

```

NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 993704 AAIS09 RS08985 WP 001085463.1
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 499 SM12261 RS08315 WP 078228268.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 408 SMU RS09530 WP 002262392.1
NTDB id 453 Spy49 1753c ACI62003.1
NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 115 BSU 16940 NP 389576.2
NTDB id 1313 DR RS12030 WP 010888966.1
NTDB id 1245 Cj1673c YP 002345041.1
NTDB id 1211 C694 RS00795 WP 000963128.1
NTDB id 1214 NCTC11637 00359 SQJ03206.1
NTDB id 1334 RA0C 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 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus

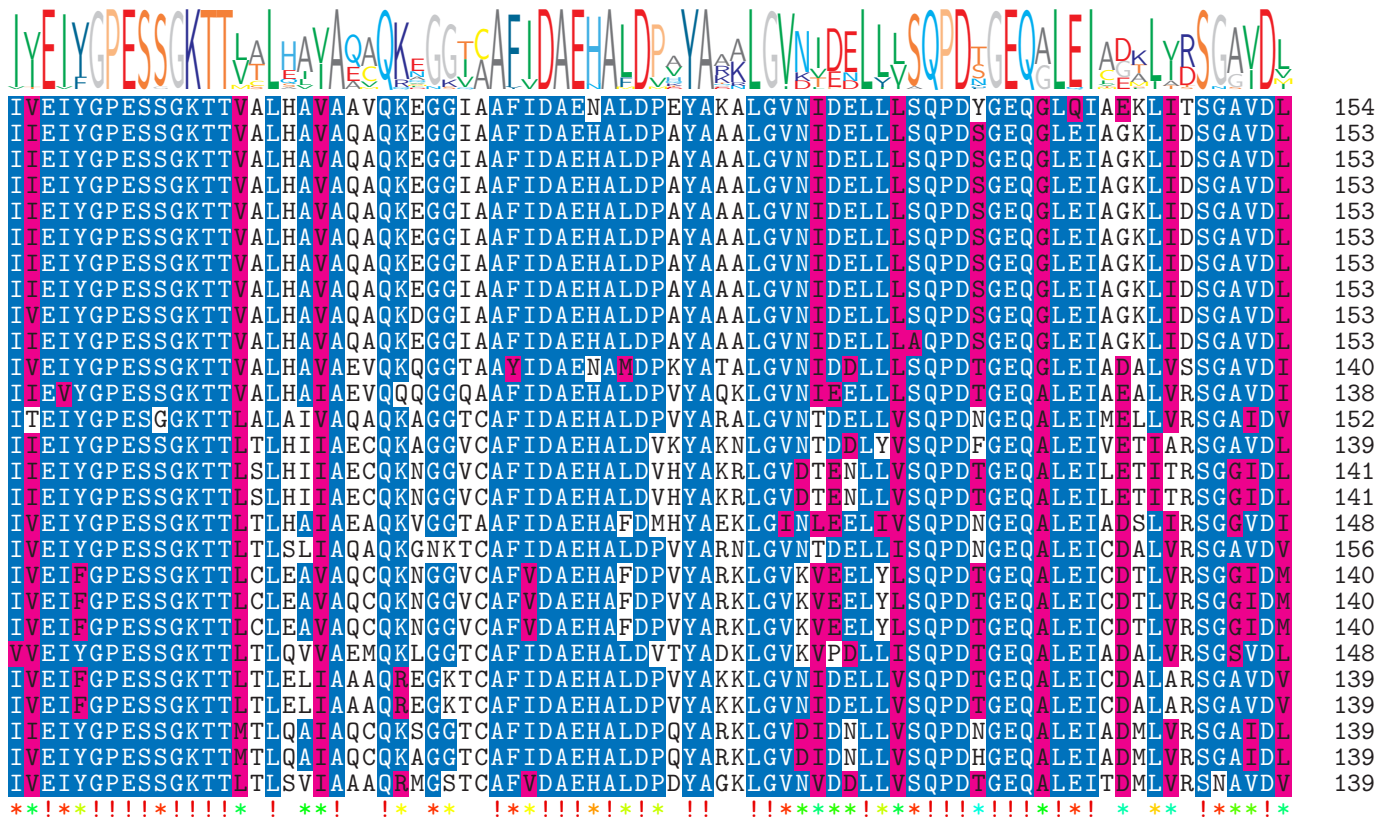
```

	MAKK	KK	EE	SK	KK	FA	ER	KA	LD	AL	AL	IE	DK	FK	SV	RL	GE	EA	AN	QK	VS	VS	SS	GS	SL	AL	LD	AL	GC	GG	YP	PK	GR			
MATKK		KTN	FDD	IT	KKY	GA	ER	KA	LD	AL	AL	IE	DK	FK	SV	RL	GE	EA	AN	QK	VS	VS	SS	GS	SL	AL	LD	AL	GC	GG	YP	PK	GR			
.MAKK		PKK	LEE	ISK	KK	FA	ER	KA	LD	AL	KL	IE	DK	FK	SV	RL	GE	EA	AE	QK	VQ	VM	SS	GS	SL	AL	LD	AL	GC	GG	YP	PK	GR			
