

logo

NTDB id 1410 SGL RS13950 WP 010873519.1	MSXLEIICDRRLGAALLDAGYLDRSLQRALERHSEVGGSLAEVLYDSQYSEERLIASTIESEFGIPLVQLHVEVSPXXK	0
NTDB id 1227 CJJ81176 RS07050 WP 011812800.1	.....	0
NTDB id 1028 TT RS08215 WP 011173991.1	MSVLTIGDKRLGAALLDAGLLTDEELQRALERHREVGGSLAEVLVDMGLLSERRIAQTIEDRFGIPLVELHRVEIPPVK	80
NTDB id 1306 DR RS10060 WP 027479822.1	.MALSIGDRRLGAILLDQGYLGDNLDLQRALERHSEVGGRLADVLIDSGMVGEKRIARAIEEALGIPLVNLLAVQPDPAAL	79
NTDB id 1355 HI 0298 AAC21962.1	.....	0
NTDB id 1366 NTHI RS01950 WP 011271972.1	.....	0
NTDB id 1384 A4U84 RS08525 WP 010787006.1	.....	0
NTDB id 1468 ASU2 RS05090 WP 014991734.1	.....	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 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		

logo

NTDB id 1410 SGL RS13950 WP 010873519.1	SEYFKKELAKELRAIPFALDEEAGVVRVAFLNPLDTLSLEEVEDLTGLVVEPYQTTKSAFLYALAKHYPELGLPVPPP..P	0
NTDB id 1227 CJJ81176 RS07050 WP 011812800.1	.....	0
NTDB id 1028 TT RS08215 WP 011173991.1	ALLPAEKAKELKAIPFALDEEAGVVRVAFLNPLDTLSLEEVEDLTGLVVEPYQTTKSAFLYALAKHYPELGLPVPPP..P	158
NTDB id 1306 DR RS10060 WP 027479822.1	RSIRPQTALNLQAFPPFALE..GDRLRVALVDPLSSFSIETLEDDSGFDIEPYQALREEVMWAIATHYPELGLEIVVPSGA	157
NTDB id 1355 HI 0298 AAC21962.1	.....	0
NTDB id 1366 NTHI RS01950 WP 011271972.1	.....	0
NTDB id 1384 A4U84 RS08525 WP 010787006.1	.....	0
NTDB id 1468 ASU2 RS05090 WP 014991734.1	.....	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 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		

logo

NTDB id 1410 SGL RS13950 WP 010873519.1	SsRGStsHKLCEtLYzHGYIzBxLxALxQxTCsALGxTLySBRxTEsLYxLAEQsGtFLEstEGxMPsEEsX	0
NTDB id 1227 CJJ81176 RS07050 WP 011812800.1	.....	0
NTDB id 1028 TT RS08215 WP 011173991.1	SGEGQKDLKLGELLQKQGWISREALEEALVEQEKTGDLLGRILV.RKGLPEEALYRALAEQKGLEFLESTEGIVDPDSAA	237
NTDB id 1306 DR RS10060 WP 027479822.1	SDAGRTGGKLGRLITHGYITDAQLQVALDAQQTGEALGATLISQRAITEDQLYEVLAEQEGTTFLPNPSGFHPGEEVL	237
NTDB id 1355 HI 0298 AAC21962.1	.....	0
NTDB id 1366 NTHI RS01950 WP 011271972.1	.....	0
NTDB id 1384 A4U84 RS08525 WP 010787006.1	.....	0
NTDB id 1468 ASU2 RS05090 WP 014991734.1	.....	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 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		

