

[illegible]

NTDB id	1323 RAOC RS07335 WP 004916218.1	YDLSTALGILAASGGTIIAPEIERVYLIMGELSLDGGGLQPIKGVLPATIRAREEGFGKITLTKPQN TREAAIVNDLEVYGVEN	158
NTDB id	1271 LPP RS03220 WP 011213198.1	FDPILPALGILAASEQIPLTNLANHEFIGELALS GELRGVSATIPAVLAAHKD.NQHLLIANANAAEASLTGHQKVFTANN	159
NTDB id	1248 GC085 RS03150 WP 011213198.1	FDPILPALGILAASEQIPLTNLANHEFIGELALS GELRGVSATIPAVLAAHKD.NQHLLIANANAAEASLTGHQKVFTANN	159
NTDB id	1032225 AB8Z47 RS26355 WP 002883134.1	YDLPIAIALTVASEQLNTRTLNQVEFVGELALTGGLRGVPGAIPAISEAIKA.GRRILVVSSDNAAEVLIGSGDCLVADH	159
NTDB id	1397 DSB67 RS15690 WP 005535577.1	FDPILPALGILAASEQIATDKLKNYEFVGELALS GGRLRTVKGVLPAAALAANKK.QRHLVPHANGDQAALVGKEQHKSAQS	159
NTDB id	1153 A1552VC RS00115 WP 000521788.1	FDPILPALGILAASDQIARNKLSEYEFIGELALTGGLRGVKGVLPAAALANQV.ERCLVPHNSCDQAALVGVERHKSACS	159
NTDB id	1349 HI 1117 AAC22771.1	FDPILPAITGILAASDDLDASHLKQEFEVAELALTGGLRGVHGVIAPAILAAQKS.KRELTIAKQNANEASLVSDQNTTYFAQT	159
NTDB id	1387 A4U84 RS06900 WP 020457569.1	FDPILPATGILAASQQIDSDKLRRIELLGELS LTGHLRGVHGAIIPAVLAASKA.KREITIIVPQQNANEASLVSN TQTYYCAST	159
consensus		* ! * ! * ! * * * * ! * ! * ! * * * * * ! * ! * ! * * * * * ! * * * * * ! * * * * *	

NTDB id 1323	RAOC RS07335 WP 004916218.1	I	K	E	V	I	D	F	F	N	E	C	P	E	P	T	K	V	N	T	R	E	E	F	H	K	R	V	N	L	F	P	F	D	F	S	E	V	K	G	Q	E	T	A	K	R	A	M	E	V	A	A	A	G	G	H	N	I	L	I	G	P	P	G	S	G	K	T	M	L	A	K	R	I	P	S	I	L	238		
NTDB id 1271	LPP RS03220 WP 011213198.1	L	R	E	V	C	D	L	C	Q	G	T	S	L	Q	S	L	P	P	K	P	D	L	...	L	L	N	N	Y	E	L	D	W	S	D	I	K	G	Q	Q	H	A	K	N	A	M	V	I	A	A	C	G	G	H	S	I	L	L	S	C	A	P	G	S	G	K	T	M	A	K	R	F	S	T	L	235					
NTDB id 1248	GC085 RS03150 WP 011213198.1	L	R	E	V	C	D	L	C	Q	G	T	S	L	Q	S	L	P	P	K	P	D	L	...	L	L	N	N	Y	E	L	D	W	S	D	I	K	G	Q	Q	H	A	K	N	A	M	V	I	A	A	C	G	G	H	S	I	L	L	S	C	A	P	G	S	G	K	T	M	A	K	R	F	S	T	L	235					
NTDB id 1032225	AB8Z47 RS26355 WP 002883134.1	L	Q	E	V	C	A	E	L	C	G	Q	H	L	S	P	P	L	A	E	A	...	P	A	R	D	E	R	Y	E	D	L	L	V	I	G	Q	Q	Q	K	R	A	L	E	I	V	A	A	G	G	H	N	L	I	L	G	P	P	G	T	G	K	T	M	L	A	S	R	L	P	G	L	234								
NTDB id 1397	DSB67 RS15690 WP 005535577.1	L	L	E	V	C	A	E	L	C	G	Q	H	L	N	L	Y	Q	T	P	K	K	...	E	L	K	A	H	G	R	D	L	Q	D	I	I	G	Q	Q	Q	K	R	A	L	E	I	A	A	A	G	N	H	N	L	L	F	L	G	P	P	G	T	G	K	T	M	L	A	S	R	L	C	D	L	235						
NTDB id 1153	A1552VC RS00115 WP 000521788.1	L	L	E	V	C	A	D	L	C	G	Q	T	L	S	L	F	Q	S	S	P	S	V	...	Q	Q	V	S	Q	T	R	D	L	Q	D	I	I	G	Q	Q	Q	K	R	A	L	E	I	A	A	A	G	N	H	N	L	L	F	L	G	P	P	G	T	G	K	T	M	L	A	S	R	L	C	D	L	235					
NTDB id 1349	HI 1117 AAC22771.1	L	L	D	V	V	Q	F	L	N	G	Q	E	K	L	P	L	A	T	E	I	V	K	E	S	A	V	N	F	S	G	K	N	T	L	D	L	T	D	I	I	G	Q	Q	H	A	K	R	A	L	T	I	A	A	A	G	Q	H	N	L	L	F	L	G	P	P	G	T	G	K	T	M	L	A	S	R	L	T	G	L	239
NTDB id 1387	A4U84 RS06900 WP 020457569.1	L	L	Q	V	N	F	L	N	R	D	Q	L	P	I	A	Q	Q	L	S	Q	N	I	A	E	N	.	R	P	L	V	S	R	D	L	T	D	I	I	G	Q	Q	H	A	K	R	A	L	I	I	A	A	S	G	Q	H	N	L	L	F	L	G	P	P	G	T	G	K	T	M	L	A	S	R	L	A	D	L			

