

```

NTDB id 1177 A1552VC RS01165 WP 000422572.1
NTDB id 1203 PSJM300 01605 AFN76401.1
NTDB id 1019 ACIAD RS04205 WP 004922051.1
NTDB id 39898 STMDT2 RS15685 WP 001055649.1
NTDB id 1448 BW25113 RS15320 WP 001326494.1
NTDB id 1307 DR RS10055 WP 010888596.1
NTDB id 1086 NMV RS00245 WP 002218487.1
NTDB id 1116 NGFG RS10615 WP 003690200.1
NTDB id 1185 GTF74 RS11940 WP 000350195.1
NTDB id 1176 A1552VC RS01160 WP 000350195.1
NTDB id 1283 ACE17V RS02630 WP 010947729.1
NTDB id 1259 GC085 RS10305 WP 010947729.1
NTDB id 1202 PSJM300 01600 AFN76400.1
NTDB id 1194 PA0395 NP 249086.1
NTDB id 1020 ACIAD RS04210 WP 011182164.1
NTDB id 1060 ABD1 RS04380 WP 000355489.1
NTDB id 1040 HON27 RS13360 WP 000355489.1
NTDB id 1081 FDQ49 RS05335 WP 006581387.1
consensus

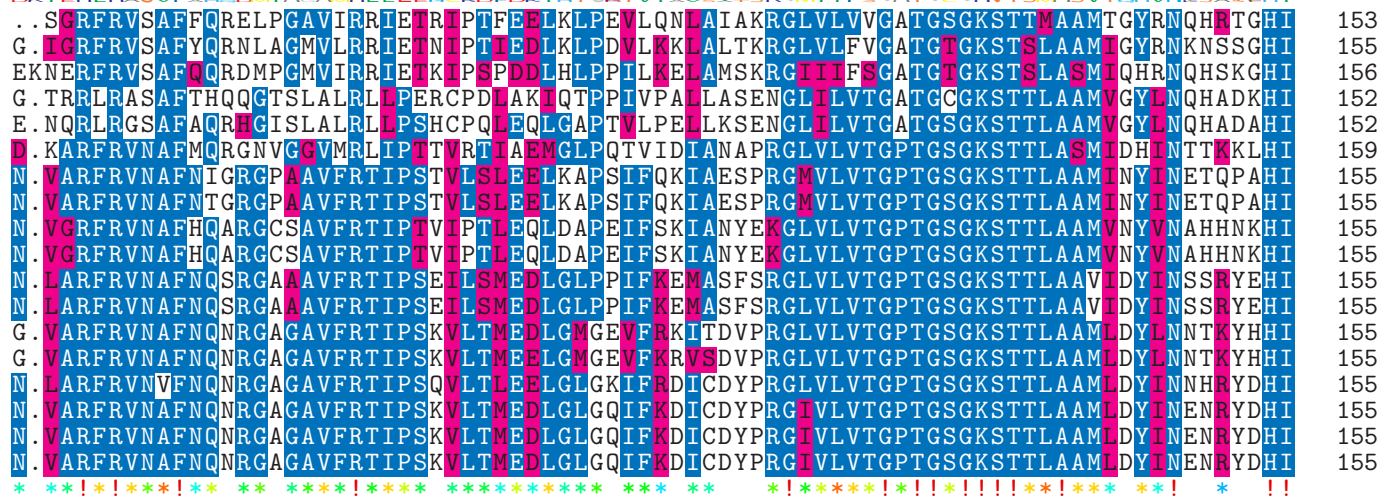
```



```

NTDB id 1177 A1552VC RS01165 WP 000422572.1
NTDB id 1203 PSJM300 01605 AFN76401.1
NTDB id 1019 ACIAD RS04205 WP 004922051.1
NTDB id 39898 STMDT2 RS15685 WP 001055649.1
NTDB id 1448 BW25113 RS15320 WP 001326494.1
NTDB id 1307 DR RS10055 WP 010888596.1
NTDB id 1086 NMV RS00245 WP 002218487.1
NTDB id 1116 NGFG RS10615 WP 003690200.1
NTDB id 1185 GTF74 RS11940 WP 000350195.1
NTDB id 1176 A1552VC RS01160 WP 000350195.1
NTDB id 1283 ACE17V RS02630 WP 010947729.1
NTDB id 1259 GC085 RS10305 WP 010947729.1
NTDB id 1202 PSJM300 01600 AFN76400.1
NTDB id 1194 PA0395 NP 249086.1
NTDB id 1020 ACIAD RS04210 WP 011182164.1
NTDB id 1060 ABD1 RS04380 WP 000355489.1
NTDB id 1040 HON27 RS13360 WP 000355489.1
NTDB id 1081 FDQ49 RS05335 WP 006581387.1
consensus