logo

NTDB id 1410 SGL RS13950 WP 010873519.1	.....	0
NTDB id 1227 CJJ81176 RS07050 WP 011812800.1	MTS	3
NTDB id 1028 TT RS08215 WP 011173991.1	LLLLRSDALRYGAVPIGFQNGEVEVVLSDPRHKEAVAQLLNRPARFYALPQAWHEELFRRAYPQKNRLGEVLVQEGKLSR	317
NTDB id 1306 DR RS10060 WP 027479822.1	GSMLRADALRLLAVPVDETEQGVTVLTS DPRKRPDIDALIGRPVQLMLTRPRDIERLIEQFYPPQRGLGEQLVQEGTLSR	317
NTDB id 1355 HI 0298 AAC21962.1	.....	0
NTDB id 1366 NTHI RS01950 WP 011271972.1	.....	0
NTDB id 1384 A4U84 RS08525 WP 010787006.1	.....	0
NTDB id 1468 ASU2 RS05090 WP 014991734.1	.....	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 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		

```

NTDB id 1410 SGL RS13950 WP 010873519.1
NTDB id 1227 CJJ81176 RS07050 WP 011812800.1
NTDB id 1028 TT RS08215 WP 011173991.1
NTDB id 1306 DR RS10060 WP 027479822.1
NTDB id 1355 HI 0298 AAC21962.1
NTDB id 1366 NTHI RS01950 WP 011271972.1
NTDB id 1384 A4U84 RS08525 WP 010787006.1
NTDB id 1468 ASU2 RS05090 WP 014991734.1
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 GCO85 RS07725 WP 011946523.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
consensus

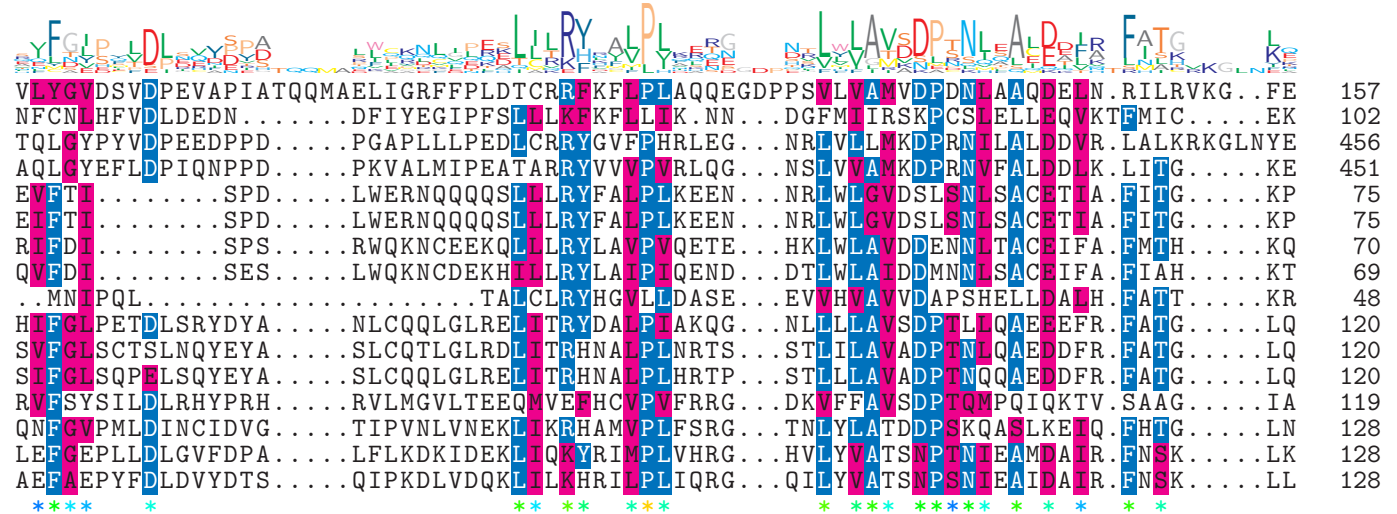
```



```

NTDB id 1410 SGL RS13950 WP 010873519.1
NTDB id 1227 CJJ81176 RS07050 WP 011812800.1
NTDB id 1028 TT RS08215 WP 011173991.1
NTDB id 1306 DR RS10060 WP 027479822.1
NTDB id 1355 HI 0298 AAC21962.1
NTDB id 1366 NTHI RS01950 WP 011271972.1
NTDB id 1384 A4U84 RS08525 WP 010787006.1
NTDB id 1468 ASU2 RS05090 WP 014991734.1
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 GCO85 RS07725 WP 011946523.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
consensus

