

```

NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 259482 CXP32 RS09870 WP 001085462.1
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 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

```



```

NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 259482 CXP32 RS09870 WP 001085462.1
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 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

```



```

NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 259482 CXP32 RS09870 WP 001085462.1
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 259482 CXP32 RS09870 WP 001085462.1
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 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

```



NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 259482 CXP32 RS09870 WP 001085462.1
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 0011374196.1
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

DEKIGQGA	EKA	KNYL	KEHQ	DV	FDEID	HKV	RAAH	G	LDD	SEVA	EETEE	TASK	TAKAK	KKEEK	AVETEE	IELE	ED	.....	387						
DEKIGQGS	ENAKKYLA	EHPEIF	DEID	KQVRS	KFG	LIDGE	EV	SEQD	TENK	KDE	...	PKKEEA	..	VNEEV	PLDL	GD	DELE	IE	385						
DEKIGQGS	ENAKKYLA	EHPEIF	DEID	KQVRS	KFG	LIDGE	EV	SEQD	TENK	KDE	...	PKKEEA	..	VNEEV	PLDL	GD	DELE	IE	385						
DEKIGQGS	ENAKKYLA	EHPEIF	DEID	KQVRS	KFG	LIDGE	EV	SEQD	TENK	KDE	...	PKKEEA	..	VNEEV	PLDL	GD	DELE	IE	385						
DEKIGQGS	ENAKKYLA	EHPEIF	DEID	KQVRS	KFG	LIDGE	EV	SEQD	TENK	KDE	...	PKKEEA	..	VNEEV	PLDL	GD	DELE	IE	385						
DEKIGQGS	ENAKKYLA	ADNPEIF	DEID	HQVRV	QFG	LIDGE	EA	IAES	...	KKDE	...	AAQVDS	..	VNEEV	TLDL	GD	DELE	IE	381						
DEKIGQGS	ENAKKYLA	ADNPEV	FAEID	HQVRV	QFG	LIDGE	EA	IAES	...	KKDE	...	AAQVDS	..	VNEEV	TLDL	GD	DELE	IE	381						
GEKIGQGS	ENAKKFL	ADNPEIF	DDID	HQVRV	QFG	LIEED	NTE	EKQSS	KEK	.....	ETDEK	..	ADKNL	VLEL	DD	DTIE	LE	382							
GEKIGQGS	ENAKRYL	ADHPQL	FDEID	RKVRV	KFG	LIEE	SEES	AMAV	ASE	.....	E	.....	TDDL	ALDL	DN	GIE	IE	377							
SERIGQG	RENAK	NYLAD	HDVE	DEV	RLK	VRAAY	G	ISDV	PEED	LP	TT	DE	Q	I	NILP	DD	ST	.....	355						
EERLGG	RENAK	QFLK	ENK	DI	MLM	I	QEQI	REHY	G	LDNN	GVV	QQA	EET	QEEL	E	FE	E	.....	348						
DERIGQG	KEKTI	AIYIA	IER	PEME	QEI	DRV	MAA	IRAG	NAGE	APAL	AP	AP	AP	AP	AP	AP	AP	.....	363						
DKKLGG	RENSK	AF	LKEN	PEI	AD	EIT	KAI	QNSM	G	I	EGM	I		SG	SE	DE	..	GEE		343					
DKKLGG	RENAK	ALL	KED	KAL	AD	EIT	LK	IKES	IG	SNEE	I		MPL	P	DEP	..	LE	EME		347					
DKKLGG	RENAK	ALL	KED	KAL	AD	EIT	LK	IKES	IG	SNEE	I		MPL	P	DEP	..	LE	EME		347					
DTKLGG	RD	TVKEL	IK	DN	PEL	AE	LE	EAK	I	REK	LQAK	.....	.....	.....	.....	.....	.....	.....	343						
GTKIGQG	KNN	AVK	WLKEN	PEI	AD	KLE	QEI	RNTL	AS	NPNS	...	VLK	ATAS	DS	NDES	D	..	VEEF	SE	EE	372				
GAKIGQG	KDN	VRV	WLKEN	PEI	S	DEI	DAK	IRAL	NG	VEMHI	...	TEGT	Q	DE	T		GER	PEE		348					
GAKIGQG	KDN	VRV	WLKEN	PEI	S	DEI	DAK	IRAL	NG	VEMHI	...	TEGT	Q	DE	T		GER	PEE		348					
GAKIGQG	KDN	VRV	WLKEN	PEI	S	DEI	DAK	IRAL	NG	VEMHI	...	TEGT	Q	DE	T		GER	PEE		348					
GERIGQ	RD	NC	REF	L	RENA	L	AR	E	ENK	VREHL	G	VT	PMG	...	AV	TL	AE	VE	ED		352				
GDKIGQG	KAN	ACKYL	LKEN	PEI	AKT	L	DKK	L	REML	LN	PENM	...	QLIA	ET	SSA	ADD	VE	..	FGAV	PEE	F	354			
GDKIGQG	KAN	ACKYL	LKEN	PEI	AKT	L	DKK	L	REML	LN	PENM	...	QLIA	ET	SSA	ADD	VE	..	FGAV	PEE	F	354			
GNKIGQG	KNN	VIRY	FE	ENN	QIA	E	E	IERN	I	REQL	LT	TGTN	...	GAV	Q	I	E	DE	EE	EP	...	LL	ES	349	
GNKIGQG	KNN	VIRY	LE	EN	QI	STE	E	E	AV	I	REQL	LT	KASD	...	Q	TAA	H	DE	TE	EE	EP	...	LL	ES	349
GSKIGQG	KANA	AKYLE	EN	PEI	G	QEI	EQ	IRAK	L	VT	TSAN	...	TKAT	P	V	A	E	D	L	A	D	...	I		347

logo

		IEE	
NTDB id 600 KW2 RS01765 WP 011675413.1	...		387
NTDB id 259482 CXP32 RS09870 WP 001085462.1	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 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 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			

- X non conserved
- X similar
- X ≥ 50% conserved