

logo

NTDB id 1028 TT RS08215 WP 011173991.1	MSVLTIGDKRLGAALLDAGLLTDEELQRALERHREVGGSLAEVLVDMGLLSERRIAQTIEDRFGIPLVELHRVEIPPKVK	80
NTDB id 1366 NTHI RS01950 WP 011271972.1		0
NTDB id 1355 HI 0298 AAC21962.1		0
NTDB id 1384 A4U84 RS08525 WP 010787006.1		0
NTDB id 1468 ASU2 RS05090 WP 014991734.1		0
NTDB id 107684 A8V32 RS00560 WP 001025184.1		0
NTDB id 1436 BW25113 RS00530 WP 001025145.1		0
NTDB id 1168 A1552VC RS11070 WP 000957200.1		0
NTDB id 1401 DSB67 RS12665 WP 010643259.1		0
NTDB id 1293 VP RS12240 WP 005479695.1		0
NTDB id 1110 NGFG RS09235 WP 003689817.1		0
NTDB id 1251 GC085 RS07725 WP 011946523.1		0
NTDB id 1018 ACIAD RS01685 WP 004920473.1		0
NTDB id 1058 ABD1 RS01615 WP 001274986.1		0
consensus		

logo

NTDB id 1028 TT RS08215 WP 011173991.1	ALLPAEKAKELKAIPFALDEEAGVVRVAFNLPLDLSLEEVEDLTGLVVEPYQTTKSAFLYALAKHYPELGLPVPPPPSG	160
NTDB id 1366 NTHI RS01950 WP 011271972.1		0
NTDB id 1355 HI 0298 AAC21962.1		0
NTDB id 1384 A4U84 RS08525 WP 010787006.1		0
NTDB id 1468 ASU2 RS05090 WP 014991734.1		0
NTDB id 107684 A8V32 RS00560 WP 001025184.1		0
NTDB id 1436 BW25113 RS00530 WP 001025145.1		0
NTDB id 1168 A1552VC RS11070 WP 000957200.1		0
NTDB id 1401 DSB67 RS12665 WP 010643259.1		0
NTDB id 1293 VP RS12240 WP 005479695.1		0
NTDB id 1110 NGFG RS09235 WP 003689817.1		0
NTDB id 1251 GC085 RS07725 WP 011946523.1		0
NTDB id 1018 ACIAD RS01685 WP 004920473.1		0
NTDB id 1058 ABD1 RS01615 WP 001274986.1		0
consensus		

logo

NTDB id 1028 TT RS08215 WP 011173991.1	EGQKDLKLGELLQKGWISREALEEALVEQEKTGDLLGRILVRKGLPEEALYRALAEQKGLEFLESTEGIVPDPSAALLL	240
NTDB id 1366 NTHI RS01950 WP 011271972.1		0
NTDB id 1355 HI 0298 AAC21962.1		0
NTDB id 1384 A4U84 RS08525 WP 010787006.1		0
NTDB id 1468 ASU2 RS05090 WP 014991734.1		0
NTDB id 107684 A8V32 RS00560 WP 001025184.1		0
NTDB id 1436 BW25113 RS00530 WP 001025145.1		0
NTDB id 1168 A1552VC RS11070 WP 000957200.1		0
NTDB id 1401 DSB67 RS12665 WP 010643259.1		0
NTDB id 1293 VP RS12240 WP 005479695.1		0
NTDB id 1110 NGFG RS09235 WP 003689817.1		0
NTDB id 1251 GC085 RS07725 WP 011946523.1		0
NTDB id 1018 ACIAD RS01685 WP 004920473.1		0
NTDB id 1058 ABD1 RS01615 WP 001274986.1		0
consensus		

logo

NTDB id 1028	TT RS08215 WP 011173991.1	LRSDALRYGAVPIGFQNGEVEVLSDPRIKEAVAQLLNRPARFYALALPQAWHEELFRRAYPQKNRLGEVLVQEGKLSREAL	320
NTDB id 1366	NTHI RS01950 WP 011271972.1		0
NTDB id 1355	HI 0298 AAC21962.1		0
NTDB id 1384	A4U84 RS08525 WP 010787006.1		0
NTDB id 1468	ASU2 RS05090 WP 014991734.1		0
NTDB id 107684	A8V32 RS00560 WP 001025184.1		0
NTDB id 1436	BW25113 RS00530 WP 001025145.1		0
NTDB id 1168	A1552VC RS11070 WP 000957200.1		0
NTDB id 1401	DSB67 RS12665 WP 010643259.1		0
NTDB id 1293	VP RS12240 WP 005479695.1		0
NTDB id 1110	NGFG RS09235 WP 003689817.1		0
NTDB id 1251	GC085 RS07725 WP 011946523.1		0
NTDB id 1018	ACIAD RS01685 WP 004920473.1		0
NTDB id 1058	ABD1 RS01615 WP 001274986.1		0
consensus			

