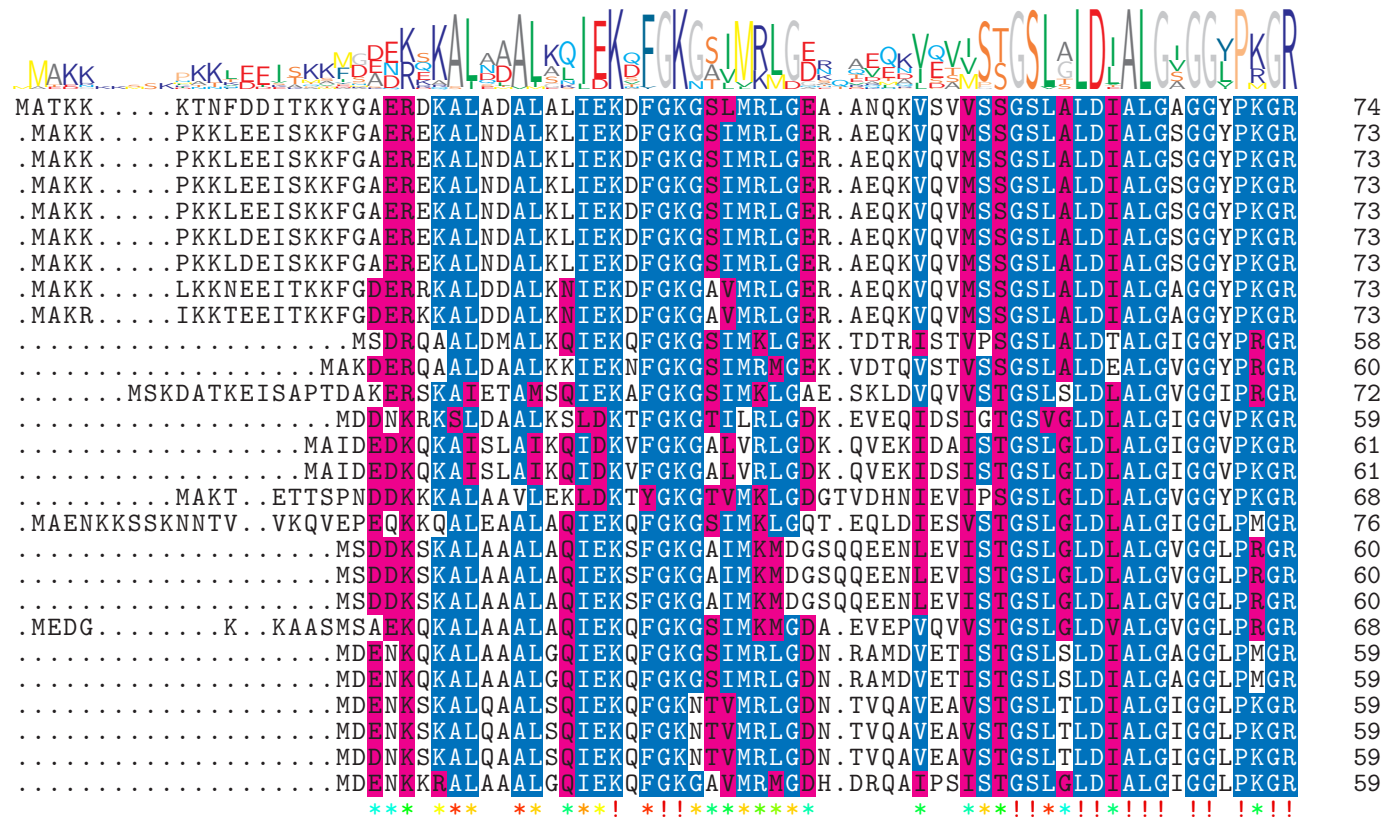


```

NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 269 KZH43 RS08665 WP 001085462.1
NTDB id 228 SPD RS09265 WP 001085462.1
NTDB id 194 SPR RS08825 WP 001085462.1
NTDB id 159 SP RS09750 WP 001085462.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 499 SM12261 RS08315 WP 078228268.1
NTDB id 453 Spy49 1753c ACI62003.1
NTDB id 408 SMU RS09530 WP 002262392.1
NTDB id 115 BSU 16940 NP 389576.2
NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 1313 DR RS12030 WP 010888966.1
NTDB id 1245 Cj1673c YP 002345041.1
NTDB id 1214 NCTC11637 00359 SQJ03206.1
NTDB id 1211 C694 RS00795 WP 000963128.1
NTDB id 1334 RAOC RS04870 WP 004918236.1
NTDB id 1389 A4U84 RS07560 WP 021112712.1
NTDB id 1130 NGFG RS03960 WP 003688695.1
NTDB id 1124 NGFG RS03960 WP 003688695.1
NTDB id 1123 OK783 RS03845 WP 003688695.1
NTDB id 1427 RS RS02760 WP 011000510.1
NTDB id 1165 A1552VC RS01565 WP 000344154.1
NTDB id 1142 GTF74 RS11550 WP 000344154.1
NTDB id 224254 B6S64 RS02000 WP 000344169.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus

```



```

NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 269 KZH43 RS08665 WP 001085462.1
NTDB id 228 SPD RS09265 WP 001085462.1
NTDB id 194 SPR RS08825 WP 001085462.1
NTDB id 159 SP RS09750 WP 001085462.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 499 SM12261 RS08315 WP 078228268.1
NTDB id 453 Spy49 1753c ACI62003.1
NTDB id 408 SMU RS09530 WP 002262392.1
NTDB id 115 BSU 16940 NP 389576.2
NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 1313 DR RS12030 WP 010888966.1
NTDB id 1245 Cj1673c YP 002345041.1
NTDB id 1214 NCTC11637 00359 SQJ03206.1
NTDB id 1211 C694 RS00795 WP 000963128.1
NTDB id 1334 RAO RS04870 WP 004918236.1
NTDB id 1389 A4U84 RS07560 WP 021112712.1
NTDB id 1130 NGFG RS03960 WP 003688695.1
NTDB id 1124 NGFG RS03960 WP 003688695.1
NTDB id 1123 OK783 RS03845 WP 003688695.1
NTDB id 1427 RS RS02760 WP 01100051.1
NTDB id 1165 A1552VC RS01565 WP 000344154.1
NTDB id 1142 GTF74 RS11550 WP 000344154.1
NTDB id 224254 B6S64 RS02000 WP 000344169.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus

```



logo

NTDB id 600 KW2 RS01765 WP 011675413.1	V	V	I	D	S	V	A	A	L	V	P	K	A	E	I	D	G	S	S	V	G	L	Q	A	R	M	S	Q	A	M	R	K	L	A	G	H	I	N	K	T	K	T	T	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	.	F	G	S	P	E	T	T	P	G	G	R	A	L	K	F	Y	A	233					