.MAKK		PKK	LEE	ISK	KK	FA	ER	KA	LD	AL	KL	IE	DK	FK	SV	RL	GE	EA	AE	QK	VQ	VM	SS	GS	SL	AL	LD	AL	GC	GG	YP	PK	GR			
.MAKK		PKK	LEE	ISK	KK	FA	ER	KA	LD	AL	KL	IE	DK	FK	SV	RL	GE	EA	AE	QK	VQ	VM	SS	GS	SL	AL	LD	AL	GC	GG	YP	PK	GR			
.MAKK		PKK	LEE	ISK	KK	FA	ER	KA	LD	AL	KL	IE	DK	FK	SV	RL	GE	EA	AE	QK	VQ	VM	SS	GS	SL	AL	LD	AL	GC	GG	YP	PK	GR			
.MAKK		PKK	LEE	ISK	KK	FA	ER	KA	LD	AL	KL	IE	DK	FK	SV	RL	GE	EA	AE	QK	VQ	VM	SS	GS	SL	AL	LD	AL	GC	GG	YP	PK	GR			
.MAKK		PKK	LEE	ISK	KK	FA	ER	KA	LD	AL	KL	IE	DK	FK	SV	RL	GE	EA	AE	QK	VQ	VM	SS	GS	SL	AL	LD	AL	GC	GG	YP	PK	GR			
.MAKK		PKK	LEE	ISK	KK	FA	ER	KA	LD	AL	KL	IE	DK	FK	SV	RL	GE	EA	AE	QK	VQ	VM	SS	GS	SL	AL	LD	AL	GC	GG	YP	PK	GR			
.MAKR		IKK	TEE	IT	KK	FG	DE	RR	KA	LD	AL	KN	IE	DK	FK	GA	VM	RL	GE	EA	AE	QK	VQ	VM	SS	GS	SL	AL	LD	AL	GC	GG	YP	PK	GR	
.MAKK		LKK	NEE	IT	KK	FG	DE	RR	KA	LD	AL	KN	IE	DK	FK	GA	VM	RL	GE	EA	AE	QK	VQ	VM	SS	GS	SL	AL	LD	AL	GC	GG	YP	PK	GR	
.....		MAK	DE	RQA	AL	DA	AL	KK	IE	KN	F	GK	CS	IM	RL	GE	EA	AE	QK	VQ	VM	SS	GS	SL	AL	DE	AL	GV	GG	YP	PK	GR				
.....		MSD	RQA	AL	DA	AL	KK	IE	KN	F	GK	CS	IM	RL	GE	EA	AE	QK	VQ	VM	SS	GS	SL	AL	DE	AL	GV	GG	YP	PK	GR					
