

logo

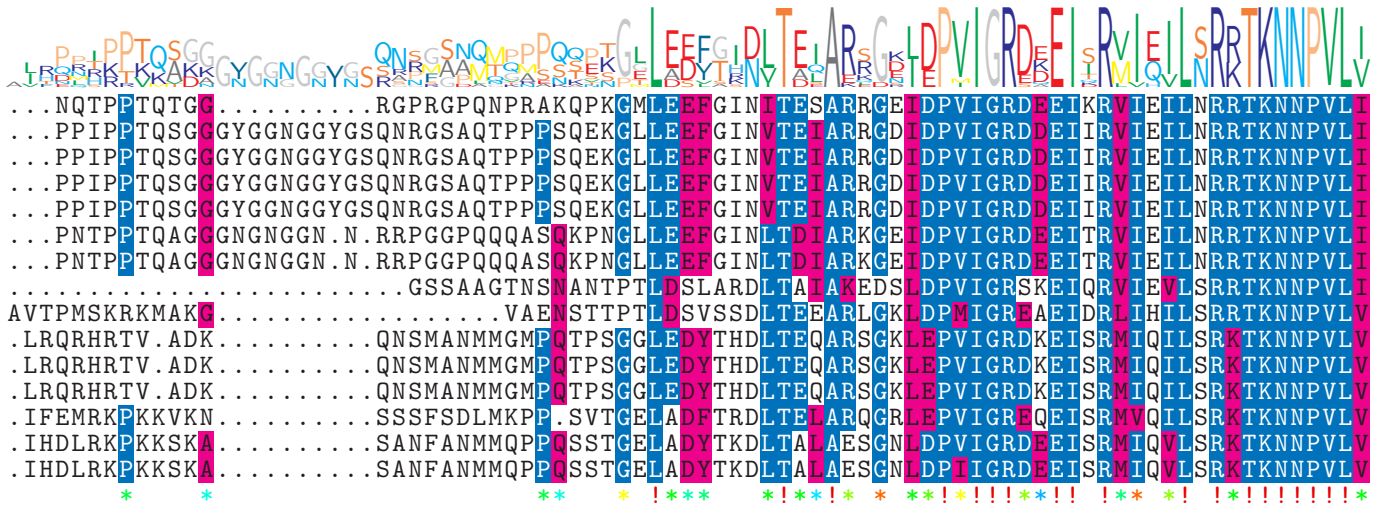
NTDB id 601 KW2 RS02615 WP 021036805.1	MLCQNCNINEA.....TI	13
NTDB id 281 KZH43 RS03550 WP 000882517.1	MLCQNCKINDS.....TI	13
NTDB id 245 SPD RS03860 WP 000882517.1	MLCQNCKINDS.....TI	13
NTDB id 243 SPR RS03635 WP 000882517.1	MLCQNCKINDS.....TI	13
NTDB id 241 SP RS04015 WP 000882523.1	MLCQNCKINDS.....TI	13
NTDB id 73540 FNL60 RS07695 WP 002266431.1	MLCQNCKINEA.....TI	13
NTDB id 378 SMU RS02690 WP 002263569.1	MLCQNCKLINEA.....TI	13
NTDB id 85 BSU 00860 NP 387967.1	..MMFGRFTEAQQVLALAQEEALRLGHNNIGTEHILLGLVREGGIAAKALQALGLGSEKIQKEVESLIG.....RGQEMS	75
NTDB id 610 V4T04 RS10165 WP 012897346.1	MKFENIKYTPTLDRILEKAEEYAHQYQYGTIESAHLAAMATTSGSIAYSLLAGMNVDSDDLIDL.....EDLSSHVKVKR	77
NTDB id 290 KZH43 RS10025 WP 001109677.1	MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNSHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYSQDET	75
NTDB id 289 SPD RS10700 WP 001109677.1	MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNSHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYSQDET	75
NTDB id 287 SP RS11210 WP 001109712.1	MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNSHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYSQDET	75
NTDB id 377 SMU RS09275 WP 002262344.1	MTDYSLKMQEVFRLAQFEAARFESSYLESWHVLLAMVEIDSSVAGLSFAEFADRVFEDYQAAAAILAIGKKPKSSSN..DI	79
NTDB id 297 STER RS00545 WP 011680614.1	MTIYSRKMQAIFHRAQLEAERFESPFLWTWHVLLAMVEVTGSVAYLTFTDFEDRIHSEEIETAAVLAMEKRPKDLSESDII	81
NTDB id 329 STU RS10020 WP 011225298.1	MTIYSRKMQAIFHRAQLEAERFESPFLWTWHVLLAMVEVPGSVAYLTFTDFEDRIHSEEIETAAVLAMEKRPKDLSESDII	81
consensus	**.....**	