NTDB id 269 KZH43 RS08665 WP 001085462.1	V	V	V	D	S	V	A	A	L	V	P	R	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	S	Q	A	M	R	K	L	G	A	S	I	N	K	T	K	T	I	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	.	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	A	232		
NTDB id 228 SPD RS09265 WP 001085462.1	V	V	V	D	S	V	A	A	L	V	P	R	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	S	Q	A	M	R	K	L	G	A	S	I	N	K	T	K	T	I	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	.	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	A	232		
NTDB id 194 SPR RS08825 WP 001085462.1	V	V	V	D	S	V	A	A	L	V	P	R	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	S	Q	A	M	R	K	L	G	A	S	I	N	K	T	K	T	I	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	.	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	A	232		
NTDB id 159 SP RS09750 WP 001085462.1	V	V	V	D	S	V	A	A	L	V	P	R	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	S	Q	A	M	R	K	L	G	A	S	I	N	K	T	K	T	I	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	.	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	A	232		
NTDB id 527 SMSK321 RS11065 WP 001085454.1	V	V	V	D	S	V	A	A	L	V	P	R	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	S	Q	A	M	R	K	L	G	A	S	I	N	K	T	K	T	I	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	.	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	A	232		
NTDB id 499 SM12261 RS08315 WP 078228268.1	V	V	V	D	S	V	A	A	L	V	P	R	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	S	Q	A	M	R	K	L	G	A	S	I	N	K	T	K	T	I	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	.	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	A	232		
NTDB id 453 Spy49 1753c ACI62003.1	V	V	V	D	S	V	A	A	L	V	P	R	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	S	Q	A	M	R	K	L	S	A	S	I	N	K	T	K	T	I	A	I	F	I	N	Q	L	R	E	K	V	G	V	M	.	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	A	232		
NTDB id 408 SMU RS09530 WP 002262392.1	V	V	V	D	S	V	A	A	L	V	P	R	A	E	I	D	G	I	G	D	S	H	V	G	L	Q	A	R	M	S	Q	A	M	R	K	L	S	A	S	I	N	K	T	K	T	I	A	I	F	I	N	Q	L	R	E	K	V	G	I	M	.	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	S	232		
