

NTDB id	1029	TT RS02230 WP 011228203	MPVYQYKARDRQGRL.VEATIEAEDLRTAAARLLDRDGLFVAEIKEPGKGGLQA EVRIPALERFGPGLK	65
NTDB id	1169	A1552VC RS11075 WP 000648511.1	MKAT.....QTLP LKNYRWKGINSNGKK.VSGQMLAI SEIEVRDKLK DQHIIQIKKLKKG SVS LLAR....LT HRV KSK	68
NTDB id	1402	DSB67 RS12670 WP 010643257.1	.MKT.....IAP LKKNYRWKGINSNGKK.TSGNVLAMTEIEVE RR LDA QHIKIKKLKGGSISFITK....ISHRVKKG	67
NTDB id	1112	NGFG RS09215 WP 003689811.1	.MAKNGGFSLF AKKEKRFIFEGRH SASDKLVNCEVS AFTEEEARKKLAKRGIRPLQITRV....KT....SSKRKITQE	70
NTDB id	1113	AAA85695.1 219..1451()	.MAKNGGFSLF AKKEKRFIFEGRH SASDKLVNCEVS AFTEEEARKKLAKRGIRPLQITRV....KT....SSKRKITQE	70
NTDB id	1252	GCO85 RS07730 WP 011213805.1	.MDKN.....SPPLTFHYQGINKAGQK.MEGDIQARSLATAKADLRKQGIVTNKVVKRKRP LFDR....KNKKITQA	67
NTDB id	1198	PSJM300 03950 AFN76868.1	.MAQK.....AIKNSVFTEGLDRQGAK.IKGELSGV SPALVKAQLRKQGINPQKVRKKSISIFS.....AGKKIKPM	66
NTDB id	1016	ACIAD RS01680 WP 004920476.1	MAAKK.....TQVM PV FAYEGVD RKGIK.LKGELPARNMALAKVT LRKQGITTRTIREKRKN IFEG...LLKKVKPTL	69
NTDB id	998693	ABDZ21 RS01810 WP 000279218.1	MAVKK.....AQMMPT FAYEGVD RKGVK.IKGELPAKNMALAKVT LRKQGVTVTRIREKRKN ILEG...LFKKKVTTL	69
NTDB id	1059	ABD1 RS01610 WP 000279215.1	MAVKK.....AQMMPT FAYEGVD RKGVK.IKGELPAKNMALAKVT LRKQGVTVRNIREKRKN ILEG...LFKKKVTTL	69
consensus			*** * * * **** * * * !***** ** **** * *	

