

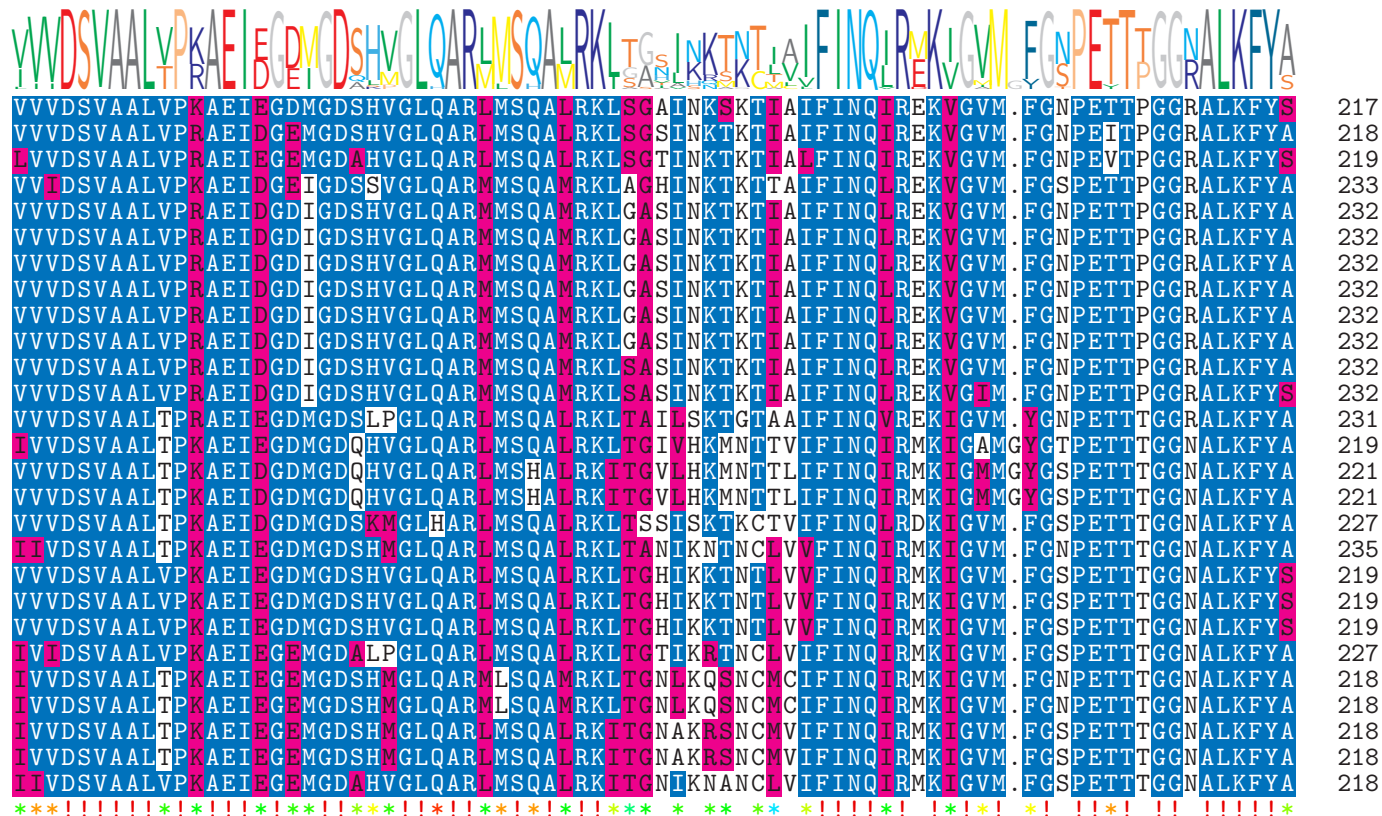
logo

NTDB id 115 BSU 16940 NP 389576.2	MSDRQAALDMALKQIEKQFGKCSIMKLCEK.TDTRISTVPSGSLALDTALGIGGYPRGR	58
NTDB id 1125498 FQ475 RS13585 WP 002287328.1	MADDRKAALDAALKKIEKSYGKCSIMKLCEK.IDQQISTIPSGSLALDVALGVGGYPRGR	59
NTDB id 625 LCA RS02525 WP 011374196.1	MAKDERQAALDAALKKIEKNFGKCSIMRMCEK.VDTQVSTVSSGSLALDEALGVGGYPRGR	60
NTDB id 600 KW2 RS01765 WP 011675413.1	MATK.....KKTNFDDITKKYGAERDKALADALALIEKDFGKCSIMRLCEA.ANQKVSVSSGSLALDTALCAGGYPRGR	74
NTDB id 269 KZH43 RS08665 WP 001085462.1	.MAK.....KPKKLEEISKKFGAEREKALNDALKLIEKDFGKCSIMRLCER.AEQKVQVMSSGSLALDTALCSGGYPKGR	73
NTDB id 228 SPD RS09265 WP 001085462.1	.MAK.....KPKKLEEISKKFGAEREKALNDALKLIEKDFGKCSIMRLCER.AEQKVQVMSSGSLALDTALCSGGYPKGR	73
NTDB id 194 SPR RS08825 WP 001085462.1	.MAK.....KPKKLEEISKKFGAEREKALNDALKLIEKDFGKCSIMRLCER.AEQKVQVMSSGSLALDTALCSGGYPKGR	73
NTDB id 159 SP RS09750 WP 001085462.1	.MAK.....KPKKLEEISKKFGAEREKALNDALKLIEKDFGKCSIMRLCER.AEQKVQVMSSGSLALDTALCSGGYPKGR	73
NTDB id 527 SMSK321 RS11065 WP 001085454.1	.MAK.....KPKKLDEISKKFGAEREKALNDALKLIEKDFGKCSIMRLCER.AEQKVQVMSSGSLALDTALCSGGYPKGR	73
NTDB id 499 SM12261 RS08315 WP 078228268.1	.MAK.....KPKKLDEISKKFGAEREKALNDALKLIEKDFGKCSIMRLCER.AEQKVQVMSSGSLALDTALCSGGYPKGR	73