```



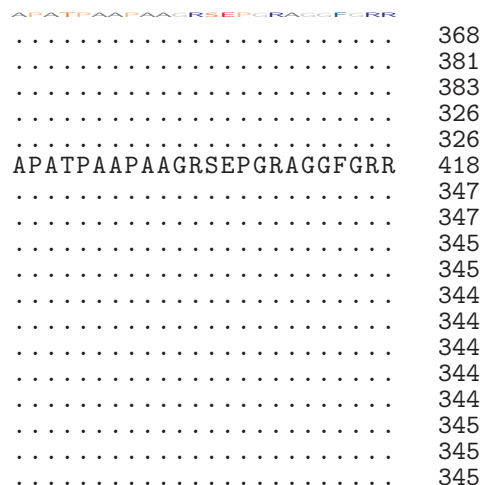
logo

NTDB id 1177 A1552VC RS01165 WP 000422572.1	LTVEDPIEFVHEH	KRCIVTQREVGLDTES	YEVALKNSLRQAPDMILIGE	IRSRETMEYAMTFAETGHL	CMATLHANNANQ	233	
NTDB id 1203 PSJM300 01605 AFN76401.1	TSIEDPIEFTHQHQC	NCIVTQREVGLDTSFE	VALKNTLRQAPDVILIGE	VRTRETMDHAVAF	AFETGHLCLATLHANNANQ	235	
NTDB id 1019 ACIAD RS04205 WP 004922051.1	ITIEDPIEFHHEHAG	CIITQREVGLDTSFE	IALKNTLRQAPDVILIGE	IRSREVMYALAF	AFETGHLVFAATLHANNANQ	236	
NTDB id 39898 STMDT2 RS15685 WP 001055649.1	LTLEDPIEYRYT	SKRCIIQQREIGQHCA	TFAAGLRAALREDPDV	ILLGELRDS	ETIRLALTA	AETGHLVLAATLHTRGAAQ	232
NTDB id 1448 BW25113 RS15320 WP 001326494.1	LTLEDPVEYLYA	SQRCLIQQREIGLH	CMTFASGLRAALREDPDV	ILLGELRDS	ETIRLALTA	AETGHLVLAATLHTRGAAQ	232
NTDB id 1307 DR RS10055 WP 010888596.1	LTIEDPIEFMH	PNKASIIINQREVGS	DTLSFDDALRAALRQ	APDVILVGEMRDY	ETIKA	AVTAAETGHLVMGTLHTNSAPE	239
NTDB id 1086 NMV RS00245 WP 002218487.1	LTIEDPIEFVHQ	SKKSLINQRELHQHT	LSFANALRSALREDPDV	ILVGEMRDP	PETIGLALTA	AETGHLVFGTLHTTGA	235
NTDB id 1116 NGFG RS10615 WP 003690200.1	LTIEDPIEFVHQ	SKKSLINQRELHQHT	LSFANALSSALREDPDV	ILVGEMRDP	PETIGLALTA	AETGHLVFGTLHTTGA	235
NTDB id 1185 GTF74 RS11940 WP 000350195.1	LTIEDPIEFVHSNN	KCLINQREVHRDTH	SFKNALRSALREDPDV	ILVGELRDQ	ETISLALTA	AETGHLVFGTLHTSSA	235
NTDB id 1176 A1552VC RS01160 WP 000350195.1	LTIEDPIEFVHSNN	KCLINQREVHRDTH	SFKNALRSALREDPDV	ILVGELRDQ	ETISLALTA	AETGHLVFGTLHTSSA	235
NTDB id 1283 ACE17W RS02630 WP 010947729.1	LTVEDPIEFVHQ	SKKCLVNQREVHK	DTLSFNAALRSALREDPD	IILVGELRD	LETIRLAM	TAAETGHLVFGTLHTNSATK	235
NTDB id 1259 GC085 RS10305 WP 010947729.1	LTVEDPIEFVHQ	SKKCLVNQREVHK	DTLSFNAALRSALREDPD	IILVGELRD	LETIRLAM	TAAETGHLVFGTLHTNSATK	235
NTDB id 1202 PSJM300 01600 AFN76400.1	LTIEDPIEFVHE	SKKCLVNQREVHR	DTLGFSEALRSALREDPD	IILVGEMRD	LETIRLALTA	AETGHLVFGTLHTTSA	235
NTDB id 1194 PA0395 NP 249086.1	LTIEDPIEFVHE	SKKCLVNQREVHR	DTLGFSEALRSALREDPD	IILVGEMRD	LETIRLALTA	AETGHLVFGTLHTTSA	235
NTDB id 1020 ACIAD RS04210 WP 011182164.1	LTVEDPIEFVHEP	KKCLINQREVHR	DTLGFNEALRSALREDPD	IILVGEMRD	LETIRLALTA	AETGHLVFGTLHTTSA	235
NTDB id 1060 ABD1 RS04380 WP 000355489.1	LTVEDPIEFVHQ	SKKCLINQREVHR	DTHGFNEALRSALREDPD	IILVGEMRD	LETIRLALTA	AETGHLVFGTLHTTSA	235
NTDB id 1040 HON27 RS13360 WP 000355489.1	LTVEDPIEFVHQ	SKKCLINQREVHR	DTHGFNEALRSALREDPD	IILVGEMRD	LETIRLALTA	AETGHLVFGTLHTTSA	235
NTDB id 1081 FDQ49 RS05335 WP 006581387.1	LTVEDPIEFVHQ	SKKCLINQREVHR	DTHGFNEALRSALREDPD	IILVGEMRD	LETIRLALTA	AETGHLVFGTLHTTSA	235
consensus	***!!!!*!*****	*****!!!!*****	***	*****!!!!*****	*****!!!!*****	*****!!!!*****	