logo

NTDB id 601 KW2 RS02615 WP 021036805.1	HLYTSVNGCQKQIDLCQNCYQ...IMKSGGQEAALFGAGNASNGNSDEPFNP.....FNDIFSALQG.QDFNGAAS..	79
NTDB id 281 KZH43 RS03550 WP 000882517.1	HLYTNLNGKQKQIDLCQNCYK...IKTDPNNSLFKGMTDLNNRDFDP.....FGDFFNDLNNFRPSSN..T..	75
NTDB id 245 SPD RS03860 WP 000882517.1	HLYTNLNGKQKQIDLCQNCYK...IKTDPNNSLFKGMTDLNNRDFDP.....FGDFFNDLNNFRPSSN..T..	75
NTDB id 243 SPR RS03635 WP 000882517.1	HLYTNLNGKQKQIDLCQNCYK...IKTDPNNSLFKGMTDLNNRDFDP.....FGDFFNDLNNFRPSSN..T..	75
NTDB id 241 SP RS04015 WP 000882523.1	HLYTNLNGKQKQIDLCQNCYK...IKTDPNNSLFKGMTDLNNRDFDP.....FGDFFNDLNNFRPSSN..T..	75
NTDB id 73540 FNL60 RS07695 WP 002266431.1	HLYANVNGCQKQIDLCQNCYQ...IMKTDPENGPLNHLSSQNSSSINPF.....FDDFFGD LNNFRAFNNQDL..	78
NTDB id 378 SMU RS02690 WP 002263569.1	HLYANVNGCQKQIDLCQNCYQ...IMKTDPENGPLNHLSSQNSSSINPF.....FDDFFGD LNNFRAFNNQDL..	78
NTDB id 85 BSU 00860 NP 387967.1	QTIHYTPRAKKVIELSMDEARKLGHSYVGTTEHILLGLIREGEGVAARVLNNLGVSLNKARQQVLQL.....LGSNET....	147
NTDB id 610 V4T04 RS10165 WP 012897346.1	STLRFSPRAEEVMTAASFLAIHNNSEAVGTEHLLYALLQVEDGFGQLLLKL.....QKINIVSLRKELEKRTGLKVPESKK	153
NTDB id 290 KZH43 RS10025 WP 001109677.1	TELPFSRRLQILFDEAEYVASVVHAKVLGTEHVLVYAILHDGNALATRILERAGFSYEDKKDQVKIAALRRNLEERAGWTREDLKA	160
NTDB id 289 SPD RS10700 WP 001109677.1	TELPFSRRLQILFDEAEYVASVVHAKVLGTEHVLVYAILHDGNALATRILERAGFSYEDKKDQVKIAALRRNLEERAGWTREDLKA	160
NTDB id 287 SP RS11210 WP 001109712.1	TELPFSRRLQVLFDEAEYVASVVHAKVLGTEHVLVYAILHDSNALATRILERAGFSYEDKKDQVKIAALRRNLEERAGWTREDLKA	160
NTDB id 377 SMU RS09275 WP 002262344.1	MLLEQSHALKRTLAEEAAISQVTHAKEVGTEHVLFAMLLNPNLLATRILELVGFHAKDDGESIRLLDLRKVIERYACFSKEDIKA	164
NTDB id 297 STER RS00545 WP 011680614.1	DLRAQSPALEAMLQEAQEIASVTGAVEVGSEHVLMAFLLHKDLMVCRLLEVAGFQYKDDSDKPRIIDLRRSLERNAGLSKQDLKA	166
NTDB id 329 STU RS10020 WP 011225298.1	DLRAQSPALEAMLQEAQGIASVTGAVEVGSEHVLMAFLLHKDLMVCRLLEVAGFQYKDDSDKPRIIDLRRSLERNAGLSKQDLKA	166
consensus	* * * * * * * * * * * * * * * * * *	