.....		MSK	DAT	KE	IS	APT	DA	ERS	KA	LD	AL	TS	IE	KA	F	GK	CS	IM	KL	GE	EA	AE	QK	VQ	VM	SS	GS	SL	AL	LD	AL	GV	GG	YP	PK	GR
.....			MDD	NK	RS	LD	AA	LS	LD	KT	F	GK	CT	IL	RL	GE	EA	AE	QK	VQ	VM	SS	GS	SL	AL	LD	AL	GV	GG	YP	PK	GR				
.....			MAI	DE	DK	QA	IS	LA	IK	QD	K	V	F	GK	GA	VM	RL	GE	EA	AE	QK	VQ	VM	SS	GS	SL	AL	LD	AL	GV	GG	YP	PK	GR		
.....			MAI	DE	DK	QA	IS	LA	IK	QD	K	V	F	GK	GA	VM	RL	GE	EA	AE	QK	VQ	VM	SS	GS	SL	AL	LD	AL	GV	GG	YP	PK	GR		
.....			MAK	T	ETT	SP	ND	DK	KA	LA	AA	LE	LD	KTY	GK	CT	VM	KL	GD	GT	VD	HN	IE	PS	GS	SL	AL	LD	AL	GV	GG	YP	PK	GR		
.MAENK	KSSKNNTV	..	VK	Q	VE	PE	QK	QA	LE	AA	LA	QI	TE	Q	F	GK	CS	IM	KL	GT	EQ	LD	IES	TS	GS	SL	AL	LD	AL	GV	GGLP	PMGR				

```

NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 993704 AAIS09 RS08985 WP 001085463.1
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 499 SM12261 RS08315 WP 078228268.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 408 SMU RS09530 WP 002262392.1
NTDB id 453 Spy49 1753c ACI62003.1
NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 115 BSU 16940 NP 389576.2
NTDB id 1313 DR RS12030 WP 010888966.1
NTDB id 1245 Cj1673c YP 002345041.1
NTDB id 1211 C694 RS00795 WP 000963128.1