NTDB id 115 BSU 16940 NP 389576.2	V	V	V	D	S	V	A	A	L	V	P	K	A	E	I	E	G	D	M	G	D	S	H	V	G	L	Q	A	R	L	M	S	Q	A	L	R	K	L	S	G	A	I	N	K	S	K	T	I	A	I	F	I	N	Q	I	R	E	K	V	G	V	M	.	F	G	N	P	E	T	T	P	G	G	R	A	L	K	F	Y	S	217
NTDB id 625 LCA RS02525 WP 011374196.1	L	V	V	D	S	V	A	A	L	V	P	R	A	E	I	E	G	E	M	G	D	A	H	V	G	L	Q	A	R	L	M	S	Q	A	L	R	K	L	S	G	T	I	N	K	T	K	T	I	A	L	F	I	N	Q	I	R	E	K	V	G	V	M	.	F	G	N	P	E	V	T	P	G	G	R	A	L	K	F	Y	S	219
NTDB id 1313 DR RS12030 WP 010888966.1	V	V	V	D	S	V	A	A	L	T	P	R	A	E	I	E	G	D	M	G	D	S	L	P	G	L	Q	A	R	L	M	S	Q	A	L	R	K	L	T	A	I	L	S	K	T	G	T	A	A	I	F	I	N	Q	V	R	E	K	I	G	V	M	.	Y	G	N	P	E	T	T	T	G	G	R	A	L	K	F	Y	A	231
NTDB id 1245 Cj1673c YP 002345041.1	I	V	V	D	S	V	A	A	L	T	P	K	A	E	I	E	G	D	M	G	D	Q	H	V	G	L	Q	A	R	L	M	S	Q	A	L	R	K	L	T	G	I	V	H	K	M	N	T	T	V	I	F	I	N	Q	I	R	M	K	I	G	A	M	G	Y	G	T	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	219
NTDB id 1214 NCTC11637 00359 SQJ03206.1	V	V	V	D	S	V	A	A	L	T	P	K	A	E	I	D	G	D	M	G	D	Q	H	V	G	L	Q	A	R	L	M	S	H	A	L	R	K	I	T	G	V	L	H	K	M	N	T	T	L	I	F	I	N	Q	I	R	M	K	I	G	M	M	G	Y	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	221
NTDB id 1211 C694 RS00795 WP 000963128.1	V	V	V	D	S	V	A	A	L	T	P	K	A	E	I	D	G	D	M	G	D	Q	H	V	G	L	Q	A	R	L	M	S	H	A	L	R	K	I	T	G	V	L	H	K	M	N	T	T	L	I	F	I	N	Q	I	R	M	K	I	G	M	M	G	Y	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	221
NTDB id 1334 RAOC RS04870 WP 004918236.1	V	V	V	D	S	V	A	A	L	T	P	K	A	E	I	D	G	D	M	G	D	S	K	M	G	L	H	A	R	L	M	S	Q	A	L	R	K	L	T	S	S	I	S	K	T	K	T	V	I	F	I	N	Q	L	R	D	K	I	G	V	M	.	F	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	227	
NTDB id 1389 A4U84 RS07560 WP 021112712.1	I	I	V	D	S	V	A	A	L	T	P	K	A	E	I	E	G	D	M	G	D	S	H	M	G	L	Q	A	R	L	M	S	Q	A	L	R	K	L	T	A	N	I	K	N	T	N	C	L	V	V	F	I	N	Q	I	R	M	K	I	G	V	M	.	F	G	N	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	235
NTDB id 1130 NGFG RS03960 WP 003688695.1	V	V	V	D	S	V	A	A	L	V	P	K	A	E	I	E	G	D	M	G	D	S	H	V	G	L	Q	A	R	L	M	S	Q	A	L	R	K	L	T	G	H	I	K	K	T	N	T	L	V	V	F	I	N	Q	I	R	M	K	I	G	V	M	.	F	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	S	219
NTDB id 1124 NGFG RS03960 WP 003688695.1	V	V	V	D	S	V	A	A	L	V	P	K	A	E	I	E	G	D	M	G	D	S	H	V	G	L	Q	A	R	L	M	S	Q	A	L	R	K	L	T	G	H	I	K	K	T	N	T	L	V	V	F	I	N	Q	I	R	M	K	I	G	V	M	.	F	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	S	219
NTDB id 1123 OK783 RS03845 WP 003688695.1	V	V	V	D	S	V	A	A	L	V	P	K	A	E	I	E	G	D	M	G	D	S	H	V	G	L	Q	A	R	L	M	S	Q	A	L	R	K	L	T	G	H	I	K	K	T	N	T	L	V	V	F	I	N	Q	I	R	M	K	I	G	V	M	.	F	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	S	219