logo

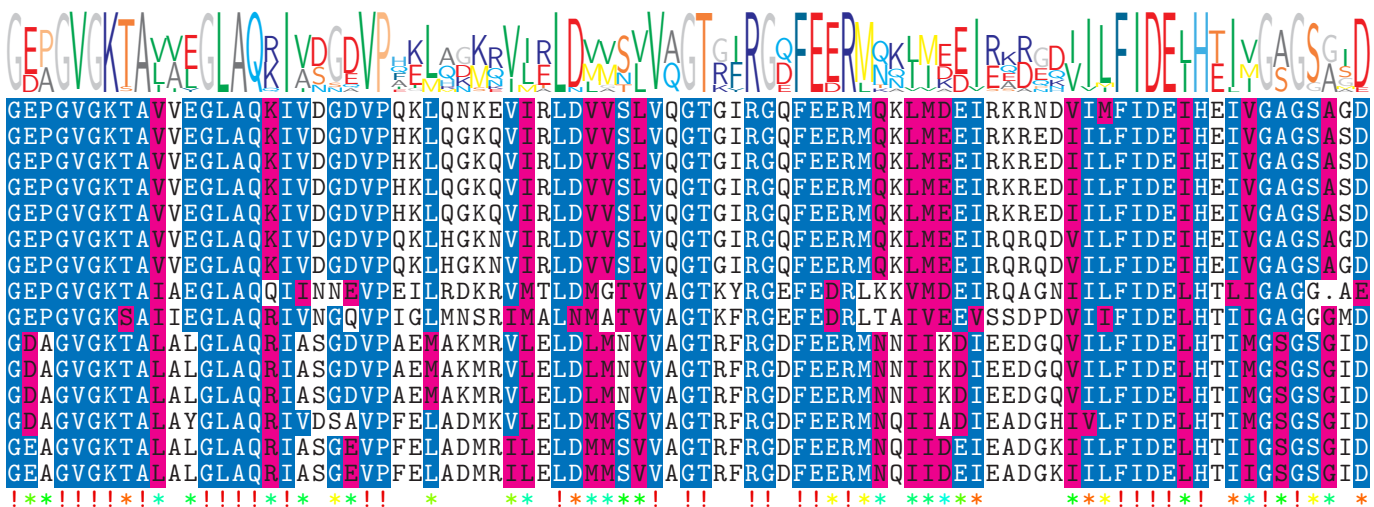
NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 281 KZH43 RS03550 WP 000882517.1
NTDB id 245 SPD RS03860 WP 000882517.1
NTDB id 243 SPR RS03635 WP 000882517.1
NTDB id 241 SP RS04015 WP 000882523.1
NTDB id 73540 FNL60 RS07695 WP 002266431.1
NTDB id 378 SMU RS02690 WP 002263569.1
NTDB id 85 BSU 00860 NP 387967.1
NTDB id 610 V4T04 RS10165 WP 012897346.1
NTDB id 290 KZH43 RS10025 WP 001109677.1
NTDB id 289 SPD RS10700 WP 001109677.1
NTDB id 287 SP RS11210 WP 001109712.1
NTDB id 377 SMU RS09275 WP 002262344.1
NTDB id 297 STER RS00545 WP 011680614.1
NTDB id 329 STU RS10020 WP 011225298.1
consensus



151
157
157
157
157
158
158
207
220
233
233
233
237
240
240

logo

NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 281 KZH43 RS03550 WP 000882517.1
NTDB id 245 SPD RS03860 WP 000882517.1
NTDB id 243 SPR RS03635 WP 000882517.1
NTDB id 241 SP RS04015 WP 000882523.1
NTDB id 73540 FNL60 RS07695 WP 002266431.1
NTDB id 378 SMU RS02690 WP 002263569.1
NTDB id 85 BSU 00860 NP 387967.1
NTDB id 610 V4T04 RS10165 WP 012897346.1
NTDB id 290 KZH43 RS10025 WP 001109677.1
NTDB id 289 SPD RS10700 WP 001109677.1
NTDB id 287 SP RS11210 WP 001109712.1
NTDB id 377 SMU RS09275 WP 002262344.1
NTDB id 297 STER RS00545 WP 011680614.1
NTDB id 329 STU RS10020 WP 011225298.1
consensus