```



logo

NTDB id 1410 SGL RS13950 WP 010873519.1	IRRLVVVTQDDFNQLIEQYYAIRREEWAAQEKRDQERALDKLNDLTDIVGSIDMNLGEDKDVDNALDSNDANQAPVYNLV	237
NTDB id 1227 CJJ81176 RS07050 WP 011812800.1	IDTATADELKIATKILNQIRIQEEIKRLSIKLR.....L.EWQENHKRDDQSCISQIF	153
NTDB id 1028 TT RS08215 WP 011173991.1	VAPAVATEAAITKLIERFYGKAELSEIAKEFAKKQ.....AEEEV..PSPLELDSAAQKFV	511
NTDB id 1306 DR RS10060 WP 027479822.1	ILPAVMAEKDIIRLIERFYGKEGFEKLNKELAERN.....KTQQSQEADLSVADESATVQVV	508
NTDB id 1355 HI 0298 AAC21962.1	VEPTLLESSQLKELLQQITPNQMQVEEQVK.....FYQHQETHFEQEDDEPVIHLL	126
NTDB id 1366 NTHI RS01950 WP 011271972.1	VEPTLLESSQLKELLQQITPHQMQVEEQVK.....FYQHQETHFEQEDDEPVIHLL	126
NTDB id 1384 A4U84 RS08525 WP 010787006.1	IEPVVVIASDELKYLNLALSPEQQPIYESE.....LAFVEQE.QEQLNLNDPIIQLL	121
NTDB id 1468 ASU2 RS05090 WP 014991734.1	IEPVLISSDELKYLNLALSPEQQSLYEETE.....LNYQSPDNLDDLNLQNDPIIQL	121
NTDB id 1436 BW25113 RS00530 WP 001025145.1	IEITCWTRQQMEGHA.....SRTQQTLPVAVQEKHQPKAELL	85
NTDB id 1168 A1552VC RS11070 WP 000957200.1	VELALADHRAALQAATIRRIYGRSIIQGAANQGKEISQ.....DELANLVKV....SDDELQSIEDLSQDDSPVSHFI	186
NTDB id 1401 DSB67 RS12665 WP 010643259.1	VELVLADFRELTAATIRRIYGRSLGQEKSGLKEINQ.....DELAGLVDI....GEDEIENIEDLSQDESPVSRVI	186
NTDB id 1293 VP RS12240 WP 005479695.1	VELVLADFRELSTAATIRRIYGRSLSHEKSGLKEINQ.....EELASLVDV....GADEIDNIEDLSQDESPVSRVI	186
NTDB id 1110 NGFG RS09235 WP 003689817.1	VELVIVEDDQLAGLLDWVGSRSTSL..LQEL.....GEGQEE.....EESHTLYIDNEEAEDGPVPRFI	176
NTDB id 1251 GC085 RS07725 WP 011946523.1	THAIVVETDKLSALIDNLLTAKESQGLSEYVEDSG.....DLEGLEISAD.....DEDQIDTATSVTDAPIVKFFV	195
NTDB id 1018 ACIAD RS01685 WP 004920473.1	VEPIIVEHDKLERLLSEHFVEETHFNFDTE...EL.....D...LDVEVDP....HTTDDDDDEDDKLKDEAPIVKYI	190
NTDB id 1058 ABD1 RS01615 WP 001274986.1	VEPVIVEHHKLEKVLGQHFAEESSFDFNDE...EF.....D...LDVNLDG....PTAQEDEEEAPQGDAPIVKYI	190
consensus	** **** * ** *	** **** *