NTDB id 453 Spy49 1753c ACI62003.1	.MAK.....KLKKNEEITKKFGDERRKALDDALKNIEKDFGKCAVMRLCER.AEQKVQVMSSGSLALDTALCAGGYPRGR	73
NTDB id 408 SMU RS09530 WP 002262392.1	.MAK.....RIKKTEEITKKFGDERKKALDDALKNIEKDFGKCAVMRLCER.AEQKVQVMSSGSLALDTALCAGGYPRGR	73
NTDB id 1313 DR RS12030 WP 01088966.1	MSKDATKEISAPTDAKERSKATETAMSQIEKAFGKCSIMKLGAE.SKLDVQVVSTGSLSLDLALGVGGTIPRGR	72
NTDB id 1245 Cj1673c YP 002345041.1	MDENKRRSLDAALKSLDKTFGKCTILRLCDK.EVEQIDSIGTGSVGLDLALCIGGVPRGR	59
NTDB id 1211 C694 RS00795 WP 000963128.1	MAIDEDKQKATSLATKQIDKVFVGKCALVRLCDK.QVEKIDISTGSLGLDLALCIGGVPRGR	61
NTDB id 1214 NCTC11637 00359 SQJ03206.1	MAIDEDKQKATSLATKQIDKVFVGKCALVRLCDK.QVEKIDISTGSLGLDLALCIGGVPRGR	61
NTDB id 1334 RA0C RS04870 WP 004918236.1	MAKT..ETTSPNDKKKALAALVLEKLDKTYGKCTVMKLCGTVVDHNIEVIPSLSLGLDLALGVGGYPKGR	68
NTDB id 1389 A4U84 RS07560 WP 021112712.1	.MAENKKSSKNNTV..VKQVEPEQKKQALEAALAQIEKQFGKCSIMKLGGT.EQLDIESVSTGSLGLDLALCIGGLPMGR	76
NTDB id 1130 NGFG RS03960 WP 003688695.1	MSDDKSKALAAALAQIEKSFGKCAIMKMDGSQQEENLEVIISTGSLGLDLALCVGGLPGR	60
NTDB id 1124 NGFG RS03960 WP 003688695.1	MSDDKSKALAAALAQIEKSFGKCAIMKMDGSQQEENLEVIISTGSLGLDLALCVGGLPGR	60
NTDB id 1123 OK783 RS03845 WP 003688695.1	MSDDKSKALAAALAQIEKSFGKCAIMKMDGSQQEENLEVIISTGSLGLDLALCVGGLPGR	60
