

```

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 499 SM12261 RS08315 WP 078228268.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 453 Spy49 1753c ACI62003.1
NTDB id 408 SMU RS09530 WP 002262392.1
NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 1044162 ACCK33 RS06105 WP 000368166.1
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 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus

```



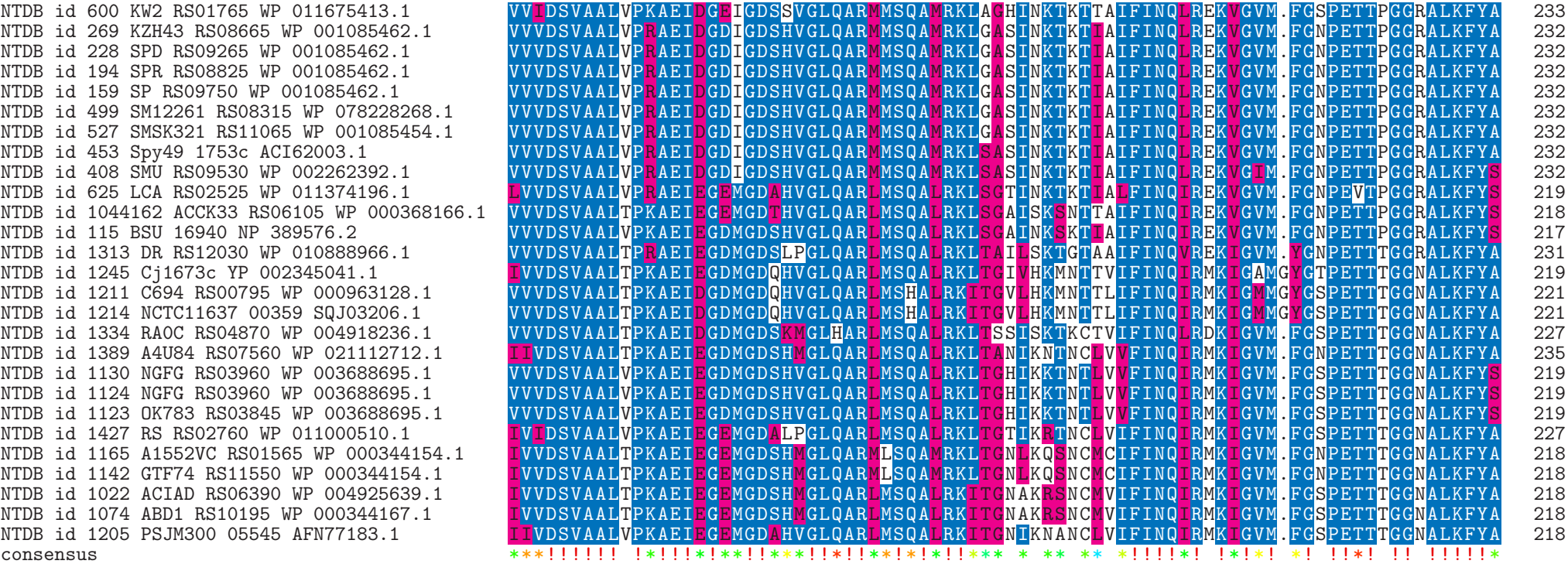
```

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 499 SM12261 RS08315 WP 078228268.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 453 Spy49 1753c ACI62003.1
NTDB id 408 SMU RS09530 WP 002262392.1
NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 1044162 ACCK33 RS06105 WP 000368166.1
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 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus

```



logo



```

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 499 SM12261 RS08315 WP 078228268.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 453 Spy49 1753c ACI62003.1
NTDB id 408 SMU RS09530 WP 002262392.1
NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 1044162 ACKK33 RS06105 WP 000368166.1
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 SQ03206.1
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 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus

```



logo

NTDB id 600 KW2 RS01765 WP 011675413.1	DEKIGQGA	EKA	KNYL	KEH	QDV	FDE	IDHKV	VRAAH	GL	DDSEVA	ETEEETT	ASKTKAKAK	KEEK	AVETEE	IELELED		387
NTDB id 269 KZH43 RS08665 WP 001085462.1	DEKIGQGS	ENAKKYLA	EHPEIF	DEIDKQV	RSKF	GL	IDGEEV	SEQDTEN	KKDE	....	PKKEEA	..VNEEV	PLDLG	DELEIE		385	
NTDB id 228 SPD RS09265 WP 001085462.1	DEKIGQGS	ENAKKYLA	EHPEIF	DEIDKQV	RSKF	GL	IDGEEV	SEQDTEN	KKDE	....	PKKEEA	..VNEEV	PLDLG	DELEIE		385	
NTDB id 194 SPR RS08825 WP 001085462.1	DEKIGQGS	ENAKKYLA	EHPEIF	DEIDKQV	RSKF	GL	IDGEEV	SEQDTEN	KKDE	....	PKKEEA	..VNEEV	PLDLG	DELEIE		385	
NTDB id 159 SP RS09750 WP 001085462.1	DEKIGQGS	ENAKKYLA	EHPEIF	DEIDKQV	RSKF	GL	IDGEEV	SEQDTEN	KKDE	....	PKKEEA	..VNEEV	PLDLG	DELEIE		385	
NTDB id 499 SM12261 RS08315 WP 078228268.1	DEKIGQGS	ENAKKYLA	DNPEIF	DEIDHQV	RVQF	GL	IDGEEI	AES	....	KKDE	....	AAQVDS	..VNEEV	TLDLG	DELEIE	381	
NTDB id 527 SMSK321 RS11065 WP 001085454.1	DEKIGQGS	ENAKKYLA	DNPEVFA	DEIDHQV	RVQF	GL	IDGEEA	AES	....	KKDE	....	VAQVDS	..VNEEV	TLDLG	DELEIE	381	
NTDB id 453 Spy49 1753c ACI62003.1	GEKIGQGS	ENAKRYLA	DHPQLF	DEIDRKV	RVKF	GL	LEESEEE	SAMAVASE	.....	E	.....	TDDLALD	LDNGIE	IE		377	
NTDB id 408 SMU RS09530 WP 002262392.1	GEKIGQGS	ENAKKFLA	DNPEIF	DDIDHKV	RVQY	GL	IEEDNTE	EKQSSKE	.....	ETDEK	..ADKNL	VLELDD	TIELE			382	
NTDB id 625 LCA RS02525 WP 011374196.1	SERIGQGR	ENAKNYLA	DHEDVE	DEVRLK	VRAAY	GIS	SDVPEED	LPTTEDE	QINILPDD	STEE	.....					355	
NTDB id 1044162 ACCK33 RS06105 WP 000368166.1	GERMGQG	KENVKMYL	KENPQIKE </td <td>EIDRKL</td> <td>REKL</td> <td>GIS</td> <td>DGDVEE</td> <td>TEDA</td> <td>..PKSL</td> <td>FD</td> <td>EE</td> <td>.....</td> <td></td> <td></td> <td></td> <td>347</td>	EIDRKL	REKL	GIS	DGDVEE	TEDA	..PKSL	FD	EE					347	
NTDB id 115 BSU 16940 NP 389576.2	EERLGGQ	GR	ENAKQFL	KENKDI	MLMIQE	QIREHY	GL	DNNGV	VQQAEET	QEELE	FEE	.....				348	
NTDB id 1313 DR RS12030 WP 010888966.1	DERIGQG	KEKTIAYIA	ERP	MEQE	IRDRV	MAAIR	AGNAGE	APALAP	APAAPE	AAAA	.....					363	
NTDB id 1245 Cj1673c YP 002345041.1	DKKLGGQ	GR	ENSKAFL	KENPEIA	DEITKAI	QNSMG	IEGMI	....	SGSEDD	..EGEE	.....					343	
NTDB id 1211 C694 RS00795 WP 000963128.1	DKKLGGQ	GR	ENAKALLK	EDKAL	ADEITLK	IKESIG	SNEEI	....	MPLPDE	..PLEEME	.....					347	