NTDB id 1427 RS RS02760 WP 011000510.1	I	V	I	D	S	V	A	A	L	V	P	K	A	E	I	E	G	E	M	G	D	A	L	P	G	L	Q	A	R	L	M	S	Q	A	L	R	K	L	T	G	T	I	K	R	T	N	C	L	V	I	F	I	N	Q	I	R	M	K	I	G	V	M	.	F	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	227
NTDB id 1165 A1552VC RS01565 WP 000344154.1	I	V	V	D	S	V	A	A	L	T	P	K	A	E	I	E	G	E	M	G	D	S	H	M	G	L	Q	A	R	M	L	S	Q	A	M	R	K	L	T	G	N	L	K	Q	S	N	C	M	C	I	F	I	N	Q	I	R	M	K	I	G	V	M	.	F	G	N	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	218
NTDB id 1142 GTF74 RS11550 WP 000344154.1	I	V	V	D	S	V	A	A	L	T	P	K	A	E	I	E	G	E	M	G	D	S	H	M	G	L	Q	A	R	M	L	S	Q	A	M	R	K	L	T	G	N	L	K	Q	S	N	C	M	C	I	F	I	N	Q	I	R	M	K	I	G	V	M	.	F	G	N	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	218
NTDB id 224254 B6S64 RS02000 WP 000344169.1	I	V	V	D	S	V	A	A	L	T	P	K	A	E	I	E	G	E	M	G	D	S	H	M	G	L	Q	A	R	L	M	S	Q	A	L	R	K	I	T	G	N	A	K	R	S	N	C	M	V	I	F	I	N	Q	I	R	M	K	I	G	V	M	.	F	G	S	P	E	T	T	T	G	G	N	A	L	K	F	Y	A	218
NTDB id 1074 ABD1 RS10195 WP 000344167.1	I	V	V	D	S	V	A	A	L	T	P	K	A	E	I	E	G	E	M	G	D	S	H	M	G	L	Q	A	R	L	M	S	Q	A	L	R	K	I	T	G	N	A	K	R	S	N	C	M	V	I	F	I	N																												

logo

NTDB id 600 KW2 RS01765 WP 011675413.1	SVRLDVRG	STKIEEGS	.GDNKTQ	IGKITK	IKVVKN	KVAPPF	KEA	LV	DIM	F	GEGIS	STGEL	IN	IAVEEG	IT	KKSGAW	FAYN	312																			
NTDB id 269 KZH43 RS08665 WP 001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKN	KVAPPF	KEA	VV	EIM	Y	GEGIS	KTGEL	LK	IASDL	DI	IKKAGAW	YSYK	311																			
NTDB id 228 SPD RS09265 WP 001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKN	KVAPPF	KEA	VV	EIM	Y	GEGIS	KTGEL	LK	IASDL	DI	IKKAGAW	YSYK	311																			
NTDB id 194 SPR RS08825 WP 001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKN	KVAPPF	KEA	VV	EIM	Y	GEGIS	KTGEL	LK	IASDL	DI	IKKAGAW	YSYK	311																			
NTDB id 159 SP RS09750 WP 001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKN	KVAPPF	KEA	VV	EIM	Y	GEGIS	KTGEL	LK	IASDL	DI	IKKAGAW	YSYK	311																			
NTDB id 527 SMSK321 RS11065 WP 001085454.1	SVRLDVRG	STQIKGTG	.DQKDTN	VGKETK	IKVVKN	KVAPPF	KEA	FV	EIM	Y	GEGIS	KTGEL	LK	IASDL	DI	IKKAGAW	YSYK	311																			
