

NTDB id	1323	RAOC RS07335 WP 004916218.1	.MLVKVYGS A IHGVS A QTI T TEVN D CGV.LGYHLVLGLP D NALKESSHRISAAIKNVG V KLPCKKITINMAPADLRKEGSA	78
NTDB id	1271	LPP RS03220 WP 011213198.1	MSLAFTKTRSTIGIVAQPVSEVHLSNGLPSFTMVGLAETAVKESKDRVRSAIINSQFEFFPCRKITVNLGPANLPKTGGSG	80
NTDB id	1248	GC085 RS03150 WP 011213198.1	MSLAFTKTRSTIGIVAQPVSEVHLSNGLPSFTMVGLAETAVKESKDRVRSAIINSQFEFFPCRKITVNLGPANLPKTGGSG	80
NTDB id	1094380	ACK8HE RS00050 WP 015572776.1	MSLSVVYTRAAGVKAPLISVEVHLSNGLPGLTLVLGLPETTVKEARDVRSAIINSGVAFPAKKITINLAPADLPKEGGR	80
NTDB id	1397	DSB67 RS15690 WP 005535577.1	MGLAIITHSRASVG V GQA P SVSEV H ISNGMPGFTLVGLPETTVKESKDRVRSAIVNSNFQFPAKRITVNLAPADLPKEGGR	80
NTDB id	1153	A1552VC RS00115 WP 000521788.1	MGLAIITHSRASIGVQA P PIVTEVHLSNGMPGFTLVGLPETTVKESKDRVRSAIINSRFEPFAKRITVNLAPADLPKEGGR	80
NTDB id	1349	HI 1117 AAC22771.1	MSLAIVYSRASMGVQA P PLVTIEVHLSNGKPGFTLVGLPEKTVKEAQDRVRSA L MNAFDFYPARRITVNLAPADLPKEGGR	80
NTDB id	1387	A4U84 RS06900 WP 020457569.1	MSLAIVYSRASIGVEA P PLVTIEVHLSNGSPGLTLVLGLPEKS V KEAQDRVRSA L MNAFDFYPARRITVNLAPADLPKEGGR	80
consensus			* * ! * * * * * * * ! * ! * * * * ! ! * * * * * * * ! ! * * * * * ! ! * * ! * * * ! * ! * * * * * ! * ! * * ! * ! * ! * ! * *	

NTDB id	1323	RAOC RS07335 WP	004916218.1	YDLSTALGILAASGGTIIAPEIERYLYIMGEISLDGGLQPIKGVLPPIAIRAREEGFGKITIPKQNTREAAIVNDLEVYGVEN	158
NTDB id	1271	LPP RS03220 WP	011213198.1	FDPPIALGILAASEQIPLTNLANHEFIGELALSSELRGVSAITPAVLAAHKD.NQHLLIANANAAEASLTGHQKVFTANN	159
NTDB id	1248	GCO8S RS03150 WP	011213198.1	FDPPIALGILAASEQIPLTNLANHEFIGELALSSELRGVSAITPAVLAAHKD.NQHLLIANANAAEASLTGHQKVFTANN	159
NTDB id	1094380	ACK8HE RS00050 WP	015572776.1	YDLPPIATAILAASEQINTPTGLSSCEFEVGELALTGALRGVPGAISGALEAIRA.GRQTIVANENASEVSLIAEKGCCLVAGH	159
NTDB id	1397	DSB67 RS15690 WP	005535577.1	FDPPIALGILAASEQIATDKLKNEYFVGELALSGLRLTVKGVLPAALAANKK.QRHLLVPHANGDQAALVGKEQHKSAAQS	159
NTDB id	1153	A1552VC RS00115 WP	000521788.1	FDPPIALGILAASEQIARNKLESYEFIGELALSSELRGVKGVLPALAANKV.ERCLVYPHNSGDQAALVGVERHKSAAQS	159
NTDB id	1349	HI 1117 AAC22771.1		FDPPIATIGILAASeqIDASHLKFEEFVAELATGQLRGVHGVIAPALAAQKS.KRELIIAKQQNANEASLVSDQNTYFAQT	159
NTDB id	1387	A4U84 RS06900 WP	020457569.1	FDPPIALGILAASEQIDSDDLKRIFELLGELSITGHLRGVHGAIPAVLAAASKA.KRETIIVPQQNANEVSLVSNTQTTCYCAST	159
consensus				*!!*!!**!!!!!* * * **!*! *! * * * * * * * ! * * * * *	

NTDB id 1323	RAOC RS07335 WP 004916218.1	I	K	E	V	I	D	F	N	E	N	C	P	L	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 1094380	ACK8HE RS00050 WP 015572776.1	L	Q	E	V	C	A	L	E	G	R	H	E	L	A	E	P	Q	E	N	D	E	L	L	V	A	P	A	S	P	E	L	S	D	I	M	G	Q	E	Q	K	R	A	L	E	I	T	A	A	G	G	H	N	L	L	I	G	P	P	G	T	G	K	T	M	L	A	S	R	L	S	G	L	234						
NTDB id 1397	DSB67 RS15690 WP 005535577.1	L	L	E	V	C	A	E	L	C	G	Q	H	Q	L	N	L	Y	Q	T	P	K	K	K	L	L	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	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	Q	T	L	S	L	F	Q	S	S	P	S	V	L	L	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	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	L	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	E	I	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	N	R	D	L	P	I	A	Q	Q	L	S	Q	N	I	A	E	N	L	R	P	L	V	S	R	D	L	T	D	I	I	G	Q	Q	H	A	K	R	A	L	E	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	C				