NTDB id	1323	RAOC RS07335 WP	004916218.1	PPLTLKEAEETTKTHSVAGKMGAEISLMTIRPFRSPHHTISDVVALVGGGSYPQPGGEISLAHNGLVFLDLMPEFKRTIVLEV	318
NTDB id	1271	LPP RS03220 WP	011213198.1	PELSSETGALCAAINSTRIGKLPDF.REWRLPPFRAPHHTASPVVALVGGGNPKPGGEISLAHHGVLFDELPEFNRRQVLET	314
NTDB id	1248	GC085 RS03150 WP	011213198.1	PELSSETGALCAAINSTRIGKLPDF.REWRLPPFRAPHHTASPVVALVGGGNPKPGGEISLAHHGVLFDELPEFNRRQVLET	314
NTDB id	103225	AABZ47 RS26355 WP	002883134.1	PPLSNQEAEASAATQSLVLNHTAK.TRWQRPPFRAPHHSASLAAMVGGGSTIPVPGEISLAHNGLVFLDELPEFERRVLEDA	313
NTDB id	1397	DSB67 RS15690 WP	005535577.1	PEMSDEEAMETASVASLTQSEINE.HNWKTTRPFRAPHHSSSMAALVGGGSVPRPGEISLAHNGLLVFLDLMPEFDRKVLDLS	314
NTDB id	1153	A1552VC RS00115 WP	000521788.1	PEMSDEEAMETASIASLTQQEINQ.HNWKLRPFRAPHHSSSMAALVGGGTIPRPGGEISLAHNGLLVFLDLMPEFERKVLDLS	314
NTDB id	1349	HI 1117 AAC22771.1		PEMTDLAETASVTSILVNELNF.HNWKKRPFRAPHHSASMPALVGGGTIPKPGGEISLATNGVLFDELPEFERKVLEDA	318
NTDB id	1387	A4U84 RS06900 WP	020457569.1	PEMEDAEIETASVTSLVNELNF.QNVKKRPFRSPHHSASMVVALVGGGSTIPKPGGEISLAHNGLVFLDELPEFERKVLEDA	317
consensus				! ** * * * ! * ! * * * * ! * * * * * ! * * ! * * ! * ! * ! * ! * ! * ! * ! * ! * ! * ! *	

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NTDB id 1323 RAOC RS07335 WP 004916218.1	LREPLESGEIIISRAAKIIFPAFQLYAAMNPSPSGFFPDDPNNT.SSSFEMQRYLNKLSGPLLDRIDITHIEVQKVVEFD	397
NTDB id 1271 LPP RS03220 WP 011213198.1	LREPLESGHICISRAAAQIEFPAKFQLIAAMNPPCGQWGNSSQANCMCTPDRIISRYLAKLSAPLLDRIDMQVTIHALSQE	394
NTDB id 1248 GC085 RS03150 WP 011213198.1	LREPLESGHICISRAAAQIEFPAKFQLIAAMNPPCGQWGNSSQANCMCTPDRIISRYLAKLSAPLLDRIDMQVTIHALSQE	394
NTDB id 1032225 AB8Z47 RS26355 WP 002883134.1	LREPIESGKIHSISRAKIDYPARFQLIAAMNPSPSGHYQGKHNR..ASPEQTLRYLGRLSGPFLLDRFDLSLEIPLPPPG	391
NTDB id 1397 DSB67 RS15690 WP 005535577.1	LREPLESGEIIISRAQKTRFPAFQIVGALNPSPSGHYEGNQAR..TNPQATILRYLGRLSGPLLDRFDMSLEIPALPKG	392
NTDB id 1153 A1552VC RS00115 WP 000521788.1	LREPLESGEIVISRAQKTRFPAFQIVGALNPSPSGHYEGSSQAR..ANPQSILRYLSRLSGPLLDRFDMSIEIPALPKG	392
NTDB id 1349 HI 1117 AAC22771.1	LRQPLESGEIIISRAANAKIQFPAFQLYAAMNPSPSGHYTGTHNR..TSPQQIMRYLNRLSGPFLLDRFDLSIEVPLLPQG	396
NTDB id 1387 A4U84 RS06900 WP 020457569.1	LRQPLESGEIIISRAANAKVFFPAFQLYAAMNPSPSGHYQGTHNR..TSPQQLMRYLNRLSGPFLLDRFDLSIEVPLLPQG	395
consensus	*!*****!!!!* *** *!!!!*****!!!!!!* ** *	

