S2 File. Alignment of *idnT* CDS from *S*. Gallinarum strains 287/91 (SG287_91) and 9184 (SG9184), and *S*. Pullorum strains CDC1983-67 (SPCDC) and RKS5078 (SPRKS).

```
                                 20                        40
                                 |                         |
  SG287_91_idnT  GTGGTGGGATTTGCCGAAGGGATGGGCGCGCAAGACGTCCTGCACTCCATACAAAACGG 59
    SG9184_idnT  GTGGTGGGATTTGCCGAAGGGATGGGCGCGCAAGACGTCCTGCACTCCATACAAAACGG 59
 SPCDC_idnT-RC   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
  SPRKS-idnT-RC  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                 60                        80                       100
                 |                         |                        |
  SG287_91_idnT  AATTGGCGGTACTCTGGGCGGACTCGCCATGATCCTCGGTTTTGGCGCGATGCTGGGAA 118
    SG9184_idnT  AATTGGCGGTACTCTGGGCGGACTCGCCATGATCCTCGGTTTTGGCGCGATGCTGGGAA 118
 SPCDC_idnT-RC   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
  SPRKS-idnT-RC  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                 120                       140                      160
                 |                         |                        |
  SG287_91_idnT  GATTAATTTCCGATACCGGCGCCGCGCAGCGCATTGCGACGACGCTCATTAATACGTTC 177
    SG9184_idnT  GATTAATTTCCGATACCGGCGCCGCGCAGCGCATTGCGACGACGCTCATTAATACGTTC 177
 SPCDC_idnT-RC   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
  SPRKS-idnT-RC  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                 180                       200                      220
                 |                         |                        |
  SG287_91_idnT  GGCAAAAAACGCGTGCAATGGGCGCTGGTGATCACCGGGCTTATCGTCGGCCTGGCAAT 236
    SG9184_idnT  GGCAAAAAACGCGTGCAATGGGCGCTGGTGATCACCGGGCTTATCGTCGGCCTGGCAAT 236
 SPCDC_idnT-RC   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
  SPRKS-idnT-RC  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                 240                       260                      280
                 |                         |                        |
  SG287_91_idnT  GTTTTTTGAAGTCGGATTCGTACTGCTGTTGCCGCTCGTTTTTACGATTGTGGCCTCAT 295
    SG9184_idnT  GTTTTTTGAAGTCGGATTCGTACTGCTGTTGCCGCTCGTTTTTACGATTGTGGCCTCAT 295
 SPCDC_idnT-RC   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
  SPRKS-idnT-RC  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                 300                       320                      340
                 |                         |                        |
  SG287_91_idnT  CGGGACTGCCCTTGCTGTATGTCGGGGGTTCCAATGGTCGCCGCCTTATCCGTTACGCAC 354
    SG9184_idnT  CGGGACTGCCCTTGCTGTATGTCGGGGGTTCCAATGGTCGCCGCCTTATCCGTTACGCAC 354
 SPCDC_idnT-RC   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
  SPRKS-idnT-RC  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                 360                       380                      400
                 |                         |                        |
  SG287_91_idnT  TGCTTCCTGCCGCCGCATCCCGGCCCTACCGCTATTGCGACAATTTTTGAGGCAAATCT 413