logo

NTDB id 1028	TT RS08215 WP 011173991.1	KEALEVQKGLPRAKPLGEIIVELGLARPEDVEEALQKQRRGGGRLEDTLVQSGKLRPEALIAQAVATQLGYPYVDPEEDPP	400
NTDB id 1366	NTHI RS01950 WP 011271972.1	MTSY....ALLHTQRVTAQNGEIFTI.....SP	24
NTDB id 1355	HI 0298 AAC21962.1	MTSY....ALLHTQRVTAQNGEIFTI.....SP	24
NTDB id 1384	A4U84 RS08525 WP 010787006.1	MSQY....T....ICEQQTERIFDI.....SP	19
NTDB id 1468	ASU2 RS05090 WP 014991734.1	MQY....S....VCDMNSQQVFDI.....SE	18
NTDB id 107684	A8V32 RS00560 WP 001025184.1	MNIPQL.....	6
NTDB id 1436	BW25113 RS00530 WP 001025145.1	MNIPQL.....	6
NTDB id 1168	A1552VC RS11070 WP 000957200.1	MLTNLVAIIRQAELISATQEQAVVTQVSASGTSVPEALLLELSIFHAQELTEQLSHIFGLPETDLSRYDY	69
NTDB id 1401	DSB67 RS12665 WP 010643259.1	MLTNLSTVLRQAGILTFSQEESSLLEQVKASGISMPEALLSSGFFQSHELTEHLSSVFGLSCTSLNQYEY	69
NTDB id 1293	VP RS12240 WP 005479695.1	MHSNLSTILRQKGLLTFSQEESSLIEQVKASGISMPEALLSSGFFTSSELAEHLSSIFGLSQPELSQYEY	69
NTDB id 1110	NGFG RS09235 WP 003689817.1	MSVGLLRILVQNQVVTVEQAEHYY.NESQAGKEVLPMFLSDGVISPKSLAALIARVFSYSILDLRHYPR	68
NTDB id 1251	GC085 RS07725 WP 011946523.1	...MALATEEYRLQGIGQLLVLEKLLDKTKAIELHKLAAAEKISLLQYIVKNKILSAEQIALTAAQNFVGPMLDINCIDV	77
NTDB id 1018	ACIAD RS01685 WP 004920473.1	...MSAFTTPPKFSGFIRRLVEEGYVNAQNMQALEKAKKFKQDIVPYLIDNFSISPLTIAEIIISLEFGEPLLDLGVFDP	77
NTDB id 1058	ABD1 RS01615 WP 001274986.1	...MSALHTSPKFTGFFRRLVEEKHVSAAATMQTALDAAKRAKQDTVAYLIEEVHLSPSLLAETISAEEFAEPYFDLDVYDT	77
consensus			

