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NTDB id 1159 ABDM36 RS04765 WP 001166105.1
NTDB id 1150 A1552VC RS08580 WP 001166105.1
NTDB id 1395 DSB67 RS04445 WP 010649155.1
NTDB id 1362 HI 1008 AAC22669.1
NTDB id 1382 A4U84 RS07375 WP 062924234.1
NTDB id 595 KW2 RS08725 WP 021037687.1
NTDB id 521 SMSK321 RS04960 WP 000443804.1
NTDB id 493 SM12261 RS04300 WP 000387351.1
NTDB id 263 KZH43 RS04195 WP 000387330.1
NTDB id 222 SPD RS04535 WP 000387330.1
NTDB id 188 SPR RS04295 WP 000387330.1
NTDB id 153 SP RS04730 WP 000387344.1
NTDB id 1069 ABD1 RS03060 WP 043960841.1
NTDB id 1041 HON27 RS14740 WP 005124713.1
NTDB id 36 MW RS08230 WP 001793467.1
NTDB id 20 SA RS08005 WP 001802022.1
NTDB id 105 BSU 25590 NP 390437.1
NTDB id 1014 ACIAD RS13855 WP 004924483.1
NTDB id 1127 NGFG RS10560 WP 003703428.1
NTDB id 1126 NGFG RS09375 WP 003703428.1
NTDB id 1125 NGFG RS07215 WP 003703428.1
NTDB id 1108 NGFG RS06525 WP 003703428.1
NTDB id 105037 R9A00 RS00060 WP 002855574.1
NTDB id 1242 Cj0011c YP 002343483.1
consensus

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[illegible]

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NTDB id 1159 ABDM36 RS04765 WP 001166105.1
NTDB id 1150 A1552VC RS08580 WP 001166105.1
NTDB id 1395 DSB67 RS04445 WP 010649155.1
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NTDB id 1125 NGFG RS07215 WP 003703428.1
NTDB id 1108 NGFG RS06525 WP 003703428.1
NTDB id 105037 R9A00 RS00060 WP 002855574.1
NTDB id 1242 Cj0011c YP 002343483.1
consensus

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EQDLITVDYKGA VKASPGYDLYKRYNDKLYLFCMLF...SKAGGLTEQADSKSLNLASKYDEALVYVPKGEESA

