

**Supplementary Material S1.** *gyrB* sequences obtained after sequencing the PCR products of the reference pseudomonads (Table 1) representing the main taxonomic groups of this genus. BlastN analyses of these sequences showed a perfect match between the amplicon-obtained sequences from the reference isolates and those already present in the Genbank database (accession number and locus ID of the matched reference sequence are indicated within parenthesis after the corresponding sequence's name). Sequences from our isolates' collection were submitted to the Genbank database. Accession numbers are indicated at the final of the document.

```
>gyrB_P.florescens_2-79 (JXCQ01000013.1; PFLU3_20420)
TTCGATGTTGTACTCGTCACGGCCATACCGCAGCCCAGCGCTGTGATCAAGGTGCCGACTTCCTGGGAGG
AAATCATCTTGTCAAAAACGAGCCTTCTCGACGTTGAGGATCTTACCCTTCAACGGCAGGATAGCCTGGGT
GCGACGGTTGCGACCCTGCTTGGCGGAACCGCCAGCAGAGTCACCTTCCACCAGGTACAGTTCCGAGAGG
GCAGGGTCTTCTCCTGGCAGTCAGCCAGCTTGCCCGGCAAGCCGGCGATATCCAACGCGCCTTTACGAC
GGGTCACTCACGGCCTTACGTGCGGCTTACGGGGCGGGGAGCATCGATCATCTTGCCAACGACCAG
CTTGCTTCGTTCCGGTTTTCCAACAGGAAGTCGGAGAAGTACTTGCCATTTCTGTTC AACAGCGGTC
TTCACTTCCGAAGACACCAGCTTGTCTTTGGTCTGGGAGCTGAACTTCGGATCCGGCACCTTGACCGAGA
TGATCGCGGTCAAACCTTACGGGCATCGTCACCGGTGGTGGCGACTTATGCTTCTTCGCCAGGCCTTC
CGCTTCGATGTAGGTGTTACAGTTACGCGTCAGCGCAGAACGGAAACCCACCAAGTGAGTACCGCCATCG
CGCTCGGAATATTGTTGGTGAAGCACAACAGTTCTCGTTGAAGCTGTCGTTCCACTCGAGGGCGATTT
CCACGCCGATGCCGCTTTCACGCTGGATGTTGAAGTGAACACACCTGGTTGACTGCAGTCTTGTGGTGT
CAGGTATTCAAACGAATGCACGCAAGCCGCTTCGTACTTGAACAGCTTTCCTTGCCGCTGCGTTCATCC
TTGAGGACGATAACCAACACCGGAGTTGAGGAAGGACAGTTACGAATCCGCTTGCCAGGATGTCCAGC
TGAAGTGGATGTTCTTGAAGTTTTAGCCGATGGCTTGAAGTGGATCTGGGTGCCCGTGGTTTTCACTGTC
GCCAACGATTTTTCATCGGCTCCTGTGGCACACCGTGGACGTAGGTCTGTTCCAGATCTTGCCGCTGCGG
CGAACGGTGAGAATCAACTCTTCGGACAGCGGCTTCACTACCGACACACCCACACCGTGCAACCCACCGG
ATACTTTATAGGAGTTGTCGTCGAACCTTACCGCCGGCTGGAGCACGGTCATGATGACCTCTGCCGCCGA
AACGCCTTCTTCTTGTGCACATCTACCGGATACCACGGCCGTTGTCGCGCACGGTAATGGACTCATCC
GGGTGGATGATAATGCTGATGTCGTCGAGTGACCGGCCAGAGCTTCGTCGATGGAGTTATCGACCACCT
CGAACACCATGTGGTGCAGACCGCTACCATCATCGGTGTCGCCAATGTACATAACCGGACGT
>gyrB_P.sihuiensis_2013 (LT629797.1; SAMN05216363_3930)
GGATGTACATCGGTGACACTGACGATGGTAGTGGTCTGCACCACATGGTGTTCGAGGTGGTCGACAACCTC
GATCGACGAAGCGCTGGCAGGCTACTGCAGTGAATCACCATCACCATCCACCCGGATGAATCGATCAGT
GTGCGTGATAACGGCCGTTGGTATCCCGGTCGACATGCACAAGGAAGAAGGCGTCTCGGCGGCCGAGGTCA
TCATGACCGTGCTTACGCGCGGTAAGTTTCGATGACAACAGCTACAAGGTATCCGGCGGCCGTCATGG
CGTGGGTGCTCGGTGGTGAACGCCCTTCCAAGGAGCTGGTGTGACCATCCGCCGTAGCGGCAAATC
TGGGAACAGACCTACGTGCATGGTGTACCGCAAGCGCTCTGGCCGCTGTCGGTGACACCGACGGTACCG
GTACGCAGATCCACTTCAAACCGTCCGAAGAGACCTTCGCCAACATCCATTTAGCTGGGACATCCTGGC
CAAGCGTCTGCGCGAACTGTCTTCTCAACTCCGGCGTGGGCATCCTGCTGCGCGACGAGCGCACCGGC
AAGGAAGAGTTGTTCAAGTACGAAGGTGGTCTGAAGGCCCTTCGTCGAGTACCTGAACACCAACAAGACCG
TGGTCAACCAGGTGTTCCACTTCAACGTTTACGCGGAAGAAGACGGCGTTGGTGTGCAAGTTGCCCTGCA
GTGGAACGACAGCTTCAACGAGAACTGCTTTGCTTCAACCAACAACATTCGCGACGCTGACGGTGGCAGC
CACCTGGCCGGTTTTCCGTTCCGCCCTCACCCGCCACCTGAACAACATACATCGAGGCCGAAGGCCTGGCCA
AGAAGTTCAAGGTTTCCACCACCGGTGACGATGCCCGCAAGGTCTGACTGCGATCATCTCGGTCAAGGT
GCCGACCCGAAATTCAGCTCGCAGACCAAGGACAACTGGTATCGAGCGAGGTAAAAACTGCGGTGCGAA
CAGGAGATGGGCAAGTACTTCTCCGACTTCTGCTGGAAAACCCCAACGAAGCCAAGGCCGTGGTCCGGCA
AGATGATCGATGCCGCGCGTGGCCGGAAGCGGCTCGTAAAGCCGTGAAATGACTCGCCGTAAAGGTGC
GCTGGACATTGCCGGCCTGCCCGGCAAACCTGGCCGACTGCCAGGAAAAAGACCCGGCCTGTCCGAACTC
TACATCGTGGAGGTTGACTCCGCGGGCGGTTCTGCCAAGCAGGGCCGTAACCGCAAGACCGGATCC
TGCCGCTCAAGGGTAAGATCCTCAACGTGCAACGCGCGCGCTTCGACCAGCATGATTTCTCGCAGGAAGT
CGGCACGCTGATCACTGCGCTCGGCTGCGGCATGGCCGTTGATGAATACAACATC
>gyrB_P.stutzeri_2014 (CP002622.1; PSTAA_0004)
CTGGCATGTATATCGGCGACACCGATGACGGCACCGGCCGTCACCACATGGTCTTCGAAGTCGTCGATAA
CTCGATCGATGAAGCGCTGGCCGGCTACTGCAGCGATATTTCCATCACCATCCATACCGATGAATCCATC
ACCGTGCGGACAACGGCCGCGGCATTCGGTGGATATTCACGAAGAAGGCGTATCGGCAGCCGAGGTCA
TCATGACCGTGCTGCACGCGAGGCGGTAAGTTTCGACGACAACCTCTACAAGGTATCCGGTGGCCTGCACGG
CGTGGGTGCTCGGTGGTGAATGCATTGTCCGAGGAGCTGCTGCTGACCATCCGCCGCGAAGGCAAGGTG
TGGGAACAGCTCTATCGCCATGGTGTCCCGCAAGCGCCGCTCGCGGCCGTTGGGCGAGACCGATACGTCGG
GCACGCAGATCCATTTCAAACCTCCGCCGAGACCTTCCAGAACATCCATTTAGCTGGGACATTTCTGGC
CAAGCGTCTTCGCGAACTGTCTTTCTCAACTCCGGGGTGGGTATCGTCTTGGTGTGACGAGCGCACGGCC
AAGGAAGAACTGTTCAAGTACGAAGGCGGCTCAGCGCTTCGTCGCCCTACCTGAACACCAACAAGACCG
CGGTGAATCAGGTGTTCCACTTCAACGTCCAGCGTGACGATGGCGTGGCGTCAAGTCCGCGTGCAGTG
GAACGACAGCTTCAACGAGAACATCCTCTGCTTTACCAACAACATTTCCCAGCGTGACGGCGGCACCTCAC
```