NTDB id 1029 TT RS02230 WP 011228203.1	DLAIFSRQLATMIGAGLTLLQALAILERQTENRKFREILKQVRTDVEGGMAFSEALS KH.KIFSRLYVNLRAGETSGGL	144
NTDB id 1169 A1552VC RS11075 WP 000648511.1	DITILTTRQLATMTTTGVPIVQAALKLVGDNHRKAEMKSILAQITKSVEAGTPLSKAMRTASAHFDTLTVDLV E TGEMSGNL	148
NTDB id 1402 DSB67 RS12670 WP 010643257.1	DITIFTFRQLIATMLTMGTGPVIQVALKLVSFNHKKAEMKSILMSVTTRAWEAGTPMSKAMRSTASTHFDPPLYTDL I A T GEGSQNL	147
NTDB id 1112 NGFG RS09215 WP 003689811.1	DITVFTRQLSTMIAKGAPLMQAFAEVARHGHNPSMTEMLEIRGGVEQGSSLSRAFSNHPKFYDRFYCNLVAAGETGGVL	150
NTDB id 1113 AAA85695.1 219..1451()	DITVFTRQLSTMINAGLPMQAFAEIVARHGHNPSMTEMLEIRGGVEQGSSLSRAFSNHHPKYDFRYCNLVAAGETGGVL	150
NTDB id 1252 GC085 RS07730 WP 011213805.1	DITVFSRQLATMI S GIPLVQAADFIVAQQSNKR LKD LTIETIK HDI ETGLTLAE S LIIKHPLY FNELFC NLVDAGEKSGSL	147
NTDB id 1198 PSJM300 O3950 AFN76868.1	DIALFTFRQMATTMMKAGVPLLQSFDIIEGFDDNPNNMRKLVDDLKQEVAAGNSSFASSLRKKKPQYFDDLYCNI VDSGEQSGS L	146
NTDB id 1016 ACIAD RS01680 WP 004920476.1	DIAFITFRQLATMMKAGVPLVQAFAEIVAEGLENPAMRDVVLGAKNEVEGGNTFAGALRKYPQYFDNL FC SLIESGEQSGSL	149
NTDB id 998693 ABDZ21 RS01810 WP 000279218.1	DITIFTFRQLATMMKAGVPLVGCFEIVAEGLEPNAMREVVLIKGEVEGGSTFASALRKYPQHFDNL FC SLVESGEQSGAL	149
NTDB id 1059 ABD1 RS01610 WP 000279215.1	DITIFTFRQLATMMKAGVPLVQCFEIVAEGLEPNAMREVVLGIKEVEGGSTFASALRKYPQHFDNL FC SLVESGEQSGAL	149
consensus	!*****!!**!*!!!!****!******!*** ***** * ** ****!**** ***** * !** * ****!*****!!**!	

NTDB id	1029	TT RS02230 WP 011228203.1	D L I L D R L A S F L E K E L E L R G K I R S A M T Y P V I V F V F A V G V A Y F L L T G I V P Q F A Q I L T D L G S E L P L L T R F L I A V S D L L R A A T L	224
NTDB id	1169	A1552VC RS11075 WP 000648511.1	P E V F E R L A T Y R E K S E Q L R A K V I K A L I Y P S M V V I A L G V S Y L M L T M V I P E F E S M F K G F G A E L P W F T Q Q V L K L S H W V Q A Y S L	228
NTDB id	1402	DSB67 RS12670 WP 010643257.1	S Q V F E R L A T Y R E K S E Q L R A K V I K A L I Y P A M V V L A L G V S Y L M L T R V I P E F E K M F T G F G A D L P A F T Q M V N L S A W T Q N W G P	227
NTDB id	1112	NGFG RS09215 WP 003689811.1	E S L L D K L A I Y K E K T Q A I R K K V K T A L T Y P V S V I A V A I G L V F V M M I F L V P A F K E V Y A N M G A E L P L I T Q T V M D M S D F F V S Y G W	230
NTDB id	1113	AAA85695.1 219..1451()	E S L L D K L A I Y K E K T Q A I R K K V K T A L T Y P V S V I A V A I G L V F V M M I F L V P A F K E V Y A N M G A E L P L I T Q T V M D M S D F F V S Y G W	230
NTDB id	1252	GCO85 RS07730 WP 011213805.1	D I M L D K V A T Y K E K I E I I K K K I K K A L T Y P I A V M V V A L L V T A G L L I Y V V P Q F E S L F K G F G A D L P A M T R A V I T M S E F M Q A Y W Y	227
NTDB id	1198	PSJM300 O3950 AFN76868.1	E T L L D R V A T Y K E K T E A L K A K I K K A M N Y P I A V V L V A V I V T A I L L I K V V P Q F Q D V F A N F G A E L P A F T L M V I G L S E A L Q A W W Y	226
NTDB id	1016	ACIAD RS01680 WP 004920476.1	E I M L D R V A V Y K E K S E V L K Q K I K K A M K Y P A T V I V V A I V V T I I L M V K V V P V F K D L F T S F G A D L P A F T Q L V V N M S N W M Q D Y W F	229
NTDB id	998693	ABDZ21 RS01810 WP 000279218.1	E T M L D R V A I Y K E K S E L L K Q K I K K A M K Y P A T V I V V A I V V T I I L M V K V V P V F Q D L F A S F G A D L P A F T Q M V V N M S K W M Q E Y W F	229
NTDB id	1059	ABD1 RS01610 WP 000279215.1	E T M L D R V A I Y K E K S E L L K Q K I K K A M K Y P A T V I V V A I V V T I I L M V K V V P V F Q D L F A S F G A D L P A F T Q M V V N M S K W M Q E Y W F	229
consensus			* * * * * ! * * ! ! * * * * ! * * * * ! * ! * ! * ! * * ! * * * * * * * * ! * ! * * * * * ! * * * * ! * * ! * * ! * * ! * * ! * * * * *	