NTDB id 499 SM12261 RS08315 WP 078228268.1	SVRLDVRG	STQIKGTG	.DQKDTN	VGKETK	IKVVKN	KVAPPF	KEA	FV	EIM	Y	GEGIS	KTGEL	LK	IASDL	DI	IKKAGAW	YSYK	311																			
NTDB id 453 Spy49 1753c ACI62003.1	SVRLDVRG	TQIKGTG	.DQKDS	IGKETK	IKVVKN	KVAPPF	KVAE	VE	EIM	Y	GEGIS	RTGEL	VK	IASDL	DI	IKKAGAW	FSYN	311																			
NTDB id 408 SMU RS09530 WP 002262392.1	SVRLDVRG	NTQIKGTG	.EQKDSN	IGKETK	IKVVKN	KVAPPF	KEA	FV	EII	Y	GEGIS	RTGEL	VK	IASDL	GI	IKKAGAW	YSYN	311																			
NTDB id 115 BSU 16940 NP 389576.2	SVRLEVRRA	AEQLKQGN	.....	DVMGN	KT	IKVVKN	KVAPPF	RTAE	VD	EIM	Y	GEGIS	KEGE	II	DLG	TEL	DIVQKSGSWYSYE	292																			
NTDB id 625 LCA RS02525 WP 011374196.1	TVRLEVRRA	ETIKNGT	.....	DMIGN	RARI	IKVVKN	KVAPPF	KVAE	VD	EIM	Y	GQGIS	RTGEL	VD	MAVE	KDI	INKSGSWYSYG	294																			
NTDB id 1313 DR RS12030 WP 010888966.1	SVRLDVRK	IGQ....	PTKVG	ND	AV	NTV	KIK	TVKN	KVA	AP	PFKE	VEL	LA	LVY	GKGF	DQLSD	LVGLA	ADMDI	IKKAGSFYSYG	307																	
NTDB id 1245 Cj1673c YP 002345041.1	SVRLDVRK	VAT....	L.KQN	EEP	IGN	RV	KV	VVKN	KVAPPF	RQAE	F	D	V	M	F	GEG	LS	REGEL	IDYGV	KLD	DIV	DKSGAW	FSYK	294													
NTDB id 1214 NCTC11637 00359 SQJ03206.1	SVRIDIRRI	AA....	L.KQN	EQH	IGN	RA	KA	VVKN	KVAPPF	REAE	F	D	IM	F	GEGIS	KEGE	II	DYGV	KLD	DIV	DKSGAW	LSYQ	296														
NTDB id 1211 C694 RS00795 WP 000963128.1	SVRIDIRRI	AS....	L.KQN	EQH	IGN	RA	KA	VVKN	KVAPPF	REAE	F	D	IM	F	GEGIS	KEGE	II	DYGV	KLD	DIV	DKSGAW	LSYQ	296														
NTDB id 1334 RAOC RS04870 WP 004918236.1	SVRIDIRRS	LSDTG	KIKDKS	GEV	IGN	RTK	V	VVKN	KVAPPF	RQAE	F	D	IMY	GEG	V	SKV	GE	ILD	VAT	DL	DI	IKKSG	SWF	SYQ	307												
NTDB id 1389 A4U84 RS07560 WP 021112712.1	SVRLDIRR	CGV....	V.KDG	DEI	IGS	ETK	V	VVKN	KVAPPF	REVQ	F	D	IMY	GEGIS	RM	NELL	ILAE	ANG	F	IKKSGAW	FSYD	310															
NTDB id 1130 NGFG RS03960 WP 003688695.1	SVRLDIRR	TGS....	I.KKG	EEV	LG	NET	RV	KV	IK	NKVAPP	FRQAE	F	D	ILY	GEGIS	WE	GEL	ID	IGV	KND	I	INKSGAW	YSYN	294													
NTDB id 1124 NGFG RS03960 WP 003688695.1	SVRLDIRR	TGS....	I.KKG	EEV	LG	NET	RV	KV	IK	NKVAPP	FRQAE	F	D	ILY	GEGIS	WE	GEL	ID	IGV	KND	I	INKSGAW	YSYN	294													
NTDB id 1123 OK783 RS03845 WP 003688695.1	SVRLDIRR	TGS....	I.KKG	EEV	LG	NET	RV	KV	IK	NKVAPP	FRQAE	F	D	ILY	GEGIS	WE	GEL	ID	IGV	KND	I	INKSGAW	YSYN	294													
NTDB id 1427 RS RS02760 WP 011000510.1	SVRLDIRR	IGS....	I.KKG	DEV	VG	NET	KV	VVKN	KVAPPF	REAI	F	D	ILY	GAG	V	S	REGE	II	DLG	VEAK	V	VEKSGAW	YSYN	302													