logo

NTDB id 1410 SGL RS13950 WP 010873519.1	NKILAKALQEGTSDIHVEPQEETLRIRFRKDGVLNQAFDPLPRKTPAVVARFKIMADMEDIAERRSPQDCKIRRIYQ..G	315
NTDB id 1227 CJJ81176 RS07050 WP 011812800.1	DFLLHHEILSFHASDIIHIEARNDDALIRERVDGILRE.FAIFEKDIYEALVFHVKFLACINIAESRKTQDGSFELDFE..N	230
NTDB id 1028 TT RS08215 WP 011173991.1	KQVIREAFLQDASDIHIEPRINDVQVRLRIDGALRP.YSTLPKGALNAVISVVKIMGCLNIAEKRIEPPQDGRVRYHE..GA	588
NTDB id 1306 DR RS10060 WP 027479822.1	DSIIREAALQDASDIHIEETTEDAVKVRVREDGALRE.QNSFPKGAAQQIMARLKIMGHLDIAERRVPQDGRVRFKK..GS	585
NTDB id 1355 HI 0298 AAC21962.1	NQIFESALQKNASDIHLETTLADQFQVRFRIIDGVLQP.QPLISKIFANRISRLKLLAKLDISENRLPQDGRFQFKTTF.S	204
NTDB id 1366 NTHI RS01950 WP 011271972.1	NQIFESALQKNASDIHLETTLADQFQVRFRIIDGVLQP.QPLISKIFANRISRLKLLAKLDISENRLPQDGRFQFKTTF.S	204
NTDB id 1384 A4U84 RS08525 WP 010787006.1	DNLFKFCLAQNASDIHIEPRKQKLIIRIRIDGVLHL.YKSLSIQIASRLISRIKLLAKLDISELRQPQDGFQSFETAL.A	199
NTDB id 1468 ASU2 RS05090 WP 014991734.1	DNLFKFCLKQNASDIHIEPQKEKLQIRLRIDGVLHI.YKSLSFSIANRITIREKLLAKLDISETRIPQDGFQNFKTVT.A	199
NTDB id 1436 BW25113 RS00530 WP 001025145.1	TRTLQSALEQRASDIHIEPADNAVIRRLRIDGVLHP.LPDVSPDAGVALTAREKVLGNLDIAEHRLPQDQGFTVELA..G	162
NTDB id 1168 A1552VC RS11070 WP 000957200.1	NQVLLDAVRKGASDIHIEPYENQYRIRLRCDGILVE.TQQPASHISRLAARIKILSKLDIAERRIPQDGRIKLHLSR.D	264
NTDB id 1401 DSB67 RS12665 WP 010643259.1	NQILLDAVRKGASDIHIEPYENMYRVRLRCDGILIE.IQQPPSHISRLSARIKILSKLDIAERRIPQDGRIKLKLNQ.D	264
NTDB id 1293 VP RS12240 WP 005479695.1	NQILLDAVRKGASDIHIEPYEYBKMVRVRLRCDGILIE.TQQPPNHISRLSARIKILSKLDIAERRIPQDGRIKLKLNQ.D	264
NTDB id 1110 NGFG RS09235 WP 003689817.1	HKTLSDAIRSGASDIHIEFYEHNRIRFRVDCQLRE.VVQPPIAVRGQLASRIKVM SRLDISEKRIPQDGRMQLTFQKGG	255
NTDB id 1251 GC085 RS07725 WP 011946523.1	NKILLDAIRQGASDIHIEPYERYRIRYRQDGLHE.VATPPASISSRITARIKVM SNLDISERRIPQDGFQFKMISK.S	273
NTDB id 1018 ACIAD RS01685 WP 004920473.1	NKILLDAIRMSASDIHIEPYEKSRYRVRYRVDGVLRL.IATPPLQLATRLASRIKVM SQMDISEKRVPPQDGRIKLKMSK.S	268
NTDB id 1058 ABD1 RS01615 WP 001274986.1	NKILLDAIRMGASDIHIEPYEKSRYRVRYRVDGVLRLQ.IANPPLQLANRLASRIKVM SQMDISEKRVPPQDGRIKLKLSK.S	268
consensus	* ** **** * ! ! ! ! ! * * **** ! ! ! ! ! ! * * ** * ! ! ! ! ! ****	

logo

NTDB id 1410 SGL RS13950 WP 010873519.1	DTGLESEMRAKRKSALTTCRTCAAELQQEWLDCPYCMTSRFS	672
NTDB id 1227 CJJ81176 RS07050 WP 011812800.1	.....	519
NTDB id 1028 TT RS08215 WP 011173991.1	.....	889
NTDB id 1306 DR RS10060 WP 027479822.1	.....	887
NTDB id 1355 HI 0298 AAC21962.1	NL.....	464
NTDB id 1366 NTHI RS01950 WP 011271972.1	NS.....	464
NTDB id 1384 A4U84 RS08525 WP 010787006.1	E.....	461
NTDB id 1468 ASU2 RS05090 WP 014991734.1	G.....	461
NTDB id 1436 BW25113 RS00530 WP 001025145.1	PHGE.....	461
NTDB id 1168 A1552VC RS11070 WP 000957200.1	.....	562
NTDB id 1401 DSB67 RS12665 WP 010643259.1	.....	561
NTDB id 1293 VP RS12240 WP 005479695.1	.....	561
NTDB id 1110 NGFG RS09235 WP 003689817.1	.....	558
NTDB id 1251 GC085 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
-  ≥ 50% conserved