NTDB id 1214 NCTC11637 00359 SQJ03206.1
NTDB id 1334 RA0C 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 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus

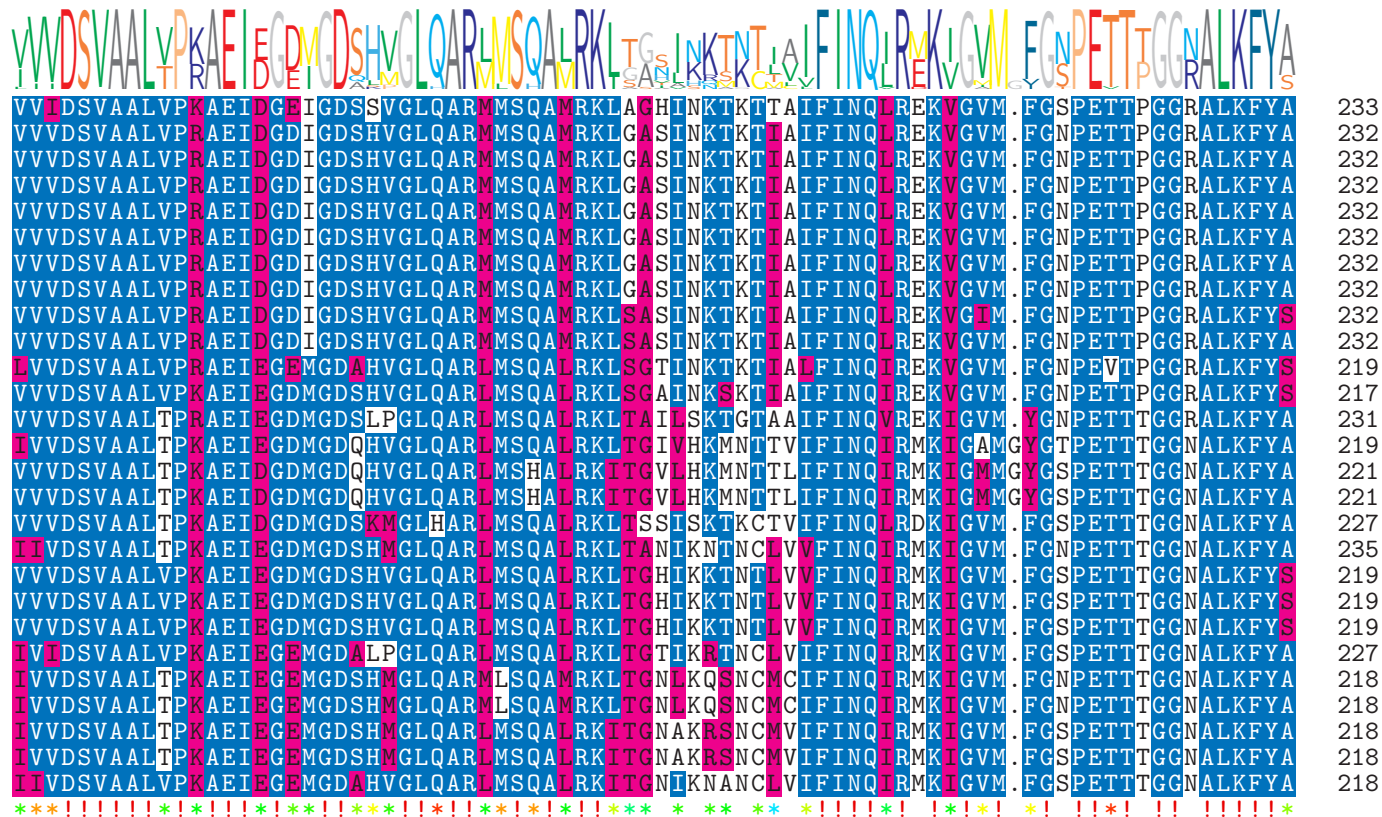
```



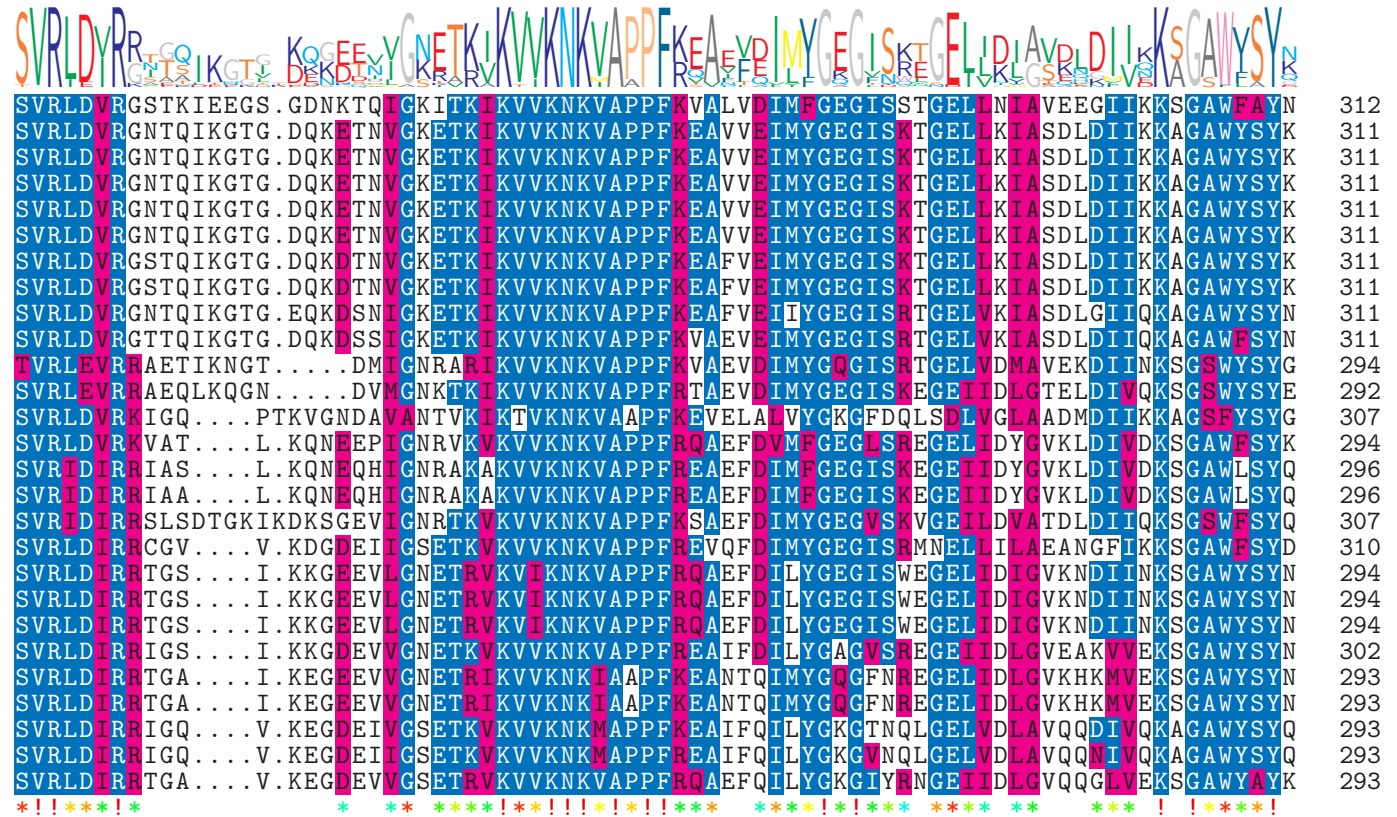
```

NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 993704 AAIS09 RS08985 WP 001085463.1
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 499 SM12261 RS08315 WP 078228268.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 408 SMU RS09530 WP 002262392.1
NTDB id 453 Spy49 1753c ACI62003.1
NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 115 BSU 16940 NP 389576.2
NTDB id 1313 DR RS12030 WP 010888966.1
NTDB id 1245 Cj1673c YP 002345041.1
NTDB id 1211 C694 RS00795 WP 000963128.1
NTDB id 1214 NCTC11637 00359 SQJ03206.1
NTDB id 1334 RA0C 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 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus

```

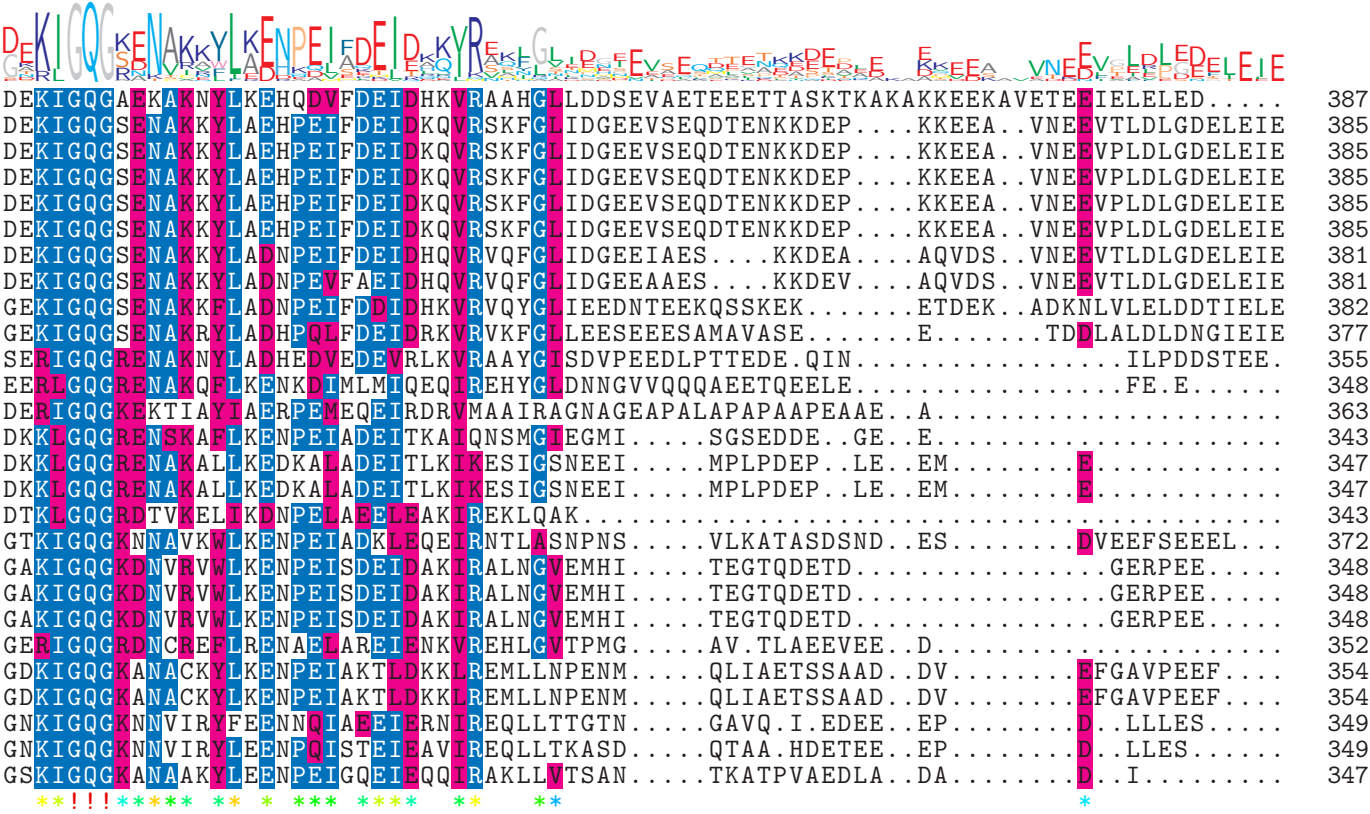


NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 993704 AAIS09 RS08985 WP 001085463.1