NTDB id 1165 A1552VC RS01565 WP 000344154.1	SVRLDIRR	TGA....	I.KEG	EEV	VG	NET	RI	IKVV	KNK	IA	AP	PFKE	ANT	Q	IMY	GQ	GF	N	REGEL	ID	LGV	VKHK	M	VEKSGAW	YSYN	293											
NTDB id 1142 GTF74 RS11550 WP 000344154.1	SVRLDIRR	TGA....	I.KEG	EEV	VG	NET	RI	IKVV	KNK	IA	AP	PFKE	ANT	Q	IMY	GQ	GF	N	REGEL	ID	LGV	VKHK	M	VEKSGAW	YSYN	293											
NTDB id 224254 B6S64 RS02000 WP 000344169.1	SVRLDIRR	IGQ....	V.KEG	DEI	VG	S	ETK	V	VVKN	K	M	AP	PFKE	AI	F	Q	ILY	GK	GT	N	Q	L	GEL	V	D	LAV	Q	Q	D	I	V	QKAGAW	YSYQ	293			
NTDB id 1074 ABD1 RS10195 WP 000344167.1	SVRLDIRR	IGQ....	V.KEG	DEI	VG	S	ETK	V	VVKN	K	M	AP	PFKE	AI	F	Q	ILY	GK	GT	N	Q	L	GEL	V	D	LAV	Q	Q	D	I	V	QKAGAW	YSYQ	293			
NTDB id 1022 ACIAD RS06390 WP 004925639.1	SVRLDIRR	IGQ....	V.KEG	DEI	IG	S	ETK	V	VVKN	K	M	AP	PF	F	RE	AI	F	Q	ILY	GK	G	V	N	Q	L	GEL	V	D	LAV	Q	Q	N	I	V	QKAGAW	YSYQ	293
NTDB id 1205 PSJM300 05545 AFN77183.1	SVRLDIRR	TGA....	V.KEG	DEV	VG	S	ET	R	V	VVKN	KVAPPF	RQAE	F	Q	ILY	GK	GI	Y	R	N	G	E	I	D	L	G	V	Q	Q	L	V	E	KSGAW	AYK	293		
consensus	*!!***!*																	*	**	*****!***!!*!!*!!*!!*!!*	*****!*	***	*****	***	***	!*	!****	!									

NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 269 KZH43 RS08665 WP 001085462.1
NTDB id 228 SPD RS09265 WP 001085462.1
NTDB id 194 SPR RS08825 WP 001085462.1
NTDB id 159 SP RS09750 WP 001085462.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 499 SM12261 RS08315 WP 078228268.1
NTDB id 453 Spy49 1753c ACI62003.1
NTDB id 408 SMU RS09530 WP 002262392.1
NTDB id 115 BSU 16940 NP 389576.2
NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 1313 DR RS12030 WP 010888966.1
NTDB id 1245 Cj1673c YP 002345041.1
NTDB id 1214 NCTC11637 00359 SQJ03206.1
NTDB id 1211 C694 RS00795 WP 000963128.1
NTDB id 1334 RAOC RS04870 WP 004918236.1
NTDB id 1389 A4U84 RS07560 WP 021112712.1
NTDB id 1130 NGFG RS03960 WP 003688695.1
NTDB id 1124 NGFG RS03960 WP 003688695.1
NTDB id 1123 OK783 RS03845 WP 003688695.1
NTDB id 1427 RS RS02760 WP 011000510.1
NTDB id 1165 A1552VC RS01565 WP 000344154.1
NTDB id 1142 GTF74 RS11550 WP 000344154.1
NTDB id 224254 B6S64 RS02000 WP 000344169.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus

Sequence	Score