[illegible]

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NTDB id 1323 RAOC RS07335 WP 004916218.1	LREPLESGEIIISRAAKIIFPAFQLYAAMNPSPGCHY-G-ONRITPQQLRYLRLSGPFLDRFDMSIEIPALPQG	397
NTDB id 1271 LPP RS03220 WP 011213198.1	MRQPLEDRVITISRAKFTVNYPASFMLVASMNPSPSGFFPDDPNNT.SSSFEMQRYLNKLSGPLLDRIDITHIEVQKVVEFD	394
NTDB id 1248 GC085 RS03150 WP 011213198.1	LREPLESGHICISRAAAQIEFPAKFQLIAAMNPPCGQWGNSSQANCMCTPDRIISRYLAKLSAPLLDRIDMQVTIHALSQE	394
NTDB id 1094380 ACK8HE RS00050 WP 015572776.1	LREPLESGHICISRAAAQIEFPAKFQLIAAMNPPCGQWGNSSQANCMCTPDRIISRYLAKLSAPLLDRIDMQVTIHALSQE	391
NTDB id 1397 DSB67 RS15690 WP 005535577.1	LREPESGEIHLSTRAKISYPAQFQLVAAMNPSPGTHYQGNHN..RCTPEQTLRYLSKLSGPFLLDRFDLSLEIPLPPPG	392
NTDB id 1153 A1552VC RS00115 WP 000521788.1	LREPLESGEIIISRAQKTRFPAQFQIVGALNPSPGTHYEGNQA..RTNPQATILRYLGRLSGPFLDRFDMSLEIPALPKG	392
NTDB id 1349 HI 1117 AAC22771.1	LREPLESGEIVISRAQKTRFPAQFQIVGALNPSPGTHYEGSSQA..RANPQSILRYLSRLSGPFLDRFDMSIEIPALPKG	396
NTDB id 1387 A4U84 RS06900 WP 020457569.1	LRQPLESGEIIISRAQKTRFPAQFQIVGALNPSPGTHYEGSSQA..RANPQSILRYLSRLSGPFLDRFDMSIEIPALPKG	395
consensus	*!***** *!* ** *!*!*!*****!!*!* * ** * ** *!!!! *!!!!*!!!!*!***** ** *	

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NTDB id 1323 RAOC RS07335 WP 004916218.1	QNSD..KRKGESSEIRQVRLKAREIQQERYQDLAISYNAQMGPKEIEHFCELDVSLLLIKNAMEKLNLSARAYDRILK	475
NTDB id 1271 LPP RS03220 WP 011213198.1	ELIKPNTHLEKQSLAIQREKVTMKHEIQMARQDS...LNANLNSKTCCEMVCELGSEEQLFLREVMSKIKLSARGYHRLK	470
NTDB id 1248 GC085 RS03150 WP 011213198.1	ELIKPNTHLEKQSLAIQREKVTMKHEIQMARQDS...LNANLNSKTCCEMVCELGSEEQLFLREVMSKIKLSARGYHRLK	470
NTDB id 1094380 ACK8HE RS00050 WP 015572776.1	LLRQT.GIRGESSATVREVRVIAAQAQYARQNR...LNARLDNSGTRQFCSLNAEDAGWLEETLTFGLSTRAWQRLK	466
NTDB id 1397 DSB67 RS15690 WP 005535577.1	TLSEG.GDRGEPTAIVKERVNQARDCLARSGK...VNALLGSREIEAFQPLQKSDAEFLENALHRLGLSIRAYHRIK	467
NTDB id 1153 A1552VC RS00115 WP 000521788.1	TLANG.GDRGESTAAVRQRVVVARERMLARSGK...VNALLGSREIEQYCPLLKADAEFLESALHRLGLSIRAYHRIK	467
NTDB id 1349 HI 1117 AAC22771.1	SLQNT.GDRGETSAQVREKVLKVREIQMERAGK...INAYLNSKEIERDCKLNDKDAFFLEKALNKLGLSVRAYHRILK	471
NTDB id 1387 A4U84 RS06900 WP 020457569.1	ALQNNTDQRGETTEQARKRVLEARHLQFNRRGK...INAQLTKEIEQDCKLTDRDALFLENALTKLGLSVRAYHRILK	471
consensus	! ***** *!*! *****! * *!?! * ***** !! ** *** ** *!!!!*!*****!!	

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NTDB id 1323 RAOC RS07335 WP 004916218.1	VSRTIADLERETNIQSHHIAEAIQYRSLDRDFWKV.....	510
NTDB id 1271 LPP RS03220 WP 011213198.1	VSRTIADMNSSKKVLLNHLQQAISYKQNLHLPK.....	503
NTDB id 1248 GC085 RS03150 WP 011213198.1	VSRTIADMNSSKKVLLNHLQQAISYKQNLHLPK.....	503
NTDB id 1094380 ACK8HE RS00050 WP 015572776.1	VARTVADVEGCSGTERRHLEALSRYAIDRLLHLQKMLA	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	VSRTIADLQGEQIFQPHLAEALGYRAMVRLKQLSNM..	509
NTDB id 1387 A4U84 RS06900 WP 020457569.1	VSRTIADLAGEAQIQPHLAEALGYRAMDRLLQRLQGES.	510
consensus	!*****! * ** *!!!!*!*****! *	

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