NTDB id 1427 RS RS02760 WP 011000510.1	.MEDG.....K..KAASMSAEKQKALAAALAQIEKQFGKCSIMKMGDA.EVEPVQVVSTGSLGLDVALGVGGLPGR	68
NTDB id 1165 A1552VC RS01565 WP 000344154.1	MDENKQKALAAALGQIEKQFGKCSIMRLCDN.RAMDVETISTGSLSLDLALCAGGLPMGR	59
NTDB id 1142 GTF74 RS11550 WP 000344154.1	MDENKQKALAAALGQIEKQFGKCSIMRLCDN.RAMDVETISTGSLSLDLALCAGGLPMGR	59
NTDB id 1022 ACIAD RS06390 WP 004925639.1	MDENKSKALQAALSQIEKQFGKNTVMRLCDN.TVQAVEAVSTGSLTLDIALCIGGLPKGR	59
NTDB id 1074 ABD1 RS10195 WP 000344167.1	MDENKSKALQAALSQIEKQFGKNTVMRLCDN.TVQAVEAVSTGSLTLDIALCIGGLPKGR	59
NTDB id 1205 PSJM300 05545 AFN77183.1	MDENKKRALAAALGQIEKQFGKCAVMRMGDH.DRQAIPSTGSLGLDLALCIGGLPKGR	59
consensus	*** ** *	

logo

NTDB id 115 BSU 16940 NP 389576.2	IIEIYGP	ESSGKTT	VALHATAEV	QQQGGQA	AFIDAEHALDP	VYAQK	LGVN	DELL	SQPD	GEQALEI	ADK	LYRSGAVD	138
NTDB id 1125498 FQ475 RS13585 WP 002287328.1	IIEIYGP	ESSGKTT	VALHATAEV	QKNNGGTA	AFIDAEHALDP	QYAQK	LGVN	DELL	SQPD	GEQGLEI	ADAL	VSSGAVD	139
NTDB id 625 LCA RS02525 WP 011374196.1	IVEIYGP	ESSGKTT	VALHATAEV	QKQGGTA	AFIDAEHALDP	KYAT	LGVN	DELL	SQPD	GEQGLEI	ADAL	VSSGAVD	140
NTDB id 600 KW2 RS01765 WP 011675413.1	IVEIYGP	ESSGKTT	VALHATAEV	QKEGGIA	AFIDAEHALDP	EYAKA	LGVN	DELL	SQPD	YGEQGL	QIAEKL	ITS	154