CTGGCCGGCTTCCGCTCCGCATTGACGCGTAACCTGAACAACCTACATCGAGCAGGAAGGCCTGGCGAAGA  
AGCACAAGATCGCCACCACCGGTGACGATGCGCGTGAAGGTCTGACCGCGATCATCTCGGTCAAGGTACC  
GGATCCGAAATTCAGTTCAGACCAAGGACAAGCTGGTTTCCCTCTGAGGTGAAGACCGCGGTGGAACAG  
GAGATGGGCAAGTATTTCCGCGACTTCTGCTGGAGCATCCAACGAGGCGAAGGCGGTGGTTCGGCAAGA  
TGATCGACGCTGCCCCGCGCCGTGAGGCTGCGCGCAAGGCACGGGAAATGACCCGGCGCAAAGGCGCGCT  
GGATATCGCCGGCTGCCGGCAAGCTTGCCGACTGTCAGGAGAAGGATCCTGCGCTGTCCGAACGTGTAC  
ATCGTGGAGGGTACTCCGCGGTGGCTCGGCCAAGCAGGGCCGCAATCGCAAGACCCAGGCGATCCTCC  
CGCTCAAGGGCAAGATTCTCAACGTCGAGAAGGCACGCTTCGACAAGATGCTCTCGTCCCAGGACGTCCG  
CACGCTGATCACCGCGCTGGGTTGCCGCTCGCCGCCACGACA