    SG9184_idnT  TGCTTCCTGCCGCCGCATCCCGGCCCTACCGCTATTGCGACAATTTTTGAGGCAAATCT 413
 SPCDC_idnT-RC   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
  SPRKS-idnT-RC  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                 420                       440                      460
                 |                         |                        |
  SG287_91_idnT  CGGTACGACCCTGCTGTATGGGTTAATCATTACCATACCGACCGTGATTGTTGCCGGCC 472
    SG9184_idnT  CGGTACGACCCTGCTGTATGGGTTAATCATTACCATACCGACCGTGATTGTTGCCGGCC 472
 SPCDC_idnT-RC   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
  SPRKS-idnT-RC  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                 480                       500                      520
                 |                         |                        |
  SG287_91_idnT  CGCTGTTTTCAAAATTGCTGGCGCGCTTTGAGAAAGCGCCGCCTGAAGGATTATTTAAT 531
    SG9184_idnT  CGCTGTTTTCAAAATTGCTGGCGCGCTTTGAGAAAGCGCCGCCTGAAGGATTATTTAAT 531
 SPCDC_idnT-RC   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
  SPRKS-idnT-RC  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                 540                       560                      580
                 |                         |                        |
  SG287_91_idnT  CCTCATCTATTCAGTGAAGAAGAGATGCCGTCATTCTGGAACAGTATTTTTGCCGCCGT 590
    SG9184_idnT  CCTCATCTATTCAGTGAAGAAGAGATGCCGTCATTCTGGAACAGTATTTTTGCCGCCGT 590
 SPCDC_idnT-RC   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
  SPRKS-idnT-RC  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
                          600                        620                              640
SG287_91_idnT   GATCCCGGTCATTCTGATGGCCATCGCAGCGGTATGTGAAATCACGCTGCCAAAAACGA 649
  SG9184_idnT   GATCCCGGTCATTCTGATGGCCATCGCAGCGGTATGTGAAATCACGCTGCCAAAAACGA 649
SPCDC_idnT-RC   - - - - - - - - - - - - - - - - - - - - - CGCAGCGGTATGTGAAATCACGCTGCCAAAAACGA 35
SPRKS-idnT-RC   - - - - - - - - - - - - - - - - - - - - - CGCAGCGGTATGTGAAATCACGCTGCCAAAAACGA 35

                          660                        680                              700
SG287_91_idnT   ATGCCGTGCGGGTTTTCTTCGAATTTATCGGTAATCCAGCAGTGGCGTTGTTTATTGCC 708
  SG9184_idnT   ATGCCGTGCGGGTTTTCTTCGAATTTATCGGTAATCCAGCAGTGGCGTTGTTTATTGCC 708
SPCDC_idnT-RC   ATGCCGTGCGGGTTTTCTTCGAATTTATCGGTAATCCAGCAGTGGCGTTGTTTATTGCC 94
SPRKS-idnT-RC   ATGCCGTGCGGGTTTTCTTCGAATTTATCGGTAATCCAGCAGTGGCGTTGTTTATTGCC 94

                          720                        740                              760
SG287_91_idnT   ATTATCATCGCCATTTTTACGCTGGGCCGACGCAACGGACGTACGGTTGAGCAGGTGAT 767
  SG9184_idnT   ATTATCATCGCCATTTTTACGCTGGGCCGACGCAACGGACGTACGGTTGAGCAGGTGAT 767
SPCDC_idnT-RC   ATTATCATCGCCATTTTTACGCTGGGCCGACGCAACGGACGTACGGTTGAGCAGGTGAT 153
SPRKS-idnT-RC   ATTATCATCGCCATTTTTACGCTGGGCCGACGCAACGGACGTACGGTTGAGCAGGTGAT 153

                          780                        800                              820
SG287_91_idnT   GGATATCGTCGGCGAGTCCATTGGCGCTATTGCGATGATTGTTTTTATCATCGCGGGCG 826