NTDB id 269 KZH43 RS08665 WP 001085462.1	IIEIYGP	ESSGKTT	VALHATAEV	QKEGGIA	AFIDAEHALDP	AYAAA	LGVN	DELL	SQPD	GEQGLEI	AGKL	ID	153
NTDB id 228 SPD RS09265 WP 001085462.1	IIEIYGP	ESSGKTT	VALHATAEV	QKEGGIA	AFIDAEHALDP	AYAAA	LGVN	DELL	SQPD	GEQGLEI	AGKL	ID	153
NTDB id 194 SPR RS08825 WP 001085462.1	IIEIYGP	ESSGKTT	VALHATAEV	QKEGGIA	AFIDAEHALDP	AYAAA	LGVN	DELL	SQPD	GEQGLEI	AGKL	ID	153
NTDB id 159 SP RS09750 WP 001085462.1	IIEIYGP	ESSGKTT	VALHATAEV	QKEGGIA	AFIDAEHALDP	AYAAA	LGVN	DELL	SQPD	GEQGLEI	AGKL	ID	153
NTDB id 527 SMSK321 RS11065 WP 001085454.1	IIEIYGP	ESSGKTT	VALHATAEV	QKEGGIA	AFIDAEHALDP	AYAAA	LGVN	DELL	SQPD	GEQGLEI	AGKL	ID	153
NTDB id 499 SM12261 RS08315 WP 078228268.1	IIEIYGP	ESSGKTT	VALHATAEV	QKEGGIA	AFIDAEHALDP	AYAAA	LGVN	DELL	SQPD	GEQGLEI	AGKL	ID	153
NTDB id 453 Spy49 1753c ACI62003.1	IIEIYGP	ESSGKTT	VALHATAEV	QKEGGIA	AFIDAEHALDP	AYAAA	LGVN	DELL	LAQPD	GEQGLEI	AGKL	ID	153
NTDB id 408 SMU RS09530 WP 002262392.1	IVEIYGP	ESSGKTT	VALHATAEV	QKDGCA	AFIDAEHALDP	AYAAA	LGVN	DELL	SQPD	GEQGLEI	AGKL	ID	153
NTDB id 1313 DR RS12030 WP 010888966.1	IIEIYGP	ESSGKTT	VALHATAEV	QKAGGTC	AFIDAEHALDP	VYARAL	LGVN	DELL	SQPD	NGEQALEI	MELL	VRSGA	152
NTDB id 1245 Cj1673c YP 002345041.1	IIEIYGP	ESSGKTT	VALHATAEV	QKAGGTC	AFIDAEHALDP	VYAKN	LGVN	DELL	LYVSQPD	FGEQALEI	VETIAR	SGAVD	139