>gyrB\_P.stutzeri\_2018 (CP002622.1; PSTAA\_0004)

TTGTATTCTCGCGCCGATGCCGCAACCCAGCGCGGTGATCAGCGTGCCGACTTCCCTGGGACGAGAGCAT  
CTTGTTCGAAGCGTGCCCTTCTCGACGTTGAGGATCTTGCCCTTGAGCGGGAGGATCGCCTGGGTCTTGCGG  
TTGCGGCCCTGCTTGGCCGAGCCACCCGCGGAGTCAACCTCCACGATGTACAGTTCGGACAGCGCAGGAT  
CCTTCTCCTGACAGTCGGCAAGCTTGCCCGGCAGGCGGGCGATATCCAGCGCACCTTTGCGCCGGGTCTAT  
TTCCCGTGCCCTTGCGCGCAGCCTCACGGGCGGGGAGCGTTCGATCATCTTGCCGACTACCGCCTTCGCC  
TCGTTTTGGATGCTCCAGCAGGAAGTCGGCGAAGTACTTGCCCATCTCCTGTTCCACCGCGGTCTTCACCT  
CGGAGGAAACCAGCTTGTCTTGGTCTGGGAACTGAACTTCGGATCCGGCACCTTGACCGAGATGATCGC  
GGTCAGACCTTACCGCGCATCGTCACCGGTGGTGGCGATCTTGTGCTTCTTCGCCAGGCCTTCCTGCTCG  
ATGTAGTTGTTTACGTTACGCGTCAGTGCAGGAGCGGAAGCCGGCCAGGTGAGTGCCGCGGTACGCTGGG  
GTATGTTGTTGGTAAAGCAGAGGATGTTCTCGTTGAAGCTGTCGTTCCACTGCAGCGCGACTTCGACGCC  
GACGCCATCGTCACGCTGGACGTTGAAGTGGAACACCTGATTCACCGCGGTCTTGTGGTGTTCAGGTAG  
GCGACGAAGGCGCTGAGGCCGCTTCGTAACAGTTCTTCCCTGGCCGTGCGCTCGTCGCGCAGAA  
CGATACCCACCCCGGAGTTGAGAAAGGACAGTTTCGCGAAGACGCTTGGCCAGAATGTCCAGCTGAAATG  
GATGTTCTGGAAGGTCTCGGCGGAGGGTTTGAATGGATCTGCGTGCCCGACGTATCGGTCTCGCCCACG  
GCCGCGAGCGGCTTGCGGGACACCATGGCGATAGAGCTGTTCCACACCTTGCCTTCGCGGCGGATGG  
TCAGCAGCAGCTCCTCGGACAATGCATTCACCACCGAGACACCCACGCGTGCAGGCCACCGGATACCTT  
GTAGGAGTTGTCGTCGAACTTACCGCCTGCGTGCAGCACGGTTCATGATGACCTCGGCTGCCGATACGCT  
TCTTCGTGAATATCCACCGGAATGCCGCGGCGTGTGTCGCGCACGGTATGGATTCATCGGTATGGATGG  
TGATGGAATATCGCTGCAGTAGCCGCGCAGCGCTTCGTCATCGAGTTATCGACGACTTCGAAGACCAT  
GTGGTGCAGGCCGTTGCCGTATCGGTGTCGCCGATATACATGCCAGGC

>gyrB\_Pseudomonas\_sp.\_CF5 (CP013987.1; APT59\_00155)

