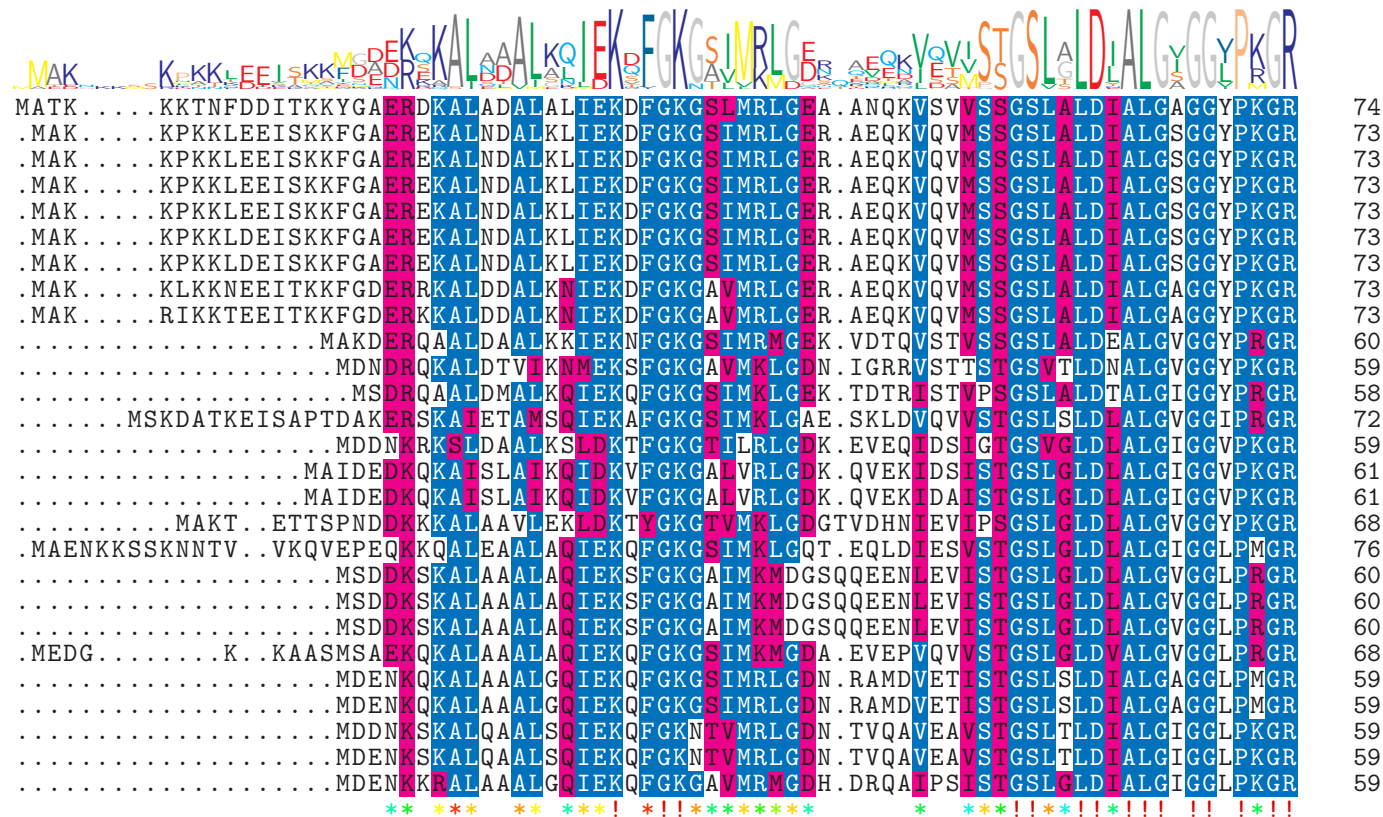


```

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 242859 CGP92 RS06335 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 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

```



```

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 242859 CGP92 RS06335 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 242859 CGP92 RS06335 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	SVRLDVRG	STKIEEGS	.GDNKTQ	IGKITK	IKVVKNKV	APPFKE	VALVDIM	FGEGIS	STGELIN	IAVEEG	ITKKSG	AWFAYN	312
NTDB id 269 KZH43 RS08665 WP 001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKNKV	APPFKE	AVVEIM	YGEGIS	KTGELL	KIASDL	DIKKAG	AWYSYK	311
NTDB id 228 SPD RS09265 WP 001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKNKV	APPFKE	AVVEIM	YGEGIS	KTGELL	KIASDL	DIKKAG	AWYSYK	311
NTDB id 194 SPR RS08825 WP 001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKNKV	APPFKE	AVVEIM	YGEGIS	KTGELL	KIASDL	DIKKAG	AWYSYK	311
NTDB id 159 SP RS09750 WP 001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKNKV	APPFKE	AVVEIM	YGEGIS	KTGELL	KIASDL	DIKKAG	AWYSYK	311
NTDB id 499 SM12261 RS08315 WP 078228268.1	SVRLDVRG	STQIKGTG	.DQKDTN	VGKETK	IKVVKNKV	APPFKE	AFVEIM	YGEGIS	KTGELL	KIASDL	DIKKAG	AWYSYK	311
NTDB id 527 SMSK321 RS11065 WP 001085454.1	SVRLDVRG	STQIKGTG	.DQKDTN	VGKETK	IKVVKNKV	APPFKE	AFVEIM	YGEGIS	KTGELL	KIASDL	DIKKAG	AWYSYK	311
NTDB id 453 Spy49 1753c ACI62003.1	SVRLDVRG	TTQIKGTG	.DQKDS	IGKETK	IKVVKNKV	APPFKE	AEVEIM	YGEGIS	RTGELV	KIASDL	DIKKAG	AWFSYN	311
NTDB id 408 SMU RS09530 WP 002262392.1	SVRLDVRG	NTQIKGTG	.EQKDSN	IGKETK	IKVVKNKV	APPFKE	AFVEIM	YGEGIS	RTGELV	KIASDL	GIKKAG	AWYSYN	311
NTDB id 625 LCA RS02525 WP 011374196.1	TVRLEV	RRRAETIK	NGT....DM	IGNRARI	IKVVKNKV	APPFKE	AEVDIM	YGQGIS	RTGELV	DMAVEK	DIINKSG	SWYSYG	294
NTDB id 242859 CGP92 RS06335 WP 000368166.1	SVRLEV	RRAEQLKQ	GQ....EIV	GNRTKI	IKVVKNKV	APPFRV	AEVDIM	YGQGIS	KEGELI	DLGVEND	IVDKSG	AWYSYN	293
NTDB id 115 BSU 16940 NP 389576.2	SVRLEV	RRAEQLKQ	GN....DVM	GNKTKI	IKVVKNKV	APPFR	TAEDIM	YGEGIS	KEGETI	IDLGT	ELDIVQ	KSWSYSY	292
NTDB id 1313 DR RS12030 WP 010888966.1	SVRLDVR	KIGQ....PTK	VGNDAV	ANTVKIK	TVKNKVA	APFKE	VELALV	YGKGF	DLSDLV	GLAADM	DIKKAG	SFYSYG	307