.....MQIKT.KIVTLFSLCLPTLPLLANAEETAPAAQ..... 33

.....MQIKT.KIVTLFSLCLPTLPLLANAEETAPAAQ..... 33

.....MKWMLTLCLLILAPMSWAE.TKTKAD..... 25

.....MKT.L.FTSVVLGALVVSSFAEEKATXQTAQSVV.....TTQA..... 38

.....MKK.LSRYTFSLLFG.LFSATTFAEEKVTTSTEHTPV.....VMQQ..... 39

NKNEIMVDLKGAVAKPNVYQISSDERLVDLT.....RQAGGFTDQADQKSINLSAKLKDEEVIYVPKVGESSS 133

EQDLITVDVKGA VKSPGIYDLSVGSRVNDAV.....QKAGGLTEQADSKSLNLAQKVSDEALVYVPTKGEEA 137

EQDLITVDVKGA VKSPGIYDLPVGSRVNDAV.....QKAGGLTEQADSKSLNLAQKVSDEALVYVPTKGEEA 137

EQDLITVDVKGA VKSPGIYDLPVGSRVNDAV.....QKAGGLTEQADSKSLNLAQKVSDEALVYVPTKGEEA 137

EQDLITVDVKGA VKSPGIYDLPVGSRVNDAV.....QKAGGLTEQADSKSLNLAQKVSDEALVYVPTKGEEA 137

EQDLITVDVKGA VKSPGIYDLPVGSRVNDAV.....QKAGGLTEQADSKSLNLAQKVSDEALVYVPTKGEEA 137

EQDLITVDVKGA VKSPGIYDLPVGSRVNDAV.....QKAGGLTEQADSKSLNLAQKVSDEALVYVPTKGEEA 137

.....MQYSMRFWKN.....K.YFVLIMLCLGVISPSVCAQSFQDNFQEWKVKQMM..YDQK..... 49

.....MQYSMRFWKN.....K.YFVLIMLCLGVISPSVCAQSFQDNFQEWKVKQMM..YDQK..... 49

NKGPVYVDVKGA VKHPNVYKMTSKDRVVD.LL.....DKAQLLEDADVQSINLSEKLTQDKMIFIPHKGQKNV 147

NKGPVYVDVKGA VKHPNVYKMTSKDRVVD.LL.....DKAQLLDDADVSRINLSEKLTQDKMIFIPHKGQKNV 147

SNETIVIDIKGA VQHGPVYEM.RTGDRVS.....QAI...EKAGGTSEQADEAQVNLAEILQDGTVVYIPKKGEETA 125

.....MSIRHFFT...FFWAT.....LLTLFSMQI...VFAQGFDQQYDAW.....KTQQKAHDTR 45

ATPYRFLLRHIVARCGLLFATLKGKTMKKMFVLF CMLF..... 44

ATPYRFLLRHIVARCGLLFATLKGKTMKKMFVLF CMLF..... 44

ATPYRFLLRHIVARCGLLFATLKGKTMKKMFVLF CMLF..... 44

ATPYRFLLRHIVARCGLLFATLKGKTMKKMFVLF CMLF..... 44

.....MKKL LFLF..FA..... 10

.....MKKL LFLF..FA..... 10

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NTDB id 1159	ABDM36	RS04765	WP 001166105.1	VEEGIVITVNINTASAEELATLLKGI	GLKKAQAI	VDYREANGP	FTH	IDDLTNVKGIG	EATVR	95
NTDB id 1150	A1552VC	RS08580	WP 001166105.1	VEEGIVITVNINTASAEELATLLKGI	GLKKAQAI	VDYREANGP	FTH	IDDLTNVKGIG	EATVR	95
NTDB id 1395	DSB67	RS04445	WP 010649155.1	KYEGIEITVNVNSATAQEIATLLIGI	GEKKAQD	IVEYRNEHG	PFKTAADL	TKVKGIG	EATVR	87
NTDB id 1362	HI 1008	AAC22669.1	EAQVAPAVVSDKLNINTATASEIQKSL	TGIGAKKA	EAI	VQYREKHGN	FXNAEQ	LLEVGIG	KATLE	104
NTDB id 1382	A4U84	RS07375	WP 062924234.1	VAATQKVNANV	VNINTATASEIQDKLVGIGAKKAQAI	IVEYREKNGK	FLNVEQL	TEVSGIG	KATLE	104
NTDB id 595	KW2	RS08725	WP 021037687.1	SESTDSPTG...SSVSNQISTTSGPKVNINKAD	ITELQK.LTGIGQKKAQDI	IDFRMKN	GD	FKSIEDL	GKVS	209
NTDB id 521	SMSK321	RS04960	WP 000443804.1	SQHTGSGAP.....SSTS	SKDKKINLNKASLEELKQ.VKGLGGKRAQDI	IDHREANGK	FKSVDEL	KKVSGIG	AKTIE	207
NTDB id 493	SM12261	RS04300	WP 000387351.1	SQQAGPGTA.....SSTSKEKKVNLN	KASLEELKQ.VKGLGGKRAQDI	IDHREANGK	FKSVDEL	KKVSGIG	AKTIE	207
NTDB id 263	KZH43	RS04195	WP 000387330.1	SQQTGLGTA.....SSISKEKKVNLN	KASLEELKQ.VKGLGGKRAQDI	IDHREANGK	FKSVDEL	KKVSGIG	GKTIE	207
NTDB id 222	SPD	RS04535	WP 000387330.1	SQQTGLGTA.....SSISKEKKVNLN	KASLEELKQ.VKGLGGKRAQDI	IDHREANGK	FKSVDEL	KKVSGIG	GKTIE	207
NTDB id 188	SPR	RS04295	WP 000387330.1	SQQTGLGTA.....SSISKEKKVNLN	KASLEELKQ.VKGLGGKRAQDI	IDHREANGK	FKSVDEL	KKVSGIG	GKTIE	207
NTDB id 153	SP	RS04730	WP 000387344.1	SQQTGSGTA.....SSTSKEKKVNLN	KASLEELKQ.VKGLGGKRAQDI	IDHREANGK	FKSVDEL	KKVSGIG	GKTIE	207
NTDB id 1069	ABD1	RS03060	WP 043960841.1	LNISKSSHSNSSKISQTKNFNDSTGQIHLN	QANVNEFQQ.LKGIGEKKAQAI	IVEYRQKNGS	FKNIDEI	KNVKGIG	PAIFE	128
NTDB id 1041	HON27	RS14740	WP 005124713.1	LNITKSSHSNGSKISQTKNFNDSTGQIHLN	QANVNEFQQ.LKGVGEKKAQAI	IVEYRQKNGS	FKNIDEI	KNVKGIG	PAIFE	128
NTDB id 36	MW	RS08230	WP 001793467.1	EP....QIGVNS..VHVKNGNTNNTKVN	LNTASVSELMS.VPGVGQAKANA	IVEYRNQ	QGAFQE	IDDLK	KKVGF	220
NTDB id 20	SA	RS08005	WP 001802022.1	EP....QIEVNS..VHVKNGNTNNTKVN	LNTASVSELMS.VPGVGQAKANA	IVEYRNQ	QGAFQE	IDDLK	KKVGF	220
NTDB id 105	BSU	25590	NP 390437.1	V....QQGGGGS..V..QSDGGKGALVN	INTATLEELQG.ISGVGPSKAEAI	IAYREENG	R	FQ	TIEDIT	196
NTDB id 1014	ACIAD	RS13855	WP 004924483.1	LNSSASHHSLSK..P..TQQSGTG	VKNINSATAKELQQ.LHGVGEKKALA	IVEYRQY	GKFASV	DDLQ	KKVGI	120
NTDB id 1127	NGFG	RS10560	WP 003703428.1	SCAFSLAAVNINAASQQELEA.L	PGIGPAKAKAIAEYRAQNGAFKS	VDDLIK	VKGIG	PAVLA		105
NTDB id 1126	NGFG	RS09375	WP 003703428.1	SCAFSLAAVNINAASQQELEA.L	PGIGPAKAKAIAEYRAQNGAFKS	VDDLIK	VKGIG	PAVLA		105
NTDB id 1125	NGFG	RS07215	WP 003703428.1	SCAFSLAAVNINAASQQELEA.L	PGIGPAKAKAIAEYRAQNGAFKS	VDDLIK	VKGIG	PAVLA		105
NTDB id 1108	NGFG	RS06525	WP 003703428.1	SCAFSLAAVNINAASQQELEA.L	PGIGPAKAKAIAEYRAQNGAFKS	VDDLIK	VKGIG	PAVLA		105
NTDB id 105037	R9A00	RS00060	WP 002855574.1	LTAFLFGAVNINTATL	KELKS.LNGIGEAKAKAILEYRKE.A	NFTS	IDDLK	KKVGI	GDKLFE	70
NTDB id 1242	Cj0011c	YP 002343483.1	LTAFLFGAVNINTATL	KELKS.LNGIGEAKAKAILEYRKE.A	NFTS	IDDLK	KKVGI	GDKLFE		70
consensus				***! !** !*						