NTDB id 1211 C694 RS00795 WP 000963128.1	IIEIYGP	ESSGKTT	VALHATAEV	QKNGGVC	AFIDAEHALDP	VHYAKRL	LGVN	DELL	SQPD	GEQALEI	LETITR	SGGID	141
NTDB id 1214 NCTC11637 00359 SQJ03206.1	IIEIYGP	ESSGKTT	VALHATAEV	QKNGGVC	AFIDAEHALDP	VHYAKRL	LGVN	DELL	SQPD	GEQALEI	LETITR	SGGID	141
NTDB id 1334 RA0C RS04870 WP 004918236.1	IVEIYGP	ESSGKTT	VALHATAEV	QKVGGTA	AFIDAEHALDP	FMHYAEK	LGVN	DELL	SQPD	NGEQALEI	ADSL	TRSGVD	148
NTDB id 1389 A4U84 RS07560 WP 021112712.1	IVEIYGP	ESSGKTT	VALHATAEV	QKGNKTC	AFIDAEHALDP	VYARN	LGVN	DELL	SQPD	NGEQALEI	CDAL	VRSGAVD	156
NTDB id 1130 NGFG RS03960 WP 003688695.1	IVEIYGP	ESSGKTT	VALHATAEV	QKNGGVC	AFIDAEHALDP	VYARKL	LGVN	DELL	SQPD	GEQALEI	CDTL	VRSGGID	140
NTDB id 1124 NGFG RS03960 WP 003688695.1	IVEIYGP	ESSGKTT	VALHATAEV	QKNGGVC	AFIDAEHALDP	VYARKL	LGVN	DELL	SQPD	GEQALEI	CDTL	VRSGGID	140
NTDB id 1123 OK783 RS03845 WP 003688695.1	IVEIYGP	ESSGKTT	VALHATAEV	QKNGGVC	AFIDAEHALDP	VYARKL	LGVN	DELL	SQPD	GEQALEI	CDTL	VRSGGID	140
NTDB id 1427 RS RS02760 WP 011000510.1	IVEIYGP	ESSGKTT	VALHATAEV	QKNGGVC	AFIDAEHALDP	VYARKL	LGVN	DELL	SQPD	GEQALEI	CDTL	VRSGGID	140
NTDB id 1165 A1552VC RS01565 WP 000344154.1	IVEIYGP	ESSGKTT	VALHATAEV	QKNGGVC	AFIDAEHALDP	VYARKL	LGVN	DELL	SQPD	GEQALEI	CDTL	VRSGGID	148
