



logo

		S	A	R	G	S	T	S	H	K	L	C	E	F	L	V	S	H	G	V	I	E	S	R	L	V	A	L	S	Q	R	T	G	S	L	G	T	L	Y	S	S	R	A	T	E	S	L	Y	E	X	L	A	E	Q	S	G	T	F	L	E	S	T	E	G	M	P	S	E	E	X	
NTDB id 1227	CJJ81176	RS07050	WP 011812800.1	.....	0																																																																		
NTDB id 1384	A4U84	RS08525	WP 010787006.1	.....	0																																																																		
NTDB id 1355	HI 0298	AAC21962.1	.....	.....	0																																																																		
NTDB id 1366	NTHI	RS01950	WP 011271972.1	.....	0																																																																		
NTDB id 1410	SGL	RS13950	WP 010873519.1	.....	0																																																																		
NTDB id 1028	TT	RS08215	WP 011173991.1	SGEGQKDLKLGELLQKQGWISREALEEALVEQEKTGDLLGRILV.RKGLPEEALYRALAEQKGLEFLESTEGIVPDPSAA	237																																																																		
NTDB id 1306	DR	RS10060	WP 027479822.1	SDAGRTGGKLGRLITHGYITDAQLQVALDAQQTGEALGATLISQRAITEDQLYEVLAEQEGTTFLPNPSGFHPGEEVL	237																																																																		
NTDB id 1168	A1552VC	RS11070	WP 000957200.1	.....	0																																																																		
NTDB id 1293	VP	RS12240	WP 005479695.1	.....	0																																																																		
NTDB id 1401	DSB67	RS12665	WP 010643259.1	.....	0																																																																		
NTDB id 235808	CEJ98	RS02600	WP 036052882.1	.....	0																																																																		
NTDB id 1110	NGFG	RS09235	WP 003689817.1	.....	0																																																																		
NTDB id 1251	GCO85	RS07725	WP 011946523.1	.....	0																																																																		
NTDB id 1018	ACIAD	RS01685	WP 004920473.1	.....	0																																																																		
NTDB id 1058	ABD1	RS01615	WP 001274986.1	.....	0																																																																		
consensus				.....	0																																																																		

logo

		S	E	L	R	D	A	L	R	T	A	V	P	Y	S	E	S	S	E	V	E	V	T	S	D	P	R	H	E	R	Y	S	L	T	R	P	X	S	H	L	T	E	P	S	T	E	E	L	E	S	Y	P	Q	R	L	G	E	X	L	V	Q	E	G	L	S	R
NTDB id 1227	CJJ81176	RS07050	WP 011812800.1	.....	0																																																													
NTDB id 1384	A4U84	RS08525	WP 010787006.1	.....	0																																																													
NTDB id 1355	HI 0298	AAC21962.1	.....	.....	0																																																													
NTDB id 1366	NTHI	RS01950	WP 011271972.1	.....	0																																																													
NTDB id 1410	SGL	RS13950	WP 010873519.1	.....	0																																																													
NTDB id 1028	TT	RS08215	WP 011173991.1	LLLLRSDALRYGAVPIGFQNGEVEVVLSDPRHKEAVAQLLNRPARFYALALPQAWHEELFRRAYPQKNRLGEVLVQEGKLSR	317																																																													
NTDB id 1306	DR	RS10060	WP 027479822.1	GSMLRADALRLLAVPVDETEQQVTVLTS DPRKRPDIDALIGRPVQLMLTRPRDIERLIEQFYPQRGRGLGEQLVQEGTLRSR	317																																																													
NTDB id 1168	A1552VC	RS11070	WP 000957200.1	.....	0																																																													
NTDB id 1293	VP	RS12240	WP 005479695.1	.....	0																																																													
NTDB id 1401	DSB67	RS12665	WP 010643259.1	.....	0																																																													
NTDB id 235808	CEJ98	RS02600	WP 036052882.1	.....	0																																																													
NTDB id 1110	NGFG	RS09235	WP 003689817.1	.....	0																																																													
NTDB id 1251	GCO85	RS07725	WP 011946523.1	.....	0																																																													
NTDB id 1018	ACIAD	RS01685	WP 004920473.1	.....	0																																																													
NTDB id 1058	ABD1	RS01615	WP 001274986.1	.....	0																																																													
consensus				.....	0																																																													