DEKIGGGA ⁺ EA ⁺ KA ⁺ KN ⁺ YL ⁺ KE ⁺ HQ ⁺ DV ⁺ FD ⁺ EI ⁺ DH ⁺ KV ⁺ RAAH ⁺ CL ⁺ LD ⁺ DSEVAETEEE..TTASKTK..AKAKKEEKAVETEEIELELED..	387
DEKIGGGS ⁺ ENAK ⁺ KYLA ⁺ EH ⁺ PE ⁺ IF ⁺ DE ⁺ DK ⁺ VR ⁺ SKF ⁺ CL ⁺ ID ⁺ GEEVSEQDTE.NKKDE.....PKKEEA..VNEEVPLDLGDEL	382
DEKIGGGS ⁺ ENAK ⁺ KYLA ⁺ EH ⁺ PE ⁺ IF ⁺ DE ⁺ DK ⁺ VR ⁺ SKF ⁺ CL ⁺ ID ⁺ GEEVSEQDTE.NKKDE.....PKKEEA..VNEEVPLDLGDEL	382
DEKIGGGS ⁺ ENAK ⁺ KYLA ⁺ EH ⁺ PE ⁺ IF ⁺ DE ⁺ DK ⁺ VR ⁺ SKF ⁺ CL ⁺ ID ⁺ GEEVSEQDTE.NKKDE.....PKKEEA..VNEEVPLDLGDEL	382
DEKIGGGS ⁺ ENAK ⁺ KYLA ⁺ EH ⁺ PE ⁺ IF ⁺ DE ⁺ DK ⁺ VR ⁺ SKF ⁺ CL ⁺ ID ⁺ GEEVSEQDTE.NKKDE.....PKKEEA..VNEEVPLDLGDEL	382
DEKIGGGS ⁺ ENAK ⁺ KYLAD ⁺ NPE ⁺ VFA ⁺ EID ⁺ HQ ⁺ VR ⁺ VQF ⁺ CL ⁺ ID ⁺ GEEAAE.....SKKDE.....VAQVDS..VNEEVTLDLGDEL	378
DEKIGGGS ⁺ ENAK ⁺ KYLAD ⁺ NPE ⁺ IF ⁺ DE ⁺ DH ⁺ QV ⁺ RV ⁺ QF ⁺ CL ⁺ ID ⁺ GEEIAE.....SKKDE.....AAQVDS..VNEEVTLDLGDEL	378
GEKIGGGS ⁺ ENAK ⁺ RYLAD ⁺ HP ⁺ QL ⁺ IF ⁺ DE ⁺ DR ⁺ KV ⁺ VKF ⁺ CL ⁺ LE ⁺ SEES ⁺ ESAMAV.ASE.....E.....TDDLALDLNNGI	374
GEKIGGGS ⁺ ENAK ⁺ KKFLAD ⁺ NPE ⁺ IF ⁺ DD ⁺ ID ⁺ HK ⁺ VR ⁺ VQY ⁺ CL ⁺ IE ⁺ EDNTEEKQSS.KEK.....ETDEK..ADKNLVLELDDTI	379
EE ⁺ RL ⁺ GGGREN ⁺ AK ⁺ QFL ⁺ KEN ⁺ KD ⁺ IMLM ⁺ IQEQ ⁺ IREHY ⁺ CL ⁺ DN ⁺ NGVV ⁺ QQQAE ⁺ E.TQEEL.E..FE.E.....	348
SERIGGGS ⁺ REN ⁺ AK ⁺ NYLAD ⁺ HED ⁺ VED ⁺ EV ⁺ RL ⁺ KV ⁺ RAAY ⁺ CT ⁺ SD ⁺ VPEEDLP ⁺ TTE.DE.QI.N..ILPDDST....EE.....	355
DERIGGG ⁺ KEK ⁺ TIAY ⁺ IA ⁺ ER ⁺ PE ⁺ ME ⁺ QE ⁺ IR ⁺ DRV ⁺ MAA ⁺ IRAG ⁺ NAGEAPALAPAAPEAAEA.....	363
DKKLGGGREN ⁺ SKA ⁺ FL ⁺ KEN ⁺ PE ⁺ IA ⁺ DE ⁺ IT ⁺ KA ⁺ IQNSM ⁺ CT ⁺ EG ⁺ MISGS..EDDEGE..E.....	343
DKKLGGGREN ⁺ AK ⁺ ALL ⁺ KED ⁺ KALADE ⁺ IT ⁺ LK ⁺ IKES ⁺ IGS ⁺ NEEIMPL..PDEPLE..EME.....	347
DKKLGGGREN ⁺ AK ⁺ ALL ⁺ KED ⁺ KALADE ⁺ IT ⁺ LK ⁺ IKES ⁺ IGS ⁺ NEEIMPL..PDEPLE..EME.....	347
DTKLGGGRD ⁺ TV ⁺ KEL ⁺ IKD ⁺ NPE ⁺ LAE ⁺ ELE ⁺ AK ⁺ IREKLQAK.....	343
GTKIGGG ⁺ KNN ⁺ AVK ⁺ WL ⁺ KEN ⁺ PE ⁺ IA ⁺ DK ⁺ LE ⁺ QEI ⁺ RNTL ⁺ ASNP ⁺ SVLK..ATASDSND ⁺ SD ⁺ VEEFSE.....EEL.....	372
GAKIGGQK ⁺ DNVR ⁺ VWL ⁺ KEN ⁺ PE ⁺ IS ⁺ DE ⁺ IDA ⁺ KTRAL ⁺ NGVEMH ⁺ ITEG..TQDETD.....GERPE.....E.....	348
GAKIGGQK ⁺ DNVR ⁺ VWL ⁺ KEN ⁺ PE ⁺ IS ⁺ DE ⁺ IDA ⁺ KTRAL ⁺ NGVEMH ⁺ ITEG..TQDETD.....GERPE.....E.....	348
GAKIGGQK ⁺ DNVR ⁺ VWL ⁺ KEN ⁺ PE ⁺ IS ⁺ DE ⁺ IDA ⁺ KTRAL ⁺ NGVEMH ⁺ ITEG..TQDETD.....GERPE.....E.....	348
GERIGGGRD ⁺ NCREF ⁺ LEN ⁺ AE ⁺ LARE ⁺ EI ⁺ ENK ⁺ VREHL ⁺ GV ⁺ TPMGAV...TLAE ⁺ EEVEED.....	352