logo

NTDB id 1028	TT RS08215 WP 011173991.1	DPGAPLLLPEDLCRRYGVFPHRLEGNRLVLLMKDPRNILLALDDVRLALKRKGLNVEVAPAVATEAAITKLTIERFYGKAEL	480
NTDB id 1366	NTHI RS01950 WP 011271972.1	DLWERNQQQQSLILIRYFALPLKEENNRLWLGVDLSNLSACETIAFITGK....PVEPILLESSQLKELLQQLTPHQM	99
NTDB id 1355	HI 0298 AAC21962.1	DLWERNQQQQSLILIRYFALPLKEENNRLWLGVDLSNLSACETIAFITGK....PVEPILLESSQLKELLQQLTPNQ	99
NTDB id 1384	A4U84 RS08525 WP 010787006.1	SRWQKNCEEKQLLIRYLAVPVQETEHKLWLAVDENNLTACEIFAFMTHK....QTEPVVVIASDELKYLNLALSPEQ	94
NTDB id 1468	ASU2 RS05090 WP 014991734.1	SLWQKNCEKHILIRYLAIPIQENDDTLWLATDDMNNLSACEIFAFIAHK....TIEPVLISSDELKYLNLALSPEQ	93
NTDB id 107684	A8V32 RS00560 WP 001025184.1	TALCLRYQGVLDDASEEVVHVAVVDAPSHELLDALHFATTK....RIEITCWTRQQMEGHA.....	63
NTDB id 1436	BW25113 RS00530 WP 001025145.1	TALCLRYHGVLLDASEEVVHVAVVDAPSHELLDALHFATTK....RIEITCWTRQQMEGHA.....	63
NTDB id 1168	A1552VC RS11070 WP 000957200.1	ANLCQQLGLRELITRYDALPIAKQGNLILLAVSDPTILLQAEDEFRAFATGL....QVELALADHRAALQAATIRRLYGR	144
NTDB id 1401	DSB67 RS12665 WP 010643259.1	ASLCQTLGLRLITIRHNALPLNRTSSTLILAVADPTNLQAEDDFRAFATGL....QVELVLADFRELTAATIRRLYGR	144
NTDB id 1293	VP RS12240 WP 005479695.1	ASLCQQLGLRELITIRHNALPLHRTPTSTLLAVADPTNLQAEDDFRAFATGL....QVELVLADFRELSTAIRRLYGR	144
NTDB id 1110	NGFG RS09235 WP 003689817.1	HRVLMGVLTEEQMVFEHCVPVFRRGDKVFFAVSDPTQMPQIKTQVSAAGI....AVELVIVEDDQLAGLLDWVGR	143
NTDB id 1251	GC085 RS07725 WP 011946523.1	GTIPVNLVNEKLIKRRHAMVPLFSRGTNLYLATDDPSKQASLKETQFHTGL....NTHAIVVETDKLSALIDNLTAKES	152
NTDB id 1018	ACIAD RS01685 WP 004920473.1	ALFLKDKIDEKLIQKYRIMPLVHRGHVLYVATSNPTNTEAMDAIRFNSKL....KVEPIIVEHDKLERLLSEHFVEETH	152
NTDB id 1058	ABD1 RS01615 WP 001274986.1	SQIPKDLVDQKLILKHRILPLIQRGQILYVATSNPSNIEAIDAIRFNSKL....LVEPVIVEHHKLEKVLGQHFAEES	152
consensus			

logo

NTDB id 1028 TT RS08215 WP 011173991.1
NTDB id 1366 NTHI RS01950 WP 011271972.1
NTDB id 1355 HI 0298 AAC21962.1
NTDB id 1384 A4U84 RS08525 WP 010787006.1
NTDB id 1468 ASU2 RS05090 WP 014991734.1
NTDB id 107684 A8V32 RS00560 WP 001025184.1
NTDB id 1436 BW25113 RS00530 WP 001025145.1
NTDB id 1168 A1552VC RS11070 WP 000957200.1
NTDB id 1401 DSB67 RS12665 WP 010643259.1
NTDB id 1293 VP RS12240 WP 005479695.1
NTDB id 1110 NGFG RS09235 WP 003689817.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
consensus



logo

NTDB id 1028 TT RS08215 WP 011173991.1
NTDB id 1366 NTHI RS01950 WP 011271972.1
NTDB id 1355 HI 0298 AAC21962.1
NTDB id 1384 A4U84 RS08525 WP 010787006.1
NTDB id 1468 ASU2 RS05090 WP 014991734.1
NTDB id 107684 A8V32 RS00560 WP 001025184.1
NTDB id 1436 BW25113 RS00530 WP 001025145.1
NTDB id 1168 A1552VC RS11070 WP 000957200.1
NTDB id 1401 DSB67 RS12665 WP 010643259.1
NTDB id 1293 VP RS12240 WP 005479695.1
NTDB id 1110 NGFG RS09235 WP 003689817.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
consensus