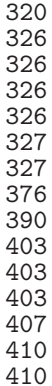


236
242
242
242
242
243
243
291
305
318
318
318
322
325
325

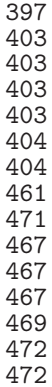
```

NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 281 KZH43 RS03550 WP 000882517.1
NTDB id 245 SPD RS03860 WP 000882517.1
NTDB id 243 SPR RS03635 WP 000882517.1
NTDB id 241 SP RS04015 WP 000882523.1
NTDB id 73540 FNL60 RS07695 WP 002266431.1
NTDB id 378 SMU RS02690 WP 002263569.1
NTDB id 85 BSU 00860 NP 387967.1
NTDB id 610 V4T04 RS10165 WP 012897346.1
NTDB id 290 KZH43 RS10025 WP 001109677.1
NTDB id 289 SPD RS10700 WP 001109677.1
NTDB id 287 SP RS11210 WP 001109712.1
NTDB id 377 SMU RS09275 WP 002262344.1
NTDB id 297 STER RS00545 WP 011680614.1
NTDB id 329 STU RS10020 WP 011225298.1
consensus

```



NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 281 KZH43 RS03550 WP 000882517.1
NTDB id 245 SPD RS03860 WP 000882517.1
NTDB id 243 SPR RS03635 WP 000882517.1
NTDB id 241 SP RS04015 WP 000882523.1
NTDB id 73540 FNL60 RS07695 WP 002266431.1
NTDB id 378 SMU RS02690 WP 002263569.1
NTDB id 85 BSU 00860 NP 387967.1
NTDB id 610 V4T04 RS10165 WP 012897346.1
NTDB id 290 KZH43 RS10025 WP 001109677.1
NTDB id 289 SPD RS10700 WP 001109677.1
NTDB id 287 SP RS11210 WP 001109712.1
NTDB id 377 SMU RS09275 WP 002262344.1
NTDB id 297 STER RS00545 WP 011680614.1
NTDB id 329 STU RS10020 WP 011225298.1
consensus