GDKIGGQK ⁺ ANACK ⁺ YL ⁺ KEN ⁺ PE ⁺ IA ⁺ AK ⁺ TL ⁺ DKKL ⁺ REML ⁺ NPEN ⁺ MQLI..AETSSAAD ⁺ DVEFGAVPE.....EF.....	354
GDKIGGQK ⁺ ANACK ⁺ YL ⁺ KEN ⁺ PE ⁺ IA ⁺ AK ⁺ TL ⁺ DKKL ⁺ REML ⁺ NPEN ⁺ MQLI..AETSSAAD ⁺ DVEFGAVPE.....EF.....	354
GNKIGGQK ⁺ KNN ⁺ VIRY ⁺ FEENT ⁺ QIA ⁺ EIE ⁺ ERN ⁺ IREQL ⁺ LTGT ⁺ NGAV..Q.I.EDEE ⁺ EPD..LLE.....S.....	349
GNKIGGQK ⁺ KNN ⁺ VIRY ⁺ FEENN ⁺ QIA ⁺ EIE ⁺ ERN ⁺ IREQL ⁺ LTGT ⁺ NGAV..Q.I.EDEE ⁺ EPD..LLE.....S.....	349
GNKIGGQK ⁺ KNN ⁺ VIRY ⁺ LEEN ⁺ PQISTE ⁺ IE ⁺ AV ⁺ IREQL ⁺ LTKASD ⁺ QTA..A.HDETEE ⁺ EPD..LLES.....	349
GSKIGGQK ⁺ KANA ⁺ KYLE ⁺ EN ⁺ PE ⁺ IA ⁺ GQEI ⁺ EQQ ⁺ IRAK ⁺ LV ⁺ TSANTKA..TPVAEDLAD ⁺ AD..I.....	347

logo

			E	I	E	L	E	E	
NTDB id 600 KW2 RS01765 WP 011675413.1	.....	387							
NTDB id 269 KZH43 RS08665 WP 001085462.1	EIEIEE	388							
NTDB id 228 SPD RS09265 WP 001085462.1	EIEIEE	388							
NTDB id 194 SPR RS08825 WP 001085462.1	EIEIEE	388							
NTDB id 159 SP RS09750 WP 001085462.1	EIEIEE	388							
NTDB id 527 SMSK321 RS11065 WP 001085454.1	EIEIEE	384							
NTDB id 499 SM12261 RS08315 WP 078228268.1	EIEIEE	384							
NTDB id 453 Spy49 1753c ACI62003.1	EIED..	378							
NTDB id 408 SMU RS09530 WP 002262392.1	ELED..	383							
NTDB id 115 BSU 16940 NP 389576.2	.....	348							
NTDB id 625 LCA RS02525 WP 011374196.1	.....	355							
NTDB id 1313 DR RS12030 WP 010888966.1	.....	363							
NTDB id 1245 Cj1673c YP 002345041.1	.....	343							
NTDB id 1214 NCTC11637 00359 SQJ03206.1	.....	347							
NTDB id 1211 C694 RS00795 WP 000963128.1	.....	347							
NTDB id 1334 RAOC RS04870 WP 004918236.1	.....	343							
NTDB id 1389 A4U84 RS07560 WP 021112712.1	.....	372							
NTDB id 1130 NGFG RS03960 WP 003688695.1	.....	348							
NTDB id 1124 NGFG RS03960 WP 003688695.1	.....	348							
NTDB id 1123 OK783 RS03845 WP 003688695.1	.....	348							
NTDB id 1427 RS RS02760 WP 011000510.1	.....	352							
NTDB id 1165 A1552VC RS01565 WP 000344154.1	.....	354							
NTDB id 1142 GTF74 RS11550 WP 000344154.1	.....	354							
NTDB id 224254 B6S64 RS02000 WP 000344169.1	.....	349							
NTDB id 1074 ABD1 RS10195 WP 000344167.1	.....	349							
NTDB id 1022 ACIAD RS06390 WP 004925639.1	.....	349							
NTDB id 1205 PSJM300 05545 AFN77183.1	.....	347							
consensus									

-  non conserved
-  similar
-  ≥ 50% conserved