c YP 002345041.1	D K K I G Q G R E N S K A F L K E N P E I A D E I T K A I Q N S M C I E G M I S G S E D D E . . G E E	343
NTDB id 1211 C694 RS00795 WP 000963128.1	D K K I G Q G R E N A K A L L K E D K A L A D E I T L K I K E S I C S N E E I M P L P D E P . . L E E M E	347
NTDB id 1214 NCTC11637 00359 SQJ03206.1	D K K I G Q G R E N A K A L L K E D K A L A D E I T L K I K E S I C S N E E I M P L P D E P . . L E E M E	347
NTDB id 1334 RA0C RS04870 WP 004918236.1	D T K I G Q G R D T V K E L I K D N P E I A E E L E A K I R E K L Q A K	343
NTDB id 1389 A4U84 RS07560 WP 021112712.1	G T K I G Q G K N N A V K W L K E N P E I A D K L E Q E I R N T L A S N P N S V L K A T A S D S N D E S D V E E . . F S E E E L	372
NTDB id 1130 NGFG RS03960 WP 003688695.1	G A K I G Q G K D N V R V W L K E N P E I S D E I D A K I R A L N C V E M H I T E G T Q D E T D G E . . R P E E	348
NTDB id 1124 NGFG RS03960 WP 003688695.1	G A K I G Q G K D N V R V W L K E N P E I S D E I D A K I R A L N C V E M H I T E G T Q D E T D G E . . R P E E	348
NTDB id 1123 OK783 RS03845 WP 003688695.1	G A K I G Q G K D N V R V W L K E N P E I S D E I D A K I R A L N C V E M H I T E G T Q D E T D G E . . R P E E	348
NTDB id 1427 RS RS02760 WP 011000510.1	G E R I G Q G R D N C R E F L R E N A E I L A R E I E N K V R E H L C V T P M G A V . T L A E E V E E D	352
NTDB id 1165 A1552VC RS01565 WP 000344154.1	G D K I G Q G K A N A C K Y L K E N P E I A K T L D K K L R E M L L N P E N M Q L I A E T S S A A D D V E F G A . . V P E E F	354
NTDB id 1142 GTF74 RS11550 WP 000344154.1	G D K I G Q G K A N A C K Y L K E N P E I A K T L D K K L R E M L L N P E N M Q L I A E T S S A A D D V E F G A . . V P E E F	354
NTDB id 1074 ABD1 RS10195 WP 000344167.1	G N K I G Q G K N N V I R Y F E E N N Q I A E E I E R N I R E Q L L T T G T N G A V Q . I . E D E E E P D . . L . . L L E S	349
NTDB id 1022 ACIAD RS06390 WP 004925639.1	G N K I G Q G K N N V I R Y L E E N P G I S T E I E A V I R E Q L L T K A S D Q T A A . H D E T E E E P D . . L . . L E S	349
NTDB id 1205 PSJM300 05545 AFN77183.1	G S K I G Q G K A N A A K Y L E E N P E I G Q E I E Q Q I R A K L L V T S A N T K A T P V A E D L A D A D . . I	347
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consensus
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 non conserved
 similar
 ≥ 50% conserved