logo

NTDB id 1028 TT RS08215 WP 011173991.1
NTDB id 1366 NTHI RS01950 WP 011271972.1
NTDB id 1355 HI 0298 AAC21962.1
NTDB id 1384 A4U84 RS08525 WP 010787006.1
NTDB id 1468 ASU2 RS05090 WP 014991734.1
NTDB id 107684 A8V32 RS00560 WP 001025184.1
NTDB id 1436 BW25113 RS00530 WP 001025145.1
NTDB id 1168 A1552VC RS11070 WP 000957200.1
NTDB id 1401 DSB67 RS12665 WP 010643259.1
NTDB id 1293 VP RS12240 WP 005479695.1
NTDB id 1110 NGFG RS09235 WP 003689817.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
consensus



```

NTDB id 1028 TT RS08215 WP 011173991.1
NTDB id 1366 NTHI RS01950 WP 011271972.1
NTDB id 1355 HI 0298 AAC21962.1
NTDB id 1384 A4U8A RS08525 WP 010787006.1
NTDB id 1468 ASU2 RS05090 WP 014991734.1
NTDB id 107684 A8V32 RS00560 WP 001025184.1
NTDB id 1436 BW25113 RS00530 WP 001025145.1
NTDB id 1168 A1552VC RS11070 WP 000957200.1
NTDB id 1401 DSB67 RS12665 WP 010643259.1
NTDB id 1293 VP RS12240 WP 005479695.1
NTDB id 1110 NGFG RS09235 WP 003689817.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
consensus

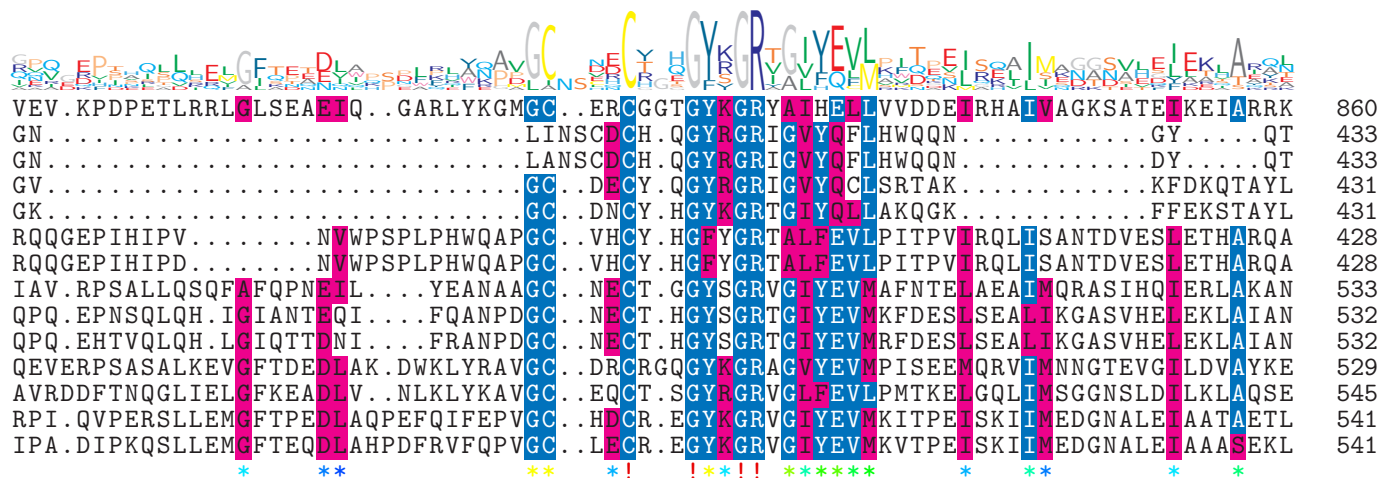
```



```

NTDB id 1028 TT RS08215 WP 011173991.1
NTDB id 1366 NTHI RS01950 WP 011271972.1
NTDB id 1355 HI 0298 AAC21962.1
NTDB id 1384 A4U8A RS08525 WP 010787006.1
NTDB id 1468 ASU2 RS05090 WP 014991734.1
NTDB id 107684 A8V32 RS00560 WP 001025184.1
NTDB id 1436 BW25113 RS00530 WP 001025145.1
NTDB id 1168 A1552VC RS11070 WP 000957200.1
NTDB id 1401 DSB67 RS12665 WP 010643259.1
NTDB id 1293 VP RS12240 WP 005479695.1
NTDB id 1110 NGFG RS09235 WP 003689817.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
consensus

```



```

NTDB id 1028 TT RS08215 WP 011173991.1
NTDB id 1366 NTHI RS01950 WP 011271972.1
NTDB id 1355 HI 0298 AAC21962.1
NTDB id 1384 A4U8A RS08525 WP 010787006.1
NTDB id 1468 ASU2 RS05090 WP 014991734.1
NTDB id 107684 A8V32 RS00560 WP 001025184.1
NTDB id 1436 BW25113 RS00530 WP 001025145.1
NTDB id 1168 A1552VC RS11070 WP 000957200.1
NTDB id 1401 DSB67 RS12665 WP 010643259.1
NTDB id 1293 VP RS12240 WP 005479695.1
NTDB id 1110 NGFG RS09235 WP 003689817.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
consensus

```



 non conserved
 similar
 $\geq 50\%$ conserved