logo

NTDB id 1177 A1552VC RS01165 WP 000422572.1	ALERILHLV	PKEREQRE	QFLLD	LSLNLKG	VIAQQLLR	DKNGKGRHGV	FVFLNS	SPRIAD	LIRRGEL	HELKAT	MARSQEV	GMQ	313	
NTDB id 1203 PSJM300 01605 AFN76401.1	ALDRIIN	FFPADR	QNVWMD	LSLNLKA	IVAQQLV	PTPDGKGRRA	VEVLINT	PLAAD	LIRKGEV	HELKGL	MKRSTDL	GMQ	315	
NTDB id 1019 ACIAD RS04205 WP 004922051.1	TLERIIH	FFDADR	HQQIF	MDLSLNLK	AVISQQLI	PTHDDGQ	SRRAAVE	VLINT	PL	LSDYIR	QGEIYK	IKELMARS	GELGMQ	316
NTDB id 39898 STMDT2 RS15685 WP 001055649.1	AVERLVDS	FPAQEKEP	VRSQLAG	SLRAVLSQ	KLEVD	RQDGRVALF	ELLINT	PATGNL	IREGKL	HQLAHV	IQTGQQQ	GMM	311	
NTDB id 1448 BW25113 RS15320 WP 001326494.1	AVERLVDS	FPAQEKEP	VRSQLAG	SLRAVLSQ	KLEVD	RQDGRVALF	ELLINT	PATGNL	IREGKL	HQLAHV	IQTGQQQ	GMM	311	
NTDB id 1307 DR RS10055 WP 010888596.1	SIDRIVDV	FPEEQQE	QIRVQL	ANNLVAV	MTQQLLP	RADGQGRV	LAYEIL	LANPAVR	ALIREG	KTFQIT	SV	MQTGA	REGMV	319
NTDB id 1086 NMV RS00245 WP 002218487.1	TVDRIVDV	FPAGEKE	EMVRS	SMLSESL	TAVISQN	LLKTHDGN	GRVAS	SHEILIAN	PAVRNL	IRENK	ITQINSV	LQTGQAS	GMQ	315
NTDB id 1116 NGFG RS10615 WP 003690200.1	TVDRIVDV	FPAGEKE	EMVRS	SMLSESL	TAVISQN	LLKTHDGN	GRVAS	SHEILIAN	PAVRNL	IRENK	ITQINSV	LQTGQAS	GMQ	315
NTDB id 1185 GTF74 RS11940 WP 000350195.1	TIDRIIDV	FPGS	DDKMVRS	SMLSESL	RAVIAQ	KLLKR	VGGGRV	ACHEIM	LATPAIRN	LIREDK	VAMYSII	IQTGA	AHGMQ	314
NTDB id 1176 A1552VC RS01160 WP 000350195.1	TIDRIIDV	FPGS	DDKMVRS	SMLSESL	RAVIAQ	KLLKR	VGGGRV	ACHEIM	LATPAIRN	LIREDK	VAMYSII	IQTGA	AHGMQ	314
NTDB id 1283 ACE17W RS02630 WP 010947729.1	TINRIIDV	FPAEEKS	MVRS	SMLSESL	QAVVAQ	SLLKK	NKGGRV	AALEIM	MCTGAIRN	LIREDK	IAQMYSSI	IQTGQAK	GMQ	314
NTDB id 1259 GC085 RS10305 WP 010947729.1	TINRIIDV	FPAEEKS	MVRS	SMLSESL	QAVVAQ	SLLKK	NKGGRV	AALEIM	MCTGAIRN	LIREDK	IAQMYSSI	IQTGQAK	GMQ	314
NTDB id 1202 PSJM300 01600 AFN76400.1	TIDRVVDF	FPAEEKS	MVRS	SMLSESL	QAVISQ	TLLKK	VGGGRV	AAHEIM	IGTPAIRN	LIREDK	VAMYSII	IQTGS	SLGMQ	314
NTDB id 1194 PA0395 NP 249086.1	TIDRVVDF	FPAEEKAM	VRS	SMLSESL	QSVISQ	TLLKK	IGGGRV	AAHEIM	IGTPAIRN	LIREDK	VAMYSII	IQTGS	SLGMQ	314
NTDB id 1020 ACIAD RS04210 WP 011182164.1	TIDRIIDV	FPAEEKD	MVRT	SMLSESL	QAVISQ	TLLKK	EGGGRV	AAHEIM	IGTPAIRN	LIREGK	VAMYSII	IQTGA	THGMT	314
NTDB id 1060 ABD1 RS04380 WP 000355489.1	TIDRVIDV	FPAEEKD	MVR	AMLSESL	QAVISQ	TLLKK	NGGGRV	AAHEIM	IGTPAIRN	LIRENK	VAMYSII	IQTGA	NHGMT	314
NTDB id 1040 HON27 RS13360 WP 000355489.1	TIDRVIDV	FPAEEKD	MVR	AMLSESL	QAVISQ	TLLKK	NGGGRV	AAHEIM	IGTPAIRN	LIRENK	VAMYSII	IQTGA	NHGMT	314
NTDB id 1081 FDQ49 RS05335 WP 006581387.1	TIDRVIDV	FPAEEKD	MVR	AMLSESL	QAVISQ	TLLKK	NGGGRV	AAHEIM	IGTPAIRN	LIRENK	VAMYSII	IQTGA	NHGMT	314
consensus	***!*****	*****!***!	*****!	!***	***!*****	*****!***!	*****!***!	*****!***!	*****!***!	*****!***!	*****!***!	*****!***!	!***	