NTDB id 269 KZH43 RS08665 WP 001085462.1
NTDB id 228 SPD RS09265 WP 001085462.1
NTDB id 194 SPR RS08825 WP 001085462.1
NTDB id 159 SP RS09750 WP 001085462.1
NTDB id 499 SM12261 RS08315 WP 078228268.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 408 SMU RS09530 WP 002262392.1
NTDB id 453 SPY49 1753c ACT62003.1
NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 115 BSU 16940 NP 389576.2
NTDB id 1313 DR RS12030 WP 010888966.1
NTDB id 1245 Cj1673c YP 002345041.1
NTDB id 1211 C694 RS00795 WP 000963128.1
NTDB id 1214 NCTC11637 00359 SQJ03206.1
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 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
NTDB id 993704 AAIS09 RS08985 WP 001085463.1
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 499 SM12261 RS08315 WP 078228268.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 408 SMU RS09530 WP 002262392.1
NTDB id 453 Spy49 1753c ACI62003.1
NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 115 BSU 16940 NP 389576.2
NTDB id 1313 DR RS12030 WP 010888966.1
NTDB id 1245 Cj1673c YP 002345041.1
NTDB id 1211 C694 RS00795 WP 000963128.1
NTDB id 1214 NCTC11637 00359 SQJ03206.1
NTDB id 1334 RA0C 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 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus



logo

		LEE	
NTDB id 600 KW2 RS01765 WP 011675413.1	...	387	
NTDB id 993704 AAIS09 RS08985 WP 001085463.1	IEE	388	
NTDB id 269 KZH43 RS08665 WP 001085462.1	IEE	388	
NTDB id 228 SPD RS09265 WP 001085462.1	IEE	388	
NTDB id 194 SPR RS08825 WP 001085462.1	IEE	388	
NTDB id 159 SP RS09750 WP 001085462.1	IEE	388	
NTDB id 499 SM12261 RS08315 WP 078228268.1	IEE	384	
NTDB id 527 SMSK321 RS11065 WP 001085454.1	IEE	384	
NTDB id 408 SMU RS09530 WP 002262392.1	D..	383	
NTDB id 453 Spy49 1753c ACI62003.1	D..	378	
NTDB id 625 LCA RS02525 WP 011374196.1	...	355	
NTDB id 115 BSU 16940 NP 389576.2	...	348	
NTDB id 1313 DR RS12030 WP 010888966.1	...	363	
NTDB id 1245 Cj1673c YP 002345041.1	...	343	
NTDB id 1211 C694 RS00795 WP 000963128.1	...	347	
NTDB id 1214 NCTC11637 00359 SQJ03206.1	...	347	
NTDB id 1334 RA0C 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 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