NTDB id 1142 GTF74 RS11550 WP 000344154.1	IVEIYGP	ESSGKTT	VALHATAEV	QKNGGVC	AFIDAEHALDP	VYARKL	LGVN	DELL	SQPD	GEQALEI	CDTL	VRSGGID	139
NTDB id 1022 ACIAD RS06390 WP 004925639.1	IVEIYGP	ESSGKTT	VALHATAEV	QKNGGVC	AFIDAEHALDP	VYARKL	LGVN	DELL	SQPD	GEQALEI	CDTL	VRSGGID	139
NTDB id 1074 ABD1 RS10195 WP 000344167.1	IVEIYGP	ESSGKTT	VALHATAEV	QKNGGVC	AFIDAEHALDP	VYARKL	LGVN	DELL	SQPD	GEQALEI	CDTL	VRSGGID	139
NTDB id 1205 PSJM300 05545 AFN77183.1	IVEIYGP	ESSGKTT	VALHATAEV	QKNGGVC	AFIDAEHALDP	VYARKL	LGVN	DELL	SQPD	GEQALEI	CDTL	VRSGGID	139
consensus	IIEIYGP	ESSGKTT	VALHATAEV	QKNGGVC	AFIDAEHALDP	VYARKL	LGVN	DELL	SQPD	GEQALEI	CDTL	VRSGGID	139

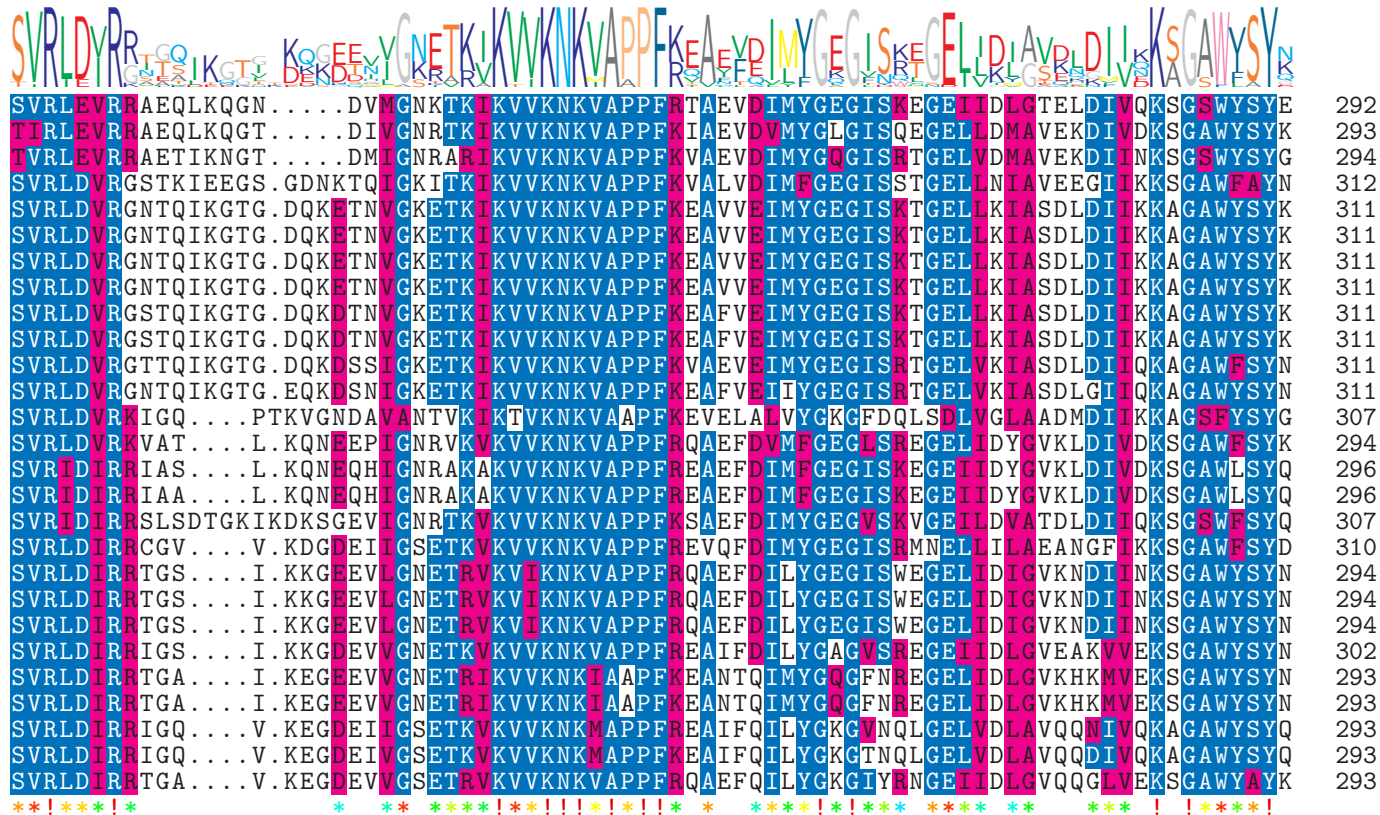
NTDB id 115 BSU 16940 NP 389576.2
NTDB id 1125498 FQ475 RS13585 WP 002287328.1
NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 600 KW2 RS01765 WP 01675413.1
NTDB id 269 KZH43 RS08665 WP 001085462.1
NTDB id 228 SPD RS09265 WP 001085462.1
NTDB id 194 SPR RS08825 WP 001085462.1
NTDB id 159 SP RS09750 WP 001085462.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 499 SM12261 RS08315 WP 078228268.1
NTDB id 453 Spy49 1753c ACT62003.1
NTDB id 408 SMU RS09530 WP 002262392.1
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



```

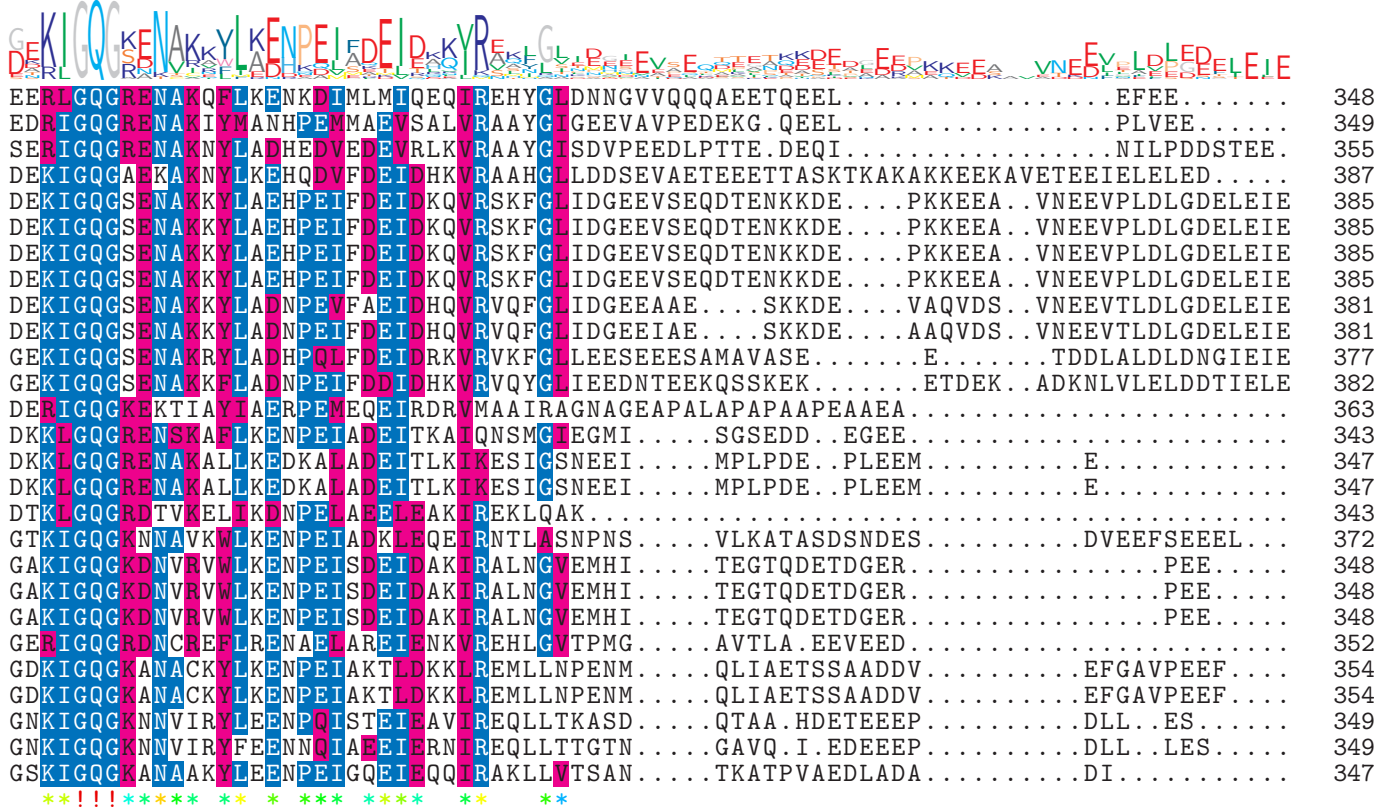
NTDB id 115 BSU 16940 NP 389576.2