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NTDB id 1323 RAOC RS07335 WP 004916218.1	Q L S D . . K R K G E S S E I I R Q R V L K A R E I Q Q E R Y Q D L A I S Y N A Q M G P K E I E H F C E L D E V S L L I T K N A M E K L N L S A R A Y D R I L K	475
NTDB id 1271 LPP RS03220 WP 011213198.1	E L I K P N T H L E K Q S L A I R E K V T K M H E I Q M A R Q D S L N A N L N S K T C E M V C E L G S E E Q L F L R E V M S K L K L S A R G Y H R L L K	470
NTDB id 1248 GC085 RS03150 WP 011213198.1	E L I K P N T H L E K Q S L A I R E K V T K M H E I Q M A R Q D S L N A N L N S K T C E M V C E L G S E E Q L F L R E V M S K L K L S A R G Y H R L L K	470
NTDB id 1032225 AB8Z47 RS26355 WP 002883134.1	I L S Q G . S Q G E S S A T V R Q R V L A A R E R Q M L R Q N K L N A H L E N R E M K N C C R L R R E D A V W L E Q T L T Q L G L S T R A W Q R L L K	466
NTDB id 1397 DSB67 RS15690 WP 005535577.1	T L S E G . G D R G E P T A I V K E R V N Q A R D C M L A R S G K V N A L L G S R E I E A F C P L Q K S D A E F L E N A L H R L G L S I R A Y H R I I K	467
NTDB id 1153 A1552VC RS00115 WP 000521788.1	T L A N G . G D R G E S T A A V R Q R V W V A R E R M L A R S G K V N A L L Q S R E I E Q Y C P L L K A D A E F L E S A L H R L G L S I R A Y H R I I K	467
NTDB id 1349 HI 1117 AAC22771.1	S L Q N T . G D R G E T S A Q V R E K V L K V R E I Q M E R A G K I N A Y L N S K E I E R D C K L N D K D A F F L E K A L N K L G L S V R A Y H R I L K	471
NTDB id 1387 A4U84 RS06900 WP 020457569.1	A L Q N N T D Q R G E T T E Q A R K R V L E A R H L Q F N R R G K I N A Q L T T K E I E Q D C K L T D R D A L F L E N A L T K L G L S V R A Y H R I L K	471
consensus	! **** * * ! * * * * * ! *	

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NTDB id 1323 RAOC RS07335 WP 004916218.1	VSRTIADLERETNIQSHHIAEAIQYRSILDRDFWKV.....	510
NTDB id 1271 LPP RS03220 WP 011213198.1	VSRTIADMNSSKKVLLNHLQQALSYPKQNLHLPK.....	503
NTDB id 1248 GC085 RS03150 WP 011213198.1	VSRTIADMNSSKKVLLNHLQQALSYPKQNLHLPK.....	503
NTDB id 1032225 AB8Z47 RS26355 WP 002883134.1	VARTIADLAEVEETIERCHLQEALSYRAIDRMLNHLQKMMA	506
NTDB id 1397 DSB67 RS15690 WP 005535577.1	VARTIADLEGSPQIERTHLAEALGYRAMDRLLKQLTAQAV	507
NTDB id 1153 A1552VC RS00115 WP 000521788.1	VARTIADLQGEAQIARPHLAEALGYRAMDRLLKQLSAQNV	507
NTDB id 1349 HI 1117 AAC22771.1	VSRTIADLQGEQIQIFPHLAEALGYRAMVRLLQKLSNM..	509
NTDB id 1387 A4U84 RS06900 WP 020457569.1	VSRTIADLAGEAQIQPHLAEALGYRAMDRLLQRLQGES.	510
consensus	!***** ** !***! * !***** *	

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