NTDB id 1214 NCTC11637 00359 SQJ03206.1	DKKLGGQ	GR	ENAKALLK	EDKAL	ADEITLK	IKESIG	SNEEI	....	MPLPDE	..PLEEME	.....					347	
NTDB id 1334 RAOC RS04870 WP 004918236.1	DTKLGGQ	GRDTV	KELIK	DNPELA	EEL	EAKIRE	KLQAK	.....								343	
NTDB id 1389 A4U84 RS07560 WP 021112712.1	GTKIGQG	KNN	AVKWL	KENPEIA	DKLE	QEIRNT	LASNPN	S	....	VLKAT	ASDSN	DES	..VEEF	SEEL	.....	372	
NTDB id 1130 NGFG RS03960 WP 003688695.1	GAKIGQG	KDNVRV	WLKENPEI	SDEID	AKIRAL	NGVEMHI	....	TEGTQ	DET	DGER	.....	PEE	.....			348	
NTDB id 1124 NGFG RS03960 WP 003688695.1	GAKIGQG	KDNVRV	WLKENPEI	SDEID	AKIRAL	NGVEMHI	....	TEGTQ	DET	DGER	.....	PEE	.....			348	
NTDB id 1123 OK783 RS03845 WP 003688695.1	GAKIGQG	KDNVRV	WLKENPEI	SDEID	AKIRAL	NGVEMHI	....	TEGTQ	DET	DGER	.....	PEE	.....			348	
NTDB id 1427 RS RS02760 WP 011000510.1	GERIGQGR	DNC	REFL	RENAEL	AREI	ENKVR	REHLG	VTPMG	....	AVTLA	..EEVEED	.....				352	
NTDB id 1165 A1552VC RS01565 WP 000344154.1	GDKIGQG	KANACKYL	KENPEIA	KTLD	KKLRE	MLLN	PENM	....	QLIAET	SSAADD	VE	..FGAV	PPEF	.....		354	
NTDB id 1142 GTF74 RS11550 WP 000344154.1	GDKIGQG	KANACKYL	KENPEIA	KTLD	KKLRE	MLLN	PENM	....	QLIAET	SSAADD	VE	..FGAV	PPEF	.....		354	
NTDB id 1022 ACIAD RS06390 WP 004925639.1	GNKIGQG	KNNVIRY	LEENPQI	STE	IAVIRE	QLLT	TKASD	....	QTAA	..HDETE	EEPD	..LL	..ES	.....		349	
NTDB id 1074 ABD1 RS10195 WP 000344167.1	GNKIGQG	KNNVIRY	FEENNQIA	EIEI	ERNIRE	QLLT	TGTN	....	GAVQ	..I	..EDEE	EPD	..LL	..LES	.....	349	
NTDB id 1205 PSJM300 05545 AFN77183.1	GSKIGQG	KANAAKYL	LEENPEI	GQIE	IEQQI	RAKLL	VTSAN	....	TKATP	VAED	LADAD	..I	.....			347	
consensus	**!	!!	*****	**	*****	*****	**	**	**								

logo

NTDB id 600 KW2 RS01765 WP 011675413.1	...	387
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 453 Spy49 1753c ACI62003.1	D..	378
NTDB id 408 SMU RS09530 WP 002262392.1	D..	383
NTDB id 625 LCA RS02525 WP 011374196.1	...	355
NTDB id 1044162 ACCK33 RS06105 WP 000368166.1	...	347
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 1022 ACIAD RS06390 WP 004925639.1	...	349
NTDB id 1074 ABD1 RS10195 WP 000344167.1	...	349
NTDB id 1205 PSJM300 05545 AFN77183.1	...	347
consensus		

-  non conserved
-  similar
-  ≥ 50% conserved