NTDB id 1177 A1552VC RS01165 WP 000422572.1
NTDB id 1203 PSJM300 01605 AFN76401.1
NTDB id 1019 ACIAD RS04205 WP 004922051.1
NTDB id 39898 STMDT2 RS15685 WP 001055649.1
NTDB id 1448 BW25113 RS15320 WP 001326494.1
NTDB id 1307 DR RS10055 WP 010888596.1
NTDB id 1086 NMV RS00245 WP 002218487.1
NTDB id 1116 NGFG RS10615 WP 003690200.1
NTDB id 1185 GTF74 RS11940 WP 000350195.1
NTDB id 1176 A1552VC RS01160 WP 000350195.1
NTDB id 1283 ACE17W RS02630 WP 010947729.1
NTDB id 1259 GC085 RS10305 WP 010947729.1
NTDB id 1202 PSJM300 01600 AFN76400.1
NTDB id 1194 PA0395 NP 249086.1
NTDB id 1020 ACIAD RS04210 WP 011182164.1
NTDB id 1060 ABD1 RS04380 WP 000355489.1
NTDB id 1040 HON27 RS13360 WP 000355489.1
NTDB id 1081 FDQ49 RS05335 WP 006581387.1
consensus



```

NTDB id 1177 A1552VC RS01165 WP 000422572.1
NTDB id 1203 PSJM300 01605 AFN76401.1
NTDB id 1019 ACIAD RS04205 WP 004922051.1
NTDB id 39898 STMDT2 RS15685 WP 001055649.1
NTDB id 1448 BW25113 RS15320 WP 001326494.1
NTDB id 1307 DR RS10055 WP 010888596.1
NTDB id 1086 NMV RS00245 WP 002218487.1
NTDB id 1116 NGFG RS10615 WP 003690200.1
NTDB id 1185 GTF74 RS11940 WP 000350195.1
NTDB id 1176 A1552VC RS01160 WP 000350195.1
NTDB id 1283 ACE17V RS02630 WP 010947729.1
NTDB id 1259 GC085 RS10305 WP 010947729.1
NTDB id 1202 PSJM300 01600 AFN76400.1
NTDB id 1194 PA0395 NP 249086.1
NTDB id 1020 ACIAD RS04210 WP 011182164.1
NTDB id 1060 ABD1 RS04380 WP 000355489.1
NTDB id 1040 HON27 RS13360 WP 000355489.1
NTDB id 1081 FDQ49 RS05335 WP 006581387.1
consensus

```

-  non conserved
-  similar
-  >50% conserved