NTDB id	1029	TT RS02230 WP 011228203.1	P L L L L A V A L F F A Y R W . Y Y G T P Q G R R V I D R L K L R L P V F G N L N R K T A V A R F S R T L A L L L S S G V N I V E A L D I T K G T A G N S V V E	303
NTDB id	1169	A1552VC RS11075 WP 000648511.1	W A F I A I A A A T F G L K A L R K N S F Q I R L K T S R L G L K F P I T I G N V L A K A S I A K F S R T L A T S F A A G I P I L A S L K T T A K T S G N V H F E	308
NTDB id	1402	DSB67 RS12670 WP 010643257.1	F I G L S F V S L L I S G K I M S Q R S D S F R L L A A R S S L R V P I L G P V L S K A A I A K F S R T L A T S F S A G I P I L T A L K T T S K T S G N M H Y Q	307
NTDB id	1112	NFGF RS09215 WP 003689811.1	M V L I A L G F A I Y G F L K L K A R S I K I Q R R M D A I L R M P I F G D I V R K G T I A R W G R T T A T L F A A G V P L V D V L D S T A G A A G N L I Y E	310
NTDB id	1113	AAA85695.1 219..1451()	M V L I A L G F A I Y R F L K L K A R S I K I Q R R M D A I L R M P I F G D I V R K G T I A R W G R T T A T L F A A G V P L V D V L D S T A G A A G N L I Y E	310
NTDB id	1252	GCO85 RS07730 WP 011213805.1	I I F G A L G G V V Y S F F Y A K N H S L E F A Q T I D R V M L K L P V I G P I L E K A A I A R F A R T L S I T F A A G L P L V E A L K S V A G A T G N I I Y A	307
NTDB id	1198	PSJM300 03950 AFN76868.1	V V L A C F V G A A Y A F K Q A H T R S E K F R N W F D R L M L K V P V V G D I L Y K S S V A R F A R T L S T T F A A G V P L V D A L D S V A G A T G N V V F R	306
NTDB id	1016	ACTAD RS01680 WP 004920476.1	I L I I V I G A A T A G F L E A R K R S K R F R D Q L D R L V L R L P I V G D L V Y K A I I A R Y S R T L A T T F A A G V P L I D A L A S T A G A T N N T V Y E	309
NTDB id	998693	ABDZ21 RS01810 WP 000279218.1	I M I I A I G A V I A A F L E A K R S K K F R D G L D K L A L K L P I F G D L V Y K A I I A R Y S R T L A T T F A A G V P L I D A L E S T A G A T N N V Y E	309
NTDB id	1059	ABD1 RS01610 WP 000279215.1	I M I I A I G A V I A A F L E A K R S K K F R D G L D K L A L K L P I F G D L V Y K A I I A R Y S R T L A T T F A A G V P L I D A L E S T A G A T N N V Y E	309
consensus			* * * * *	