logo

NTDB id 601 KW2 RS02615 WP 021036805.1	EVTDEDMPVITEKDIIEQIVEQKTQIPVGD	LKEKEQ	ETQLINLAD	DLKAHVIGQDEAVDK	ISKAIRRSRVGLGKPNRPIGSFLFVGP	482											
NTDB id 281 KZH43 RS03550 WP 000882517.1	KITDQDTP	IIESEKTI	IEHIIIEQKTNIPVGD	LKEKEQSQLIHLAED	LKSHVIGQDDAVDKIAKAIRNRVGLGTPNRPIGSFLFVGP	488											
NTDB id 245 SPD RS03860 WP 000882517.1	KITDQDTP	IIESEKTI	IEHIIIEQKTNIPVGD	LKEKEQSQLIHLAED	LKSHVIGQDDAVDKIAKAIRNRVGLGTPNRPIGSFLFVGP	488											
NTDB id 243 SPR RS03635 WP 000882517.1	KITDQDTP	IIESEKTI	IEHIIIEQKTNIPVGD	LKEKEQSQLIHLAED	LKSHVIGQDDAVDKIAKAIRNRVGLGTPNRPIGSFLFVGP	488											
NTDB id 241 SP RS04015 WP 000882523.1	KITDQDTPS	ISEKTI	IEHIIIEQKTNIPVGD	LKEKEQSQLIHLAED	LKSHVIGQDDAVDKIAKAIRNRVGLGTPNRPIGSFLFVGP	488											
NTDB id 73540 FNL60 RS07695 WP 002266431.1	KLDKENTP	VITEKNI	IEVIVEQKTNIPVGE	LKEKEQSQLIHLADD	LKTRVIGQDAAVDKIAKAIRNRVGLGTPNRPIGSFLFVGP	489											
NTDB id 378 SMU RS02690 WP 002263569.1	KLDKENTP	VITEKNI	IEVIVEQKTNIPVGE	LKEKEQSQLIHLADD	LKTRVIGQDAAVDKIAKAIRNRVGLGTPNRPIGSFLFVGP	489											
NTDB id 85 BSU 00860 NP 387967.1	EKQGGENSEVTVD	DIAMVSVSSWTG	VPVSKIAQTETDKL	NMENILHSRVIGQDEAVVA	VAKAVRRARAGLKDPKRPIGSFIFLGP	546											
NTDB id 610 V4T04 RS10165 WP 012897346.1	VKEDKRQEVTDQA	VVA	VASTLTGVPITQMTK	SESDRLINLEKELH	KRVVGQEEAISA	VSRAIRRARSGVADSRRPMGSFMFLGP	555										
NTDB id 290 KZH43 RS10025 WP 001109677.1	VPV.YKD	LVTESD	ILTTLSRLSGIPVQ	KLTTQTD	DAKKYLNLEAE	LHKKRVIGQDQAVSSISRAIRRNQSGIRSHKRPIGSFMFLGP	550										
NTDB id 289 SPD RS10700 WP 001109677.1	VPV.YKD	LVTESD	ILTTLSRLSGIPVQ	KLTTQTD	DAKKYLNLEAE	LHKKRVIGQDQAVSSISRAIRRNQSGIRSHKRPIGSFMFLGP	550										
NTDB id 287 SP RS11210 WP 001109712.1	VPV.YKD	LVTESD	ILTTLSRLSGIPVQ	KLTTQTD	DAKKYLNLEAE	LHKKRVIGQDQAVSSISRAIRRNQSGIRSHKRPIGSFMFLGP	550										
NTDB id 377 SMU RS09275 WP 002262344.1	PLLKKRAE	VKEED	ILATLSKL	SGIPVKKLTQAD	SKKYLNLERELH	KRVIGQDDAVSSISRAIRRNQSGIRVKGKRPIGSFMFLGP	553										
NTDB id 297 STER RS00545 WP 011680614.1	AKFPPKPA	LV	DADQIMQTL	SRLSGIPVEKMTQT	DSKRYLNLESELH	KRVIGQDEAVSAISRAIRRNQSGIRTGKRPIGSFMFLGP	556										
NTDB id 329 STU RS10020 WP 011225298.1	AKFPPKPA	LV	DADQIMQTL	SRLSGIPVEKMTQT	DSKRYLNLESELH	KRVIGQDEAVSAISRAIRRNQSGIRTGKRPIGSFMFLGP	556										
consensus	*	*****	*	**	*	*****	*!	*	*	*****	*!	*!*****!	*	*!*****!	!*	*	!!!!!!!!!!!!