CCGGCATGTACATCGGCGACACCGATGACGGCACCGGCTGCACCACATGGTCTTCGAGGTGGTGGACAA  
CTCCATCGACGAGGCCCTGGCCGGCTTCTGCAGCGAGATCAGCATCACCATCCACATGGACGAATCCATC  
ACCGTGCGCGACAACGGTTCGCGGCATCCCGGTGGATATCCACAAGGAGGAAGGCGTTTCCGCGAGCCGAGG  
TCATCATGACCGTGTGTCACGCCGGCGGTAAGTTCGATGACAACACCTACAAGGTGTCGGCGGTCTGCA  
CGGCGTGGGCGTCTCGGTGGTGAACGCCCTGTCCGAAGAGCTGCGACTGACCATTCGCCGCGCCGGCCAG  
GTATGGGAGCAGGTCTATGTGCATGGCGTGCCCCAGGCGCCGCTGGCGGTGATCGGCGAGACGGACACCA  
CCGGTACCCAGGTGCACTTCAAGCCGTCCGCCGAGACCTTCAGCAACATCCAGTTCCAGCTGGGACATCCT  
GGCCAAGCGGATTCGCGAGCTGTCTTCCCTCAACTCCGGCGTCGGCATCGTCTGCGGACGAGCGCAGC  
GGCAAGGAAGAGCTGTTCAAGTACGAAGGCGGCTGCGTGCCTTCGTCGACTACCTCAACACCAACAAGA  
CCGCGGTGAACGAGGTGTTCCATTTCCAGGTGCAGCGCGAAGACGATGGCGTTCGGCGTGGAAAGTGGCCCT  
GCAGTGGAAACGACAGCTTCAACGAGAACATCCTTCTGCTTACCAACAACATTCGCCAGCGGATGGCGGT  
ACCCACCTGGCGGGCTTCCGCTCGGCTCTGACGCGCAACCTGAACAACCTACATCGAGGCCGAGGGCCTGG  
CCAAGAAGTTCAAGGTGGCCACCACCGGTGACGACGCCCGCAAGGCCTGACCGCCATCATCTCGGTCAA  
GGTGCCGGATCCCAAGTTCTCCTCCAGACCAAGGACAAGCTGGTCTCCTCCGAGGTGAAGACCGCGGTG  
GAACAGGAGATGGGCAAGTACTTCTCCGACTTCTGCTGGAGAATCCCAACGAGGCCAAGGCGGTGGTTCG  
GCAAGATGATCGACGCGGCCCGGGCCGGGAAGCGCGCGCAAGGCGCGGAGATGACCCGCCGAAGGG  
CGCCCTGGACATCGCCGGTCTGCCCGCAAGCTGGCGGACTGCCAGGAAAAGGACCCGGCGCTGTCCGAA  
CTCTACATCGTGGAGGGTACTCCGCCGGTGGTTCGGCCAAGCAGGGCCGCAACCGGCGCACCCAGGCGA  
TCCTGCCGCTCAAGGGCAAGATCCTCAACGTCGAGAAGGCCCGCTTCGACAAGATGCTCTCCTCCAGGA  
GGTAGGCACCCTGATCACCGCGCTGGGCTGCGGTATCGGTTCGCGAAGAGTCAA

>gyrB\_P.protegens\_CHA0 (CP003190.1; PFLCHA0\_c00040)

CCGGTATGTACATTGGCGACACCGATGACGGCAGCGGTCTGCACCACATGGTGTTCGAGGTGGTTCGATAA  
CTCCATCGACGAAGCGCTGGCCGGTCAATTGCGACGACATCAGCATCATCATCCATCCGGATGAATCCATC  
ACCGTGCGCGACAACGGTTCGCGGCATCCCGGTGATGTGCATAAAGAAGAAGGCGTCTCCGCGGCAGAGG  
TCATCATGACCGTGTCCACGCCGGCGGTAAGTTCGACGACAACCTCTACAAGGTCTCCGGCGGTCTGCA  
CGGCGTAGGTGATCGGTAGTGAACGCCCTGTCCGAGGAGCTGATCCTCACCGTGCGCCGTAGCGGCAAG  
ATCTGGGAACAGACCTATGTCCACGGTGTTCGCAAGAGCGGATGAAAATCGTTGGTGTGACAGCGAAACCA  
CCGGTACCCAGATCCACTTCAAGCCTTCGGCTGAAACCTTCAAGAACATCCACTTCAGCTGGGACGTCTT  
GGCCAAGCGGATCCGTGAACTGTCTTCCCTCAACTCCGGTGTGCGGCATCGTCTCAAGGACGAGCGCAGC  
GGCAAGGAAGAGCTGTTCAAGTACGAAGGCