

logo

NTDB id 1313 DR RS12030 WP 010888966.1	.MSKD...ATKEISAPTDAKERSKATETAM	74
NTDB id 37979 CLOSA RS03535 WP 013271397.1	MNNKDDKLKALDAALTQIEKA	63
NTDB id 600 KW2 RS01765 WP 011675413.1	MATKK...KTNFDDITKKYGAERDKALADALALIEKD	76
NTDB id 269 KZH43 RS08665 WP 001085462.1	.MAKK...PKKLEEISKKFGAEREKALNDALKLIEKD	75
NTDB id 228 SPD RS09265 WP 001085462.1	.MAKK...PKKLEEISKKFGAEREKALNDALKLIEKD	75
NTDB id 194 SPR RS08825 WP 001085462.1	.MAKK...PKKLEEISKKFGAEREKALNDALKLIEKD	75
NTDB id 159 SP RS09750 WP 001085462.1	.MAKK...PKKLEEISKKFGAEREKALNDALKLIEKD	75
NTDB id 527 SMSK321 RS11065 WP 001085454.1	.MAKK...PKKLDEISKKFGAEREKALNDALKLIEKD	75
NTDB id 499 SM12261 RS08315 WP 078228268.1	.MAKK...PKKLDEISKKFGAEREKALNDALKLIEKD	75
NTDB id 453 Spy49 1753c ACI62003.1	.MAKK...LKKNEEITKKFGDERRKALDDALKNIEKD	75
NTDB id 408 SMU RS09530 WP 002262392.1	.MAKR...IKKTEEITKKFGDERKKALDDALKNIEKD	75
NTDB id 115 BSU 16940 NP 389576.2	MSDRQAALDMALKQIEKQFGKGSIMKLGEKT	60
NTDB id 625 LCA RS02525 WP 011374196.1	MAKDERQAALDAALKKIEKNFGKGSIMRMGEKV	62
NTDB id 1245 Cj1673c YP 002345041.1	MDNKRKSLDAALKSLDKTFGKGTILRLGDK	61
NTDB id 1211 C694 RS00795 WP 000963128.1	MAIDEDKQKATISLAIKQIDKVF	63
NTDB id 1214 NCTC11637 00359 SQJ03206.1	MAIDEDKQKATISLAIKQIDKVF	63
NTDB id 1334 RAOC RS04870 WP 004918236.1	MAKTETTTSPNDDKKKALA	70
NTDB id 1389 A4U84 RS07560 WP 021112712.1	.MAENKKSSKNNTVVVKQVEPEQKKQ	78
NTDB id 1130 NGFG RS03960 WP 003688695.1	MSDDKSKALAAALAQIEKS	62
NTDB id 1124 NGFG RS03960 WP 003688695.1	MSDDKSKALAAALAQIEKS	62
NTDB id 1123 OK783 RS03845 WP 003688695.1	MSDDKSKALAAALAQIEKS	62
NTDB id 1427 RS RS02760 WP 011000510.1	.MEDG.....KKAASMSAEKQKALAAALAQIEKQ	70