NTDB id 1029	TT RS02230 WP 011228203.1	EIVEAAK LK L I Q Q G D P L N L T L A Q H P F V F P P M V S S M V A I G E E T G A L D T M L S K V A D F Y E R E V D E A V A S L T A A I E P L M I I F L G V	383
NTDB id 1169	A1552VC RS11075 WP 000648511.1	T A I N E V Y R D T A A G M P M Y I A M R . N T E A F P E M V L Q M V M I G E E S G Q L D D M L N K V A T I Y E F E V D N T V D N L G K I L E P L I I V F L G T	387
NTDB id 1402	DSB67 RS12670 WP 010643257.1	L A T E E V Y R D T A A G M P M Y I A M R . H C H V F P E L V L Q M V M I G E E S G R L D D M L N K T A A I Y E F E V D N T V D N L S K I L E P L I I V F L G V	386
NTDB id 1112	NGFG RS09215 WP 003689811.1	E A T R E I R T R V I Q G L S M T S G M R . A T E L F P N M M L Q M S S I G E E S G L D D M L N K A A E F Y E D E V D N A V G R L S A M M E P T I I I V I L G L	389
NTDB id 1113	AAA85695.1 219..1451()	E A T R E I R T R V I Q G L S M T S G M R . A T E L F P N M M L Q M S S I G E E S G L D D M L N K A A E F Y E D E V D N A V G W L S A M M E P T I I I L I L G L	389
NTDB id 1252	GC085 RS07730 WP 011213805.1	K A T D K I R E E V A T G Q Q L F I A M E . N T H L F P N M V L Q M V A I G E E S G A L E K M L S K V A D F Y E E E V N N A V D A L S S L L E P I I M S I L G I	386
NTDB id 1198	PSJM300 03950 AFN76868.1	S A I N K I K S D V S S G M Q L N F S M R . T T G T F P S M A V Q M T A I G E E S G A L D E M L S K V A T F Y E D E V D N M V D G L T A L M E P M I M A V L G V	385
NTDB id 1016	ACIAD RS01680 WP 004920476.1	Q A V L K I R E D V S T G Q Q L N F A M R . V S N R F P T M A I Q M V A I G E E S G A L D E M L D K V A N Y Y E S E V D H A V D G L T S M M E P L I M A I L G I	388
NTDB id 998693	ABDZ21 RS01810 WP 000279218.1	K A V M K I R E D V A T G Q Q L Q F A M R . V S N R F P S M A I Q M V A I G E E S G A L D S M L D K V A T Y Y E N E V D N A V D G L T S M M E P L I M A I L G V	388
NTDB id 1059	ABD1 RS01610 WP 000279215.1	K A V M K I R E D V A T G Q Q L Q F A M R . I S N R F P S M A I Q M V A I G E E S G A L D S M L D K V A T Y Y E N E V D N A V D G L T S M M E P L I M A I L G V	388
consensus		* * * * *	

NTDB id 1029	TT RS02230 WP 011228203.1	IVGMIIVAGMFLPLFKIIGT	LSVQ	406
NTDB id 1169	A1552VC RS11075 WP 000648511.1	VVGGLVVAMYLPIFNLMSV	LG..	408
NTDB id 1402	DSB67 RS12670 WP 010643257.1	VVGGLVTAMYLPIFNLMSV	LG..	407
NTDB id 1112	NGFG RS09215 WP 003689811.1	VIGTLLVAMYLPLFNLGNV	VVA..	410
NTDB id 1113	AAA85695.1 219..1451()	VIGTLLVAMYLPLFNLGNV	VVA*..	410
NTDB id 1252	GCO85 RS07730 WP 011213805.1	LVGGLVVAMYLPIFKLGS	AV...	406
NTDB id 1198	PSJM300 O3950 AFN76868.1	LVGGLTIAMYLPIFQMG	SVV...	405
NTDB id 1016	ACIAD RS01680 WP 004920476.1	LVGGLVVIAMYLPIFQMG	SVV...	408
NTDB id 998693	ABDZ21 RS01810 WP 000279218.1	LVGGLVIAMYLPIFQMG	SVV...	408
NTDB id 1059	ABD1 RS01610 WP 000279215.1	LVGGLVVIAMYLPIFQMG	SVV...	408
consensus		***!*****!***!***!*****		

-  non conserved
-  similar
-  >50% conserved