NTDB id 1125498 FQ475 RS13585 WP 002287328.1
NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 600 KW2 RS01765 WP 01675413.1
NTDB id 269 KZH43 RS08665 WP 001085462.1
NTDB id 228 SPD RS09265 WP 001085462.1
NTDB id 194 SPR RS08825 WP 001085462.1
NTDB id 159 SP RS09750 WP 001085462.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 499 SM12261 RS08315 WP 078228268.1
NTDB id 453 Spy49 1753c AC162003.1
NTDB id 408 SMU RS09530 WP 002262392.1
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 115 BSU 16940 NP 389576.2
NTDB id 1125498 FQ475 RS13585 WP 002287328.1
NTDB id 625 LCA RS02525 WP 011374196.1
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 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

		LEE	
NTDB id 115 BSU 16940 NP 389576.2	...	348	
NTDB id 1125498 FQ475 RS13585 WP 002287328.1	...	349	
NTDB id 625 LCA RS02525 WP 011374196.1	...	355	
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 527 SMSK321 RS11065 WP 001085454.1	IEE	384	
NTDB id 499 SM12261 RS08315 WP 078228268.1	IEE	384	
NTDB id 453 Spy49 1753c ACI62003.1	D..	378	
NTDB id 408 SMU RS09530 WP 002262392.1	D..	383	
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 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