  SG9184_idnT   GGATATCGTCGGCGAGTCCATTGGCGCTATTGCGATGATTGTTTTTATCATCGCGGGCG 826
SPCDC_idnT-RC   GGATATCGTCGGCGAGTCCATTGGCGCTATTGCGATGATTGTTTTTATCATCGCGGGCG 212
SPRKS-idnT-RC   GGATATCGTCGGCGAGTCCATTGGCGCTATTGCGATGATTGTTTTTATCATCGCGGGCG 212

                          840                        860                              880
SG287_91_idnT   GCGGCGCGTTTAAACAAGTGCTGGTGGATAGCGGCGTGGGCCAATATATCTCGCAATTA 885
  SG9184_idnT   GCGGCGCGTTTAAACAAGTGCTGGTGGATAGCGGCGTGGGCCAATATATCTCGCAATTA 885
SPCDC_idnT-RC   GCGGCGCGTTTAAACAAGTGCTGGTGGATAGCGGCGTGGGCCAATATATCTCGCAATTA 271
SPRKS-idnT-RC   GCGGCGCGTTTAAACAAGTGCTGGTGGATAGCGGCGTGGGCCAATATATCTCGCAATTA 271

                          900                        920                              940
SG287_91_idnT   ATGACCGGCACCTCGCTATCTCCGTTATTAATGTGCTGGACGGTAGCCGCCGTGCTGCG 944
  SG9184_idnT   ATGACCGGCACCTCGCTATCTCCGTTATTAATGTGCTGGACGGTAGCCGCCGTGCTGCG 944
SPCDC_idnT-RC   ATGACCGGCACCTCGCTATCTCCGTTATTAATGTGCTGGACGGTAGCCGCCGTGCTGCG 330
SPRKS-idnT-RC   ATGACCGGCACCTCGCTATCTCCGTTATTAATGTGCTGGACGGTAGCCGCCGTGCTGCG 330

                          960                        980                            1.000
SG287_91_idnT   TATTGCGTTAGGTTCCGCGACCGTGGCCGCGATAACCACAGCGGGCGTCGTATTGCCGA 1003
  SG9184_idnT   TATTGCGTTAGGTTCCGCGACCGTGGCCGCGATAACCACAGCGGGCGTCGTATTGCCGA 1003
SPCDC_idnT-RC   TATTGCGTTAGGTTCCGCGACCGTGGCCGCGATAACCACAGCGGGCGTCGTATTGCCGA 389
SPRKS-idnT-RC   TATTGCGTTAGGTTCCGCGACCGTGGCCGCGATAACCACAGCGGGCGTCGTATTGCCGA 389

                          1.020                      1.040                          1.060
SG287_91_idnT   TTATTAACGTAACCCACGCCGATCCGGCGTTAATGGTACTGGCGACAGGCGCGGGAAGC 1062
  SG9184_idnT   TTATTAACGTAACCCACGCCGATCCGGCGTTAATGGTACTGGCGACAGGCGCGGGAAGC 1062
SPCDC_idnT-RC   TTATTAACGTAACCCACGCCGATCCGGCGTTAATGGTACTGGCGACAGGCGCGGGAAGC 448
SPRKS-idnT-RC   TTATTAACGTAACCCACGCCGATCCGGCGTTAATGGTACTGGCGACAGGCGCGGGAAGC 448

                          1.080                      1.100                          1.120
SG287_91_idnT   GTTATTGCATCACATGTTAACGATCCCGGTTTTTGGCTGTTTAAAGGGTATTTTAATCT 1121
  SG9184_idnT   GTTATTGCATCACATGTTAACGATCCCGGTTTTTGGCTGTTTAAAGGGTATTTTAATCT 1121
SPCDC_idnT-RC   GTTATTGCATCACATGTTAACGATCCCGGTTTTTGGCTGTTTAAAGGGTATTTTAATCT 507
SPRKS-idnT-RC   GTTATTGCATCACATGTTAACGATCCCGGTTTTTGGCTGTTTAAAGGGTATTTTAATCT 507

                          1.140                      1.160                          1.180
SG287_91_idnT   TAGCGTCGGGGAAACCCTACGTACCTGGACCGTTATGGAAACATTGATTTCTGTCATGG 1180
  SG9184_idnT   TAGCGTCGGGGAAACCCTACGTACCTGGACCGTTATGGAAACATTGATTTCTGTCATGG 1180
SPCDC_idnT-RC   TAGCGTCGGGGAAACCCTACGTACCTGGACCGTTATGGAAACATTGATTTCTGTCATGG 566
SPRKS-idnT-RC   TAGCGTCGGGGAAACCCTACGTACCTGGACCGTTATGGAAACATTGATTTCTGTCATGG 566

                          1.200                      1.220
SG287_91_idnT   GGTTACTGGGCGTACTGGCGCTGAATGCGGTTCTGCATTAA 1221
  SG9184_idnT   GGTTACTGGGCGTACTGGCGCTGAATGCGGTTCTGCATTAA 1221
SPCDC_idnT-RC   GGTTACTGGGCGTACTGGCGCTGAATGCGGTTCTGCATTAA 607
SPRKS-idnT-RC   GGTTACTGGGCGTACTGGCGCTGAATGCGGTTCTGCATTAA 607
```