logo

NTDB id 1227 CJJ81176 RS07050 WP 011812800.1	.....MESRM.....DKIFQAY...IDNEISLDEICTKFNITSWDFFKK	37
NTDB id 1384 A4U84 RS08525 WP 010787006.1	.....MSQY.....TI.....CEQ.....	9
NTDB id 1355 HI 0298 AAC21962.1	.....MTSY.....ALHTQR.VTA.....	14
NTDB id 1366 NTHI RS01950 WP 011271972.1	.....MTSY.....ALHTQR.VTA.....	14
NTDB id 1410 SGL RS13950 WP 010873519.1	SSSSKKSRAVALRNYFSPFGNKIVAGGHVDAEQLRQAVVQVKKTGRSPEEIKAVTGREISPELIRQYKKNQ...L.FEL	79
NTDB id 1028 TT RS08215 WP 011173991.1	EALKEALEVQKGLPRAKPLGEIVLVLGLARPEDVEEALQKQRRGGGRIEDTLV..QSGKLRPEALAAQA.....V	384
NTDB id 1306 DR RS10060 WP 027479822.1	DQLREALQVQAREGKVKPLGEVITELGFASPDEVDLALQKQNVGGGRIEDTLV..QSGKLSPEMLARS.....L	384
NTDB id 1168 A1552VC RS11070 WP 000957200.1	.....MLTNLVAIRQAELISATQEQAVVTQVSASGTSVPEALL..ELSIFHAQELTEQ.....L	53
NTDB id 1293 VP RS12240 WP 005479695.1	.....MHSNLSTILRQKGLLTFQSQEESLIEQVKASGISMPEALL..SSGFFTSSELAEH.....L	53
NTDB id 1401 DSB67 RS12665 WP 010643259.1	.....MLTNLSTVLRQAGILTFQSQEESLIEQVKASGISMPEALL..SSGFFQSHELTEH.....L	53
NTDB id 235808 CEJ98 RS02600 WP 036052882.1	.....MSVGLLRITVQNNQVVTVEQAEHY..NESQAGKEVLPMTF..SDGVISPKSAAL.....I	0
NTDB id 1110 NGFG RS09235 WP 003689817.1	.....MALATEEYRLQGIGQLVLEKLLDKTKAIELHKLAAAEEKISLQYIV..KNKILSAEQIALT.....A	52
NTDB id 1251 GCO85 RS07725 WP 011946523.1	.....MSAFTTPPKFSGFIRRLVEEGYVNAQNMQQALTEKAKKFKQDVPYLI..DNFSISPLTIAEI.....I	61
NTDB id 1018 ACIAD RS01685 WP 004920473.1	.....MSALHTSPKFTGFFRRRLVEEKHVSAAATMQTALDAAKRAKQDTVAYLI..EEVHISPSLLAET.....I	61
NTDB id 1058 ABD1 RS01615 WP 001274986.1	.....MSALHTSPKFTGFFRRRLVEEKHVSAAATMQTALDAAKRAKQDTVAYLI..EEVHISPSLLAET.....I	61
consensus	.....*.....*.....*.....*.....*.....*	