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NTDB id 1159	ABDM36	RS04765	WP 001166105.1	NNAARILL.....	103
NTDB id 1150	A1552VC	RS08580	WP 001166105.1	NNAARILL.....	103
NTDB id 1395	DSB67	RS04445	WP 010649155.1	KNEDRILL.....	95
NTDB id 1362	HI 1008	AAC22669.1	KNRDRIIF.....	112	
NTDB id 1382	A4U84	RS07375	WP 062924234.1	KNRDCIVIE.....	113
NTDB id 595	KW2	RS08725	WP 021037687.1	KLKDEISID.....	218
NTDB id 521	SMSK321	RS04960	WP 000443804.1	KLKDYVTVD.....	216
NTDB id 493	SM12261	RS04300	WP 000387351.1	KLKDYVTVD.....	216
NTDB id 263	KZH43	RS04195	WP 000387330.1	KLKDYVTVD.....	216
NTDB id 222	SPD	RS04535	WP 000387330.1	KLKDYVTVD.....	216
NTDB id 188	SPR	RS04295	WP 000387330.1	KLKDYVTVD.....	216
NTDB id 153	SP	RS04730	WP 000387344.1	KLKDYVTVD.....	216
NTDB id 1069	ABD1	RS03060	WP 043960841.1	KNKSRLAL.....	136
NTDB id 1041	HON27	RS14740	WP 005124713.1	KNKSRLAL.....	136
NTDB id 36	MW	RS08230	WP 001793467.1	KLKSYFTI.....	228
NTDB id 20	SA	RS08005	WP 001802022.1	KLKSYFTI.....	228
NTDB id 105	BSU	25590	NP 390437.1	KIKSSIIVK.....	205
NTDB id 1014	ACIAD	RS13855	WP 004924483.1	KNRDRLAI.....	128
NTDB id 1127	NGFG	RS10560	WP 003703428.1	KLKDQASVGAPAPKGPVLPVAVKK	131
NTDB id 1126	NGFG	RS09375	WP 003703428.1	KLKDQASVGAPAPKGPVLPVAVKK	131
NTDB id 1125	NGFG	RS07215	WP 003703428.1	KLKDQASVGAPAPKGPVLPVAVKK	131
NTDB id 1108	NGFG	RS06525	WP 003703428.1	KLKDQASVGAPAPKGPVLPVAVKK	131
NTDB id 105037	R9A00	RS00060	WP 002855574.1	KIKNDITVE.....	79
NTDB id 1242	Cj0011c	YP 002343483.1	KIKNDITIE.....	79	
consensus				*****	

 non conserved
 similar
 $\geq 50\%$ conserved