NTDB id 1165 A1552VC RS01565 WP 000344154.1	MDENKQKALAAALGQIEKQ	61
NTDB id 1142 GTF74 RS11550 WP 000344154.1	MDENKQKALAAALGQIEKQ	61
NTDB id 1022 ACIAD RS06390 WP 004925639.1	MDNKKSKALQAALSQIEKQ	61
NTDB id 1074 ABD1 RS10195 WP 000344167.1	MDENKSKALQAALSQIEKQ	61
NTDB id 1205 PSJM300 05545 AFN77183.1	MDENKKRALAAALGQIEKQ	61
consensus	*** ** *	

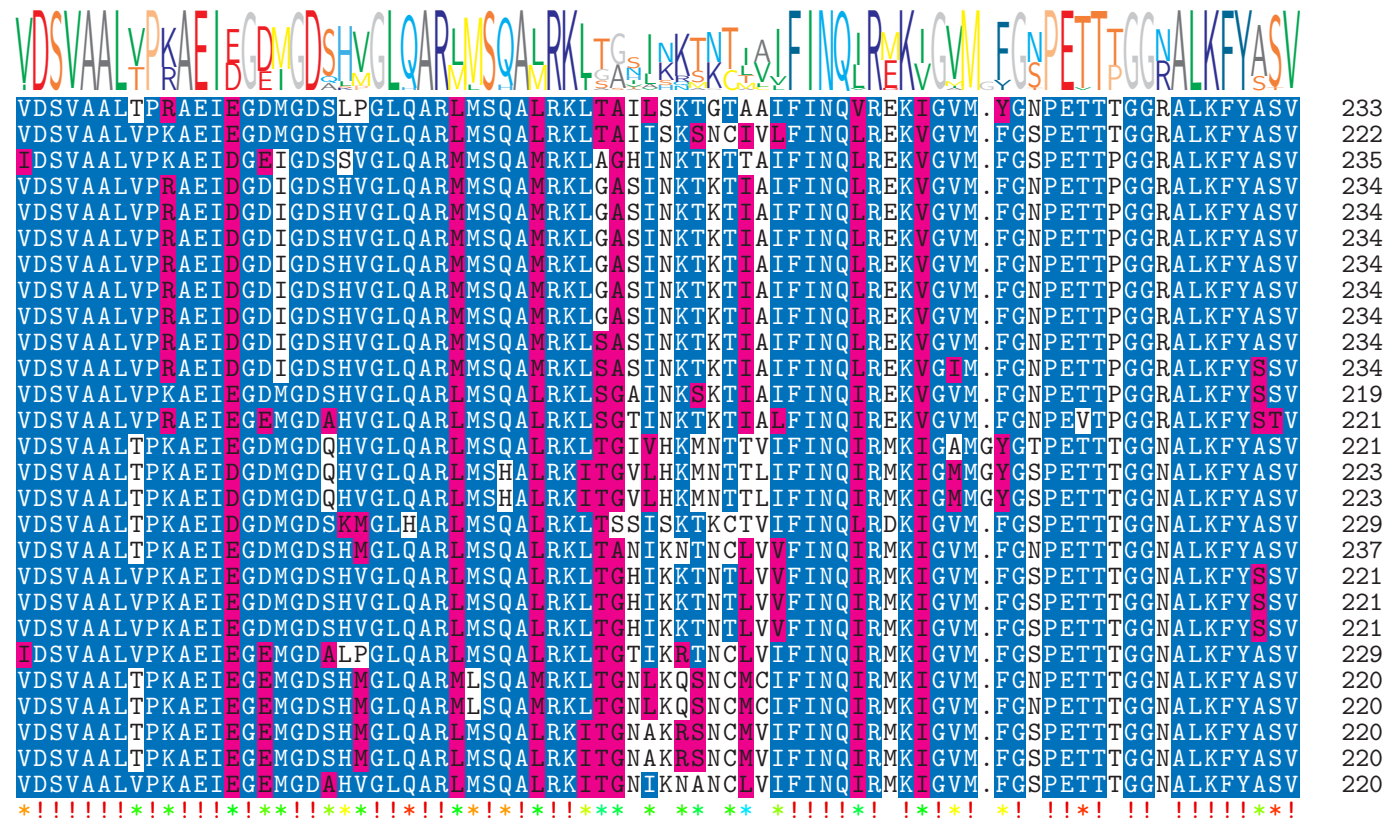
logo

NTDB id 1313 DR RS12030 WP 010888966.1	EIYGPESSGKTTT	154
NTDB id 37979 CLOSA RS03535 WP 013271397.1	EIYGPESSGKTTT	143
NTDB id 600 KW2 RS01765 WP 011675413.1	EIYGPESSGKTTT	156
NTDB id 269 KZH43 RS08665 WP 001085462.1	EIYGPESSGKTTT	155
NTDB id 228 SPD RS09265 WP 001085462.1	EIYGPESSGKTTT	155
NTDB id 194 SPR RS08825 WP 001085462.1	EIYGPESSGKTTT	155
NTDB id 159 SP RS09750 WP 001085462.1	EIYGPESSGKTTT	155
NTDB id 527 SMSK321 RS11065 WP 001085454.1	EIYGPESSGKTTT	155
NTDB id 499 SM12261 RS08315 WP 078228268.1	EIYGPESSGKTTT	155
NTDB id 453 Spy49 1753c ACI62003.1	EIYGPESSGKTTT	155
NTDB id 408 SMU RS09530 WP 002262392.1	EIYGPESSGKTTT	155
NTDB id 115 BSU 16940 NP 389576.2	EIYGPESSGKTTT	140
NTDB id 625 LCA RS02525 WP 011374196.1	EIYGPESSGKTTT	142
NTDB id 1245 Cj1673c YP 002345041.1	EIYGPESSGKTTT	141
NTDB id 1211 C694 RS00795 WP 000963128.1	EIYGPESSGKTTT	143
NTDB id 1214 NCTC11637 00359 SQJ03206.1	EIYGPESSGKTTT	143
NTDB id 1334 RAOC RS04870 WP 004918236.1	EIYGPESSGKTTT	150
NTDB id 1389 A4U84 RS07560 WP 021112712.1	EIYGPESSGKTTT	158
NTDB id 1130 NGFG RS03960 WP 003688695.1	EIYGPESSGKTTT	142
NTDB id 1124 NGFG RS03960 WP 003688695.1	EIYGPESSGKTTT	142
NTDB id 1123 OK783 RS03845 WP 003688695.1	EIYGPESSGKTTT	142
NTDB id 1427 RS RS02760 WP 011000510.1	EIYGPESSGKTTT	150
NTDB id 1165 A1552VC RS01565 WP 000344154.1	EIYGPESSGKTTT	141
NTDB id 1142 GTF74 RS11550 WP 000344154.1	EIYGPESSGKTTT	141
NTDB id 1022 ACIAD RS06390 WP 004925639.1	EIYGPESSGKTTT	141
NTDB id 1074 ABD1 RS10195 WP 000344167.1	EIYGPESSGKTTT	141
NTDB id 1205 PSJM300 05545 AFN77183.1	EIYGPESSGKTTT	141
consensus		

```

NTDB id 1313 DR RS12030 WP 010888966.1
NTDB id 37979 CLQA RS03535 WP 013271397.1
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 115 BSU 16940 NP 389576.2
NTDB id 625 LCA RS02525 WP 011374196.1
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 OKF783 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

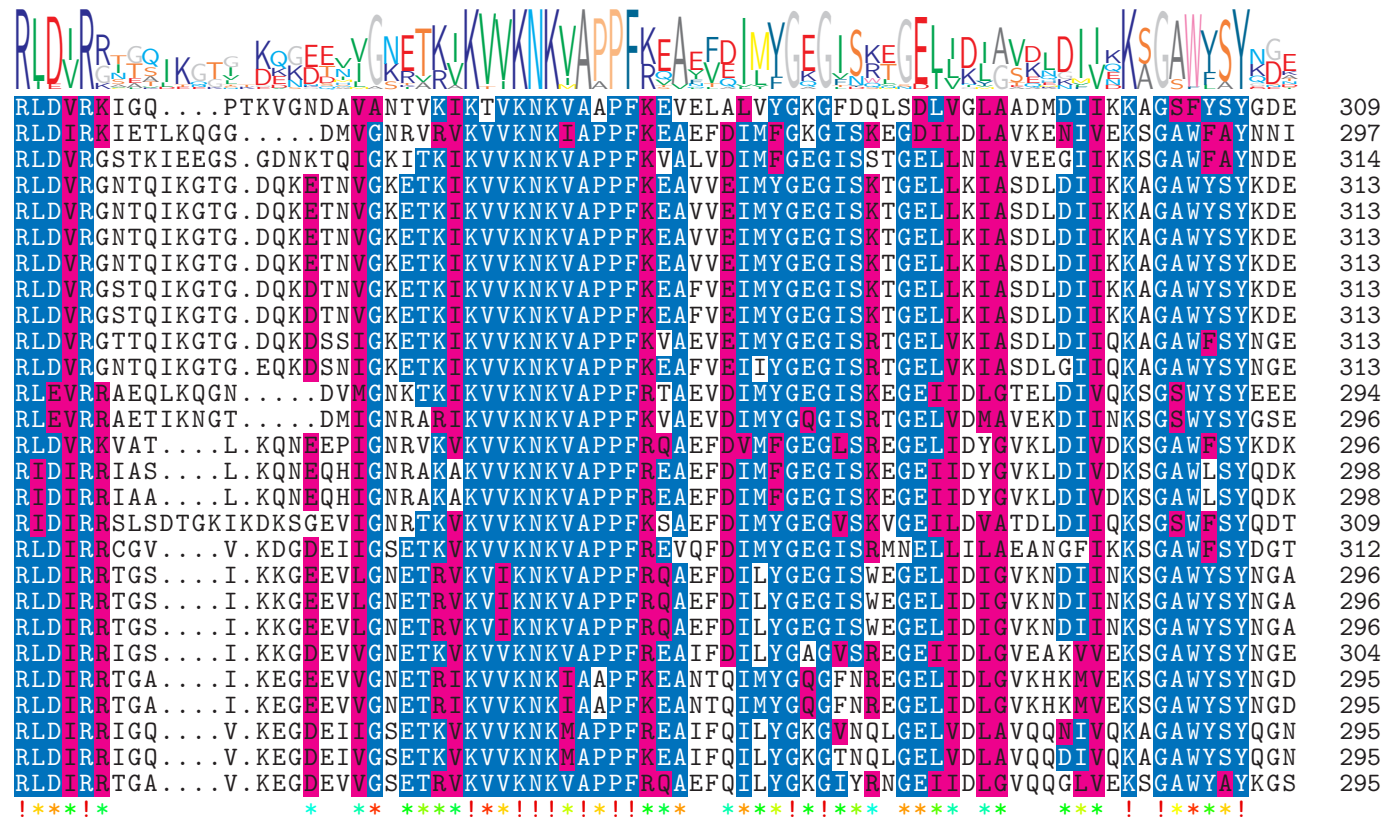
```



```

NTDB id 1313 DR RS12030 WP 010888966.1
NTDB id 37979 CLQA RS03535 WP 013271397.1
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 115 BSU 16940 NP 389576.2
NTDB id 625 LCA RS02525 WP 011374196.1
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 OKF783 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 1313 DR RS12030 WP 010888966.1	RIGQGKEKTIAYIAERP	MEQEIRDRVMAAIRAGNAGEAPALAPAPAA.....PEAAEA.....	363	
NTDB id 37979 CLOSA RS03535 WP 013271397.1	KIGQGGREN	AKTYLQDNPAACMEIENKVRVKYGLH	EEGSAAPESGGAAAKESKRMKAEEKS...PEAPQQ.....	363
NTDB id 600 KW2 RS01765 WP 011675413.1	KIGQGA	EKAKNYLKEHQDVFEIDHKVRAAHGLDDSEVAETEEETTAS	TKAKAKKEEKAVETEEIELELED.....	387
NTDB id 269 KZH43 RS08665 WP 001085462.1	KIGQGS	ENAKKYLAEHPEIFDEIDKQVRSKFG	LIDGEEVSEQDTENKKDE....PKKEEA..VNEEVPLDLGDELEIEIE	387
NTDB id 228 SPD RS09265 WP 001085462.1	KIGQGS	ENAKKYLAEHPEIFDEIDKQVRSKFG	LIDGEEVSEQDTENKKDE....PKKEEA..VNEEVPLDLGDELEIEIE	387