logo

NTDB id 1227 CJJ81176 RS07050 WP 011812800.1	ANFCNLHFVLDLED.....NDFIYEGIPFSLLKFKFLLKNND...GFMIRSKPCSELLLEQVKTFMI...CEK	102
NTDB id 1384 A4U84 RS08525 WP 010787006.1	.....QTERIFDISPS...RWQKNCEEKQLLLRYLAVPVQETE...HKLWLAVDENNLTAEIFAFMTH....KQ	70
NTDB id 1355 HI 0298 AAC21962.1	.....KNGEVFTISPD...LWERNQQQQSLLRYFALPKKEEN...NRLWLGVDLSLNLISACETIAFITG....KP	75
NTDB id 1366 NTHI RS01950 WP 011271972.1	.....QNGEIFTISPD...LWERNQQQQSLLRYFALPKKEEN...NRLWLGVDLSLNLISACETIAFITG....KP	75
NTDB id 1410 SGL RS13950 WP 010873519.1	KVLYGVDSVDPEVAPIATQQMAELIGRFFPLDTCRRFKFLPLAQQEGDPPSVLWAMVDPDNLAQDELNRILRVKGF..E	157
NTDB id 1028 TT RS08215 WP 011173991.1	ATQLGYPYVDPEEDPPD....PGAPLLLPEDLCCRYPGVFPHRLEG...NRLVLLMKDPRNLLALDDVRLALKRKLNYE	456
NTDB id 1306 DR RS10060 WP 027479822.1	AAQLGYEFLDPIQNPPD....PKVALMIPEATARRVVVVPVRLQG...NSLVVAMKDPNVFALDDIKLIIG....KE	451
NTDB id 1168 A1552VC RS11070 WP 000957200.1	SHIFGLPETDLRSYDYA....NLCQQGLGRELITRYDALPIAKQG...NLLLAVSDPTLLQAEFEFRFATG....LQ	120
NTDB id 1293 VP RS12240 WP 005479695.1	SSIFGLSQPELSQYEYA....SLCQQGLGRELITRHNALPIHRT...STLLLAVADPTNQQAEDDFRFATG....LQ	120
NTDB id 1401 DSB67 RS12665 WP 010643259.1	SSVFGLSCTSLNQYEYA....SLCQTLGLRDLITRHNALPIHRTS...STLLLAVADPTNLQAEDDFRFATG....LQ	120
NTDB id 235808 CEJ98 RS02600 WP 036052882.1	.....RVLMSGVLTVEEQMVEFHCVVFRRG...DKVFFAVSDPTQMPQIQKTVSAAG....IA	0
NTDB id 1110 NGFG RS09235 WP 003689817.1	ARVFSYSILDLRHYPRH....RVLMSGVLTVEEQMVEFHCVVFRRG...DKVFFAVSDPTQMPQIQKTVSAAG....IA	119
NTDB id 1251 GCO85 RS07725 WP 011946523.1	AQNFQVPMLDINCIDVG....TIPVNLVNEKILKRHAMVPLFSRG...TNLYLATDDPSKQASLKEIQFHTG....LN	128
NTDB id 1018 ACIAD RS01685 WP 004920473.1	SLEFCEPLDLGVFDPA....LFLKDKIDEKLIQKVRIMPVHRG...HVLYVATSNPTNIEAMDAIFENSK....LK	128
NTDB id 1058 ABD1 RS01615 WP 001274986.1	SAEFAEYPFDLDVYDTS....QIPKDLVDQKLLKHRILPLIQRG...QILYVATSNPSNTEAIDAIFENSK....LL	128
consensus	.....*.....*.....*.....**.....**.....*.....*.....*.....*	





logo

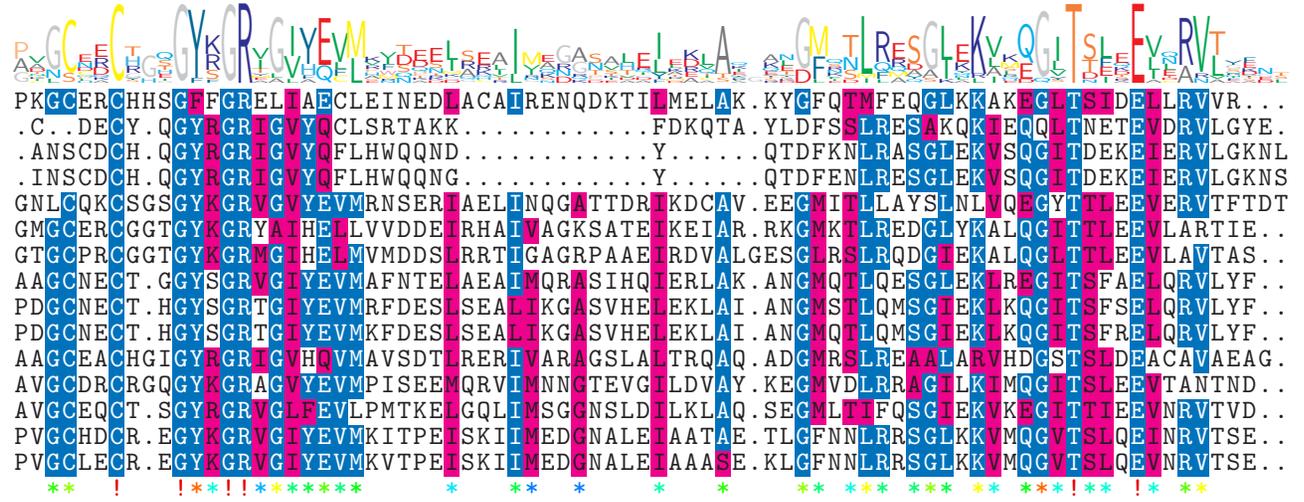
NTDB id 1227 CJJ81176 RS07050 WP 011812800.1  
 NTDB id 1384 A4U84 RS08525 WP 010787006.1  
 NTDB id 1355 HI 0298 AAC21962.1  
 NTDB id 1366 NTHI RS01950 WP 011271972.1  
 NTDB id 1410 SGL RS13950 WP 010873519.1  
 NTDB id 1028 TT RS08215 WP 011173991.1  
 NTDB id 1306 DR RS10060 WP 027479822.1  
 NTDB id 1168 A1552VC RS11070 WP 000957200.1  
 NTDB id 1293 VP RS12240 WP 005479695.1  
 NTDB id 1401 DSB67 RS12665 WP 010643259.1  
 NTDB id 235808 CEJ98 RS02600 WP 036052882.1  
 NTDB id 1110 NGFG RS09235 WP 003689817.1  
 NTDB id 1251 GCO85 RS07725 WP 011946523.1  
 NTDB id 1018 ACIAD RS01685 WP 004920473.1  
 NTDB id 1058 ABD1 RS01615 WP 001274986.1  
 consensus