logo

NTDB id 601 KW2 RS02615 WP 021036805.1	TGVGKTELAKQ	LAKELFGSS	ESMIRFDMSEYMEKH	SVAKLIGAPPGYVGY	EEAGQLTERVRRNP	PYSLILLDEIEKAHPDVMHMF	567
NTDB id 281 KZH43 RS03550 WP 000882517.1	TGVGKTEL	SKQLAIELFGS	ADSMIRFDMSEYMEKH	SVAKLVGAPPGYVGY	DEAGQLTEKVRHNP	PYSLILLDEVEKAHPDVMHMF	573
NTDB id 245 SPD RS03860 WP 000882517.1	TGVGKTEL	SKQLAIELFGS	ADSMIRFDMSEYMEKH	SVAKLVGAPPGYVGY	DEAGQLTEKVRHNP	PYSLILLDEVEKAHPDVMHMF	573
NTDB id 243 SPR RS03635 WP 000882517.1	TGVGKTEL	SKQLAIELFGS	ADSMIRFDMSEYMEKH	SVAKLVGAPPGYVGY	DEAGQLTEKVRHNP	PYSLILLDEVEKAHPDVMHMF	573
NTDB id 241 SP RS04015 WP 000882523.1	TGVGKTEL	SKQLAIELFGS	ADSMIRFDMSEYMEKH	SVAKLVGAPPGYVGY	DEAGQLTEKVRHNP	PYSLILLDEVEKAHPDVMHMF	573
NTDB id 73540 FNL60 RS07695 WP 002266431.1	TGVGKTEL	SKQLAIELFGS	EDSMIRFDMSEYMEKH	AVAKLVGAPPGYVGY	EEAGQLTEKVRNP	PYSLILLDEVEKAHPDVMHMF	574
NTDB id 378 SMU RS02690 WP 002263569.1	TGVGKTEL	SKQLAIELFGS	EDSMIRFDMSEYMEKH	AVAKLVGAPPGYVGY	EEAGQLTEKVRNP	PYSLILLDEVEKAHPDVMHMF	574
NTDB id 85 BSU 00860 NP 387967.1	TGVGKTEL	ARALAES	IFGDEESMIRIDMSEYMEKH	STSR	LVGSPPGYVGYDEGGQLTEKVR	RKPYSVLLDEIEKAHPDVFNILL	631
NTDB id 610 V4T04 RS10165 WP 012897346.1	TGVGKTEL	AKALADS	VFGSE	DNMIRVDMSEFMEKH	STSR	LIGAPPGYVGYDEGGQLTERVRNKPYSVLLDEVEKAHPDVFNIML	640
NTDB id 290 KZH43 RS10025 WP 001109677.1	TGVGKTEL	AKALAEVLFDD	ESALIRFDMSEYMEK	FAASRLNGAPPGYVGY	EEGGELTEKVRNKPYSVLLFDEVEKAHPDIFNVLL	635	
NTDB id 289 SPD RS10700 WP 001109677.1	TGVGKTEL	AKALAEVLFDD	ESALIRFDMSEYMEK	FAASRLNGAPPGYVGY	EEGGELTEKVRNKPYSVLLFDEVEKAHPDIFNVLL	635	
NTDB id 287 SP RS11210 WP 001109712.1	TGVGKTEL	AKALAEVLFDD	ESALIRFDMSEYMEK	FAASRLNGAPPGYVGY	EEGGELTEKVRNKPYSVLLFDEVEKAHPDIFNVLL	635	
NTDB id 377 SMU RS09275 WP 002262344.1	TGVGKTEL	AKALAEVLFDD	ESALIRFDMSEYMEK	FAASRLNGAPPGYVGY	EEGGELTEKVRNKPYSVLLFDEVEKAHPDIFNILL	638	
NTDB id 297 STER RS00545 WP 011680614.1	TGVGKTEL	AKALAEVLFDD	ESALIRFDMSEYMEK	FAASRLNGAPPGYVGY	DEGGELTEKVRNKPYSVLLFDEIEKAHPDIFNILL	641	
NTDB id 329 STU RS10020 WP 011225298.1	TGVGKTEL	AKALAEVLFDD	ESALIRFDMSEYMEK	FAASRLNGAPPGYVGY	DEGGELTEKVRNKPYSVLLFDEIEKAHPDIFNVLL	641	
consensus	!!!!!!!!!!*	!!	*!* **	*****!!!!!!*!!!!*	*!*****!!!!!!*!*****!!!!!!	!!!!*****!!!!!!*!!!!	* !

logo

NTDB id 601 KW2 RS02615 WP 021036805.1	ISNQTQETAETTDDEEVPAE	748
NTDB id 281 KZH43 RS03550 WP 000882517.1	QIKSAKKA.EVKSSEKEK.	752
NTDB id 245 SPD RS03860 WP 000882517.1	QIKSAKKA.EVKSSEKEK.	752
NTDB id 243 SPR RS03635 WP 000882517.1	QIKSAKKA.EVKSSEKEK.	752
NTDB id 241 SP RS04015 WP 000882523.1	QIKSAKKA.EVKSSEKEK.	752
NTDB id 73540 FNL60 RS07695 WP 002266431.1	VIRASNKV.ETVTKATSD.	753
NTDB id 378 SMU RS02690 WP 002263569.1	VIKASNKV.ETVTKATSD.	753
NTDB id 85 BSU 00860 NP 387967.1	VVKTTAKTN.....	810
NTDB id 610 V4T04 RS10165 WP 012897346.1	KIAQIV.....	816
NTDB id 290 KZH43 RS10025 WP 001109677.1	KFDIA.....	810
NTDB id 289 SPD RS10700 WP 001109677.1	KFDIA.....	810
NTDB id 287 SP RS11210 WP 001109712.1	KFDIA.....	810
NTDB id 377 SMU RS09275 WP 002262344.1	KFDIV.....	813
NTDB id 297 STER RS00545 WP 011680614.1	TFTVV.....	816
NTDB id 329 STU RS10020 WP 011225298.1	TFTVV.....	816
consensus		



-  non conserved
-  similar
-  ≥ 50% conserved