NTDB id 194 SPR RS08825 WP 001085462.1	KIGQGS	ENAKKYLAEHPEIFDEIDKQVRSKFG	LIDGEEVSEQDTENKKDE....PKKEEA..VNEEVPLDLGDELEIEIE	387
NTDB id 159 SP RS09750 WP 001085462.1	KIGQGS	ENAKKYLAEHPEIFDEIDKQVRSKFG	LIDGEEVSEQDTENKKDE....PKKEEA..VNEEVPLDLGDELEIEIE	387
NTDB id 527 SMSK321 RS11065 WP 001085454.1	KIGQGS	ENAKKYLADNPEVFAEIDHQVRVQFGLIDGEEAAE....SKKDE....VAQVDS..VNEEVTLDLGDELEIEIE		383
NTDB id 499 SM12261 RS08315 WP 078228268.1	KIGQGS	ENAKKYLADNPEIFDEIDHQVRVQFGLIDGEEIAE....SKKDE....AAQVDS..VNEEVTLDLGDELEIEIE		383
NTDB id 453 Spy49 1753c ACI62003.1	KIGQGS	ENAKRYLADHPQLFDEIDRKVRVKFGLLEESEEEESAMAVASE.....E.....TDDLALDLNGIEIED.		378
NTDB id 408 SMU RS09530 WP 002262392.1	KIGQGS	ENAKKFLADNPEIFDDIDHKVRVQYGLIEEDNTEEKQSSKEK.....ETDEK..ADKNLVLELDDTIELED.		383
NTDB id 115 BSU 16940 NP 389576.2	RLGQGGREN	AKQFLKENKDIMLMIQEQIREHYGLDNNGVVQQAEETQEEL.EFE.E.....		348
NTDB id 625 LCA RS02525 WP 011374196.1	RIGQGGREN	AKNYLADHEDVEDEVRLKVRAAYGISDVPEEDLPTTEDE.QI.NILPDDST.....EE.....		355
NTDB id 1245 Cj1673c YP 002345041.1	KLGGGREN	SKAFLKENPEIADEITKAIQNSMGI	EGMISGSEDD..EGEE.....	343
NTDB id 1211 C694 RS00795 WP 000963128.1	KLGGGREN	AKALLKEDKALADEITLKI	KESIGSNEEIMPLPDE..PLEEM.E.....	347
NTDB id 1214 NCTC11637 00359 SQJ03206.1	KLGGGREN	AKALLKEDKALADEITLKI	KESIGSNEEIMPLPDE..PLEEM.E.....	347
NTDB id 1334 RAOC RS04870 WP 004918236.1	KLGGGRD	TVKELTKDNPELAEELEAKIREKLQAK.....		343
NTDB id 1389 A4U84 RS07560 WP 021112712.1	KIGQGGK	NNAVKWLKENPEIADKLEQEIRNTLASNPNSVLKATASDSNDES.DVEEFSE.....EEL.....		372
NTDB id 1130 NGFG RS03960 WP 003688695.1	KIGQGGK	DNVRVWLKENPEISDEIDAKIRALNGVEMHITEGTQDET	DGER.....PE.....E.....	348