STIDRLLDMQAQKSYLIASALSLVIAQRLVRKLCPCWKQKSKKHVIE.....FEGEFFE 443  
 SAVERLLQLGTYEYEQNSLLLVIAQRLVRKLCCKRQGVG..... 399  
 SAISRLQLLGIQQYEIKNSLLLVIAQRLVRKLCCKGGNL..... 404  
 SAISRLQLLGIQQHEIENSLLLVIAQRLVRKLCCKGGNL..... 404  
 GATARLDEMGEVPEFMVSGSLGVLQAQLMRKVCTECRVIAIY.HPSKEELSRFGLSASGDEVVTFYKANSLSLPDEIHLARQK 554  
 QAITRLLDEMGEVPEFNISAALIGVLSQRLVRRVCEHCKVEV.KPDPETLRRLLGLSEAFIQ..G.....ARLYK 812  
 GAVTRLEEMGTIENFNISAAMGVLAQRLVRRVCECKQPT.NADPEVLRRLGISERDIR..G.....ANLMR 809  
 ETVIRLANMGVEPFNLASSLSLIAQRLARRLCKHCKIAV.RPSALLQSQFAFQPNFEL.....YEAN 486  
 ETIIRLSNMGVESFNASSLSLIAQRLARRLCKPYCKQPQ.EHTVQL.QHLGIQTTNI.....FRAN 485  
 ETVIRLSNMGVESFNASSLSLIAQRLARRLCKPYCKQPQ.EPNSQL.QHIGIANTEQI.....FQAN 485  
 GATARLLDIGVAPYHIAAALRIVTAQRLVRRLCVTCRRPS.RESIPTLLAAGLDPTRLED.G.....WRPFV 308  
 ATLSRMLNMGVAPFNIASSVSLIAQRLRRLLCSSCKQEVERPSASALKEVCFTEDEFLAK.D.....WKLYR 481  
 ETLNRLVMGTPTFNIASSVTLIAQRLARRLCKNQCKAVRDDFTNQGLIELGFKEADLV..N.....LKLYK 498  
 ETITRRLRMGVASFNIATSVNLVIAQRLARRLCSQCKRPI.QVPERSLLEMCFTPEDLAQPE.....FQIFE 494  
 ETITRRLRMGVPSFNIATSVNLVIAQRLARRLCSQCKIPA.DIPKQSLEMGFTEQLAHPD.....FRVFQ 494

logo

NTDB id 1227 CJJ81176 RS07050 WP 011812800.1  
 NTDB id 1384 A4U84 RS08525 WP 010787006.1  
 NTDB id 1355 HI 0298 AAC21962.1  
 NTDB id 1366 NTHI RS01950 WP 011271972.1  
 NTDB id 1410 SGL RS13950 WP 010873519.1  
 NTDB id 1028 TT RS08215 WP 011173991.1  
 NTDB id 1306 DR RS10060 WP 027479822.1  
 NTDB id 1168 A1552VC RS11070 WP 000957200.1  
 NTDB id 1293 VP RS12240 WP 005479695.1  
 NTDB id 1401 DSB67 RS12665 WP 010643259.1  
 NTDB id 235808 CEJ98 RS02600 WP 036052882.1  
 NTDB id 1110 NGFG RS09235 WP 003689817.1  
 NTDB id 1251 GCO85 RS07725 WP 011946523.1  
 NTDB id 1018 ACIAD RS01685 WP 004920473.1  
 NTDB id 1058 ABD1 RS01615 WP 001274986.1  
 consensus