NTDB id 1245 Cj1673c YP 002345041.1	SVRLDVR	KVAT....L.KQ	NEEP	IGNRVK	VVVKNKV	APPFRQ	AEFDVM	FGEGLS	REGELI	IDYGVK	LDIVDK	SGAWFSYK	294
NTDB id 1211 C694 RS00795 WP 000963128.1	SVRIDIR	RIAS....L.KQ	NEQH	IGNRAK	AKVVKNKV	APPFRE	AEFDIM	FGEGIS	KEGETI	IDYGVK	LDIVDK	SGAWLSYQ	296
NTDB id 1214 NCTC11637 00359 SQJ03206.1	SVRIDIR	RIAA....L.KQ	NEQH	IGNRAK	AKVVKNKV	APPFRE	AEFDIM	FGEGIS	KEGETI	IDYGVK	LDIVDK	SGAWLSYQ	296
NTDB id 1334 RAOC RS04870 WP 004918236.1	SVRIDIR	RSLSDTGK	IKDKSGEV	IGNRTK	VVVKNKV	APPFKS	AEFDIM	YGEGV	SKVGEI	LDVATD	LIIQKS	GSWFSYQ	307
NTDB id 1389 A4U84 RS07560 WP 021112712.1	SVRLDIR	RCGV....V.KD	GDEI	IGSETK	VVVKNKV	APPFRE	VQFDIM	YGEGIS	RMNELL	ILAEANG	FIIKKS	SGAWFSYD	310
NTDB id 1130 NGFG RS03960 WP 003688695.1	SVRLDIR	RTGS....I.KK	GEEV	LGNETR	VKVIKN	KVAPPFRQ	AEFDIL	YGEGIS	WEGELI	IDIGVK	NDIINK	SGAWYSYN	294
NTDB id 1124 NGFG RS03960 WP 003688695.1	SVRLDIR	RTGS....I.KK	GEEV	LGNETR	VKVIKN	KVAPPFRQ	AEFDIL	YGEGIS	WEGELI	IDIGVK	NDIINK	SGAWYSYN	294
NTDB id 1123 OK783 RS03845 WP 003688695.1	SVRLDIR	RTGS....I.KK	GEEV	LGNETR	VKVIKN	KVAPPFRQ	AEFDIL	YGEGIS	WEGELI	IDIGVK	NDIINK	SGAWYSYN	294
NTDB id 1427 RS RS02760 WP 011000510.1	SVRLDIR	RIGS....I.KK	GDEV	VGNETK	VVVKNKV	APPFRE	AIFDIL	YGAGVS	REGEI	IDLGV	EAKVVE	EKSGAWYSYN	302
NTDB id 1165 A1552VC RS01565 WP 000344154.1	SVRLDIR	RTGA....I.KE	GEEV	VGNETRI	IKVVKNK	IAAPFKE	ANTQIM	YGQGF	NREGEL	IDLGV	VKHKMVE	EKSGAWYSYN	293
NTDB id 1142 GTF74 RS11550 WP 000344154.1	SVRLDIR	RTGA....I.KE	GEEV	VGNETRI	IKVVKNK	IAAPFKE	ANTQIM	YGQGF	NREGEL	IDLGV	VKHKMVE	EKSGAWYSYN	293
NTDB id 1022 ACIAD RS06390 WP 004925639.1	SVRLDIR	RIGQ....V.KE	GDEI	IGSETK	VVVKNK	MAPPFRE	AIQILY	GKGVN	QLGELV	DLAVQQ	NIIVQK	AGAWYSYQ	293
NTDB id 1074 ABD1 RS10195 WP 000344167.1	SVRLDIR	RIGQ....V.KE	GDEI	IGSETK	VVVKNK	MAPPFRE	AIQILY	GKGTN	QLGELV	DLAVQQ	DIIVQK	AGAWYSYQ	293
NTDB id 1205 PSJM300 05545 AFN77183.1	SVRLDIR	RRTGA....V.KE	GDEV	VGSETR	VVVKNKV	APPFRQ	AEFQIL	YGKGIY	RNGEII	DLGVQQ	GLVEK	SGAWAYK	293
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 242859 CGP92 RS06335 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 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

		IEE	
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 242859 CGP92 RS06335 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			

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