NTDB id 1124 NGFG RS03960 WP 003688695.1	KIGQGGK	DNVRVWLKENPEISDEIDAKIRALNGVEMHITEGTQDET	DGER.....PE.....E.....	348
NTDB id 1123 OK783 RS03845 WP 003688695.1	KIGQGGK	DNVRVWLKENPEISDEIDAKIRALNGVEMHITEGTQDET	DGER.....PE.....E.....	348
NTDB id 1427 RS RS02760 WP 011000510.1	RIGQGRD	NCREFLRENAELAREIENKVRHLGVTPMGAVTLA.EEVEED.....		352
NTDB id 1165 A1552VC RS01565 WP 000344154.1	KIGQGGK	ANACKYLLKENPEIAKTLDKKLREMLLNPENMQLIAETSSAADV.EFGAVPE.....EF.....		354
NTDB id 1142 GTF74 RS11550 WP 000344154.1	KIGQGGK	ANACKYLLKENPEIAKTLDKKLREMLLNPENMQLIAETSSAADV.EFGAVPE.....EF.....		354
NTDB id 1022 ACIAD RS06390 WP 004925639.1	KIGQGGK	NNVIRYLEENPQISTEIEAVIREQLLTKASDQTA..HDETEEEP.DLL..ES.....		349
NTDB id 1074 ABD1 RS10195 WP 000344167.1	KIGQGGK	NNVIRYFEENNQIAEEIERNIREQLLTTGTNGAVQ..I.EDEEEP.DLL..LE.....S.....		349
NTDB id 1205 PSJM300 05545 AFN77183.1	KIGQGGK	ANAACKYLLKENPEIGQEIEQQIRAKLLVTSANTKATPVAEDLADA.DI.....		347
consensus	**!!!!	*~		

logo

NTDB id 1313 DR RS12030 WP 010888966.1	.	363
NTDB id 37979 CLOSA RS03535 WP 013271397.1	.	363
NTDB id 600 KW2 RS01765 WP 011675413.1	.	387
NTDB id 269 KZH43 RS08665 WP 001085462.1	E	388
NTDB id 228 SPD RS09265 WP 001085462.1	E	388
NTDB id 194 SPR RS08825 WP 001085462.1	E	388
NTDB id 159 SP RS09750 WP 001085462.1	E	388
NTDB id 527 SMSK321 RS11065 WP 001085454.1	E	384
NTDB id 499 SM12261 RS08315 WP 078228268.1	E	384
NTDB id 453 Spy49 1753c ACI62003.1	.	378
NTDB id 408 SMU RS09530 WP 002262392.1	.	383
NTDB id 115 BSU 16940 NP 389576.2	.	348
NTDB id 625 LCA RS02525 WP 011374196.1	.	355
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