PKGCERCCHHSCFFGRELIACELEINEDIACATRENQDKTIIMELAK.KYGFQTMFEQGIKKAKECITSIDEILRVVR... 519  
 .C..DECY.QGYRGRIGVYQCLSRITAKK.....FDKQTA.YLDFSSLRRESAKKQTEQQITNETEVDRVLGYE.. 461  
 .ANSCDCH.QGYRGRIGVYQFLHWQQND.....Y.....QTDfKNLRASGLEKVSQGITDEKEIERVLGKNL 464  
 .INSCDCH.QGYRGRIGVYQFLHWQQNG.....Y.....QTDfENLRRESGLEKVSQGITDEKEIERVLGKNS 464  
 GNLQCKCSGSGYKGRVGVYEVMRNSERIAELINQGAITDRIKDCAV.EEGMITLLAYSLLNLVQECYITLIEEVERVFTDT 633  
 GMGCERCGGTYKGRYATHEILLVVDDERTHAIWAGKSATEIKEIAR.RKCMKTLREDGLYKALQCITLIEEVLARTIE.. 889  
 GTGCPRCGGTYKGRMGITHEILVMDDSLRRTIGAGRPAAEIRDVALGESGRSLRQDCTEKALQCITLIEEVLAVTAS.. 887  
 AAGCONNECT.GYSGRVCYIEVMAFNTELAEAIMQRASIHQIERLAK.ANCMQLQESGLEKIRECITSFAELQRVLYF.. 562  
 PDGCONNECT.HGYSGRTCYIEVMRFDESISEALIKGASVHELKLAIAI.ANCMSTLQMSCTEKLKQCITSFSELQRVLYF.. 561  
 PDGCONNECT.HGYSGRTCYIEVMKFDSEISEALIKGASVHELKLAIAI.ANCMQLQMSCTEKLKQCITSFRELQRVLYF.. 561  
 AAGCEACHGIGYRGRIGVHGVMAVSDTLRERIVARAGSLALTRQAQ.ADCMRSRLREAAARVHDGSTSLEDEACAVAEAG.. 386  
 AVGCDCRCRGQYKGRAGVYEVMPISEEMQRVIMNNGTEVGLDVAAY.KEGMVDLRRAGILKIMQCITSLEEVANTAND.. 558  
 AVGCEQCT.SGYRGRVGLFEVLPMTKELGQLIMSGNSLDLKLAAQ.SEGMLTIFQSGIEKVKEGITLIEEVRVTVD.. 574  
 PVGCCHDCR.EGYKGRVGVYEVMKITPEITSKIIMEDGNALEIAATAE.TLGFNNLRRSGLKVKVMQCVTSLQEVNRTSE.. 570  
 PVGCLECR.EGYKGRVGVYEVMKVTPETSKIIMEDGNALEIAAAASE.KLGFNNLRRSGLKVKVMQCVTSLQEVNRTSE.. 570

logo

	GLESEMRAKRKKSALTCRTCAAELQQEWLDCPYCMTSRFS	
NTDB id 1227 CJJ81176 RS07050 WP 011812800.1	.....	519
NTDB id 1384 A4U84 RS08525 WP 010787006.1	.....	461
NTDB id 1355 HI 0298 AAC21962.1	.....	464
NTDB id 1366 NTHI RS01950 WP 011271972.1	.....	464
NTDB id 1410 SGL RS13950 WP 010873519.1	GLESEMRAKRKKSALTCRTCAAELQQEWLDCPYCMTSRFS	672
NTDB id 1028 TT RS08215 WP 011173991.1	.....	889
NTDB id 1306 DR RS10060 WP 027479822.1	.....	887
NTDB id 1168 A1552VC RS11070 WP 000957200.1	.....	562
NTDB id 1293 VP RS12240 WP 005479695.1	.....	561
NTDB id 1401 DSB67 RS12665 WP 010643259.1	.....	561
NTDB id 235808 CEJ98 RS02600 WP 036052882.1	.....	386
NTDB id 1110 NGFG RS09235 WP 003689817.1	.....	558
NTDB id 1251 GCO85 RS07725 WP 011946523.1	.....	574
NTDB id 1018 ACIAD RS01685 WP 004920473.1	.....	570
NTDB id 1058 ABD1 RS01615 WP 001274986.1	.....	570
consensus		

- non conserved
- similar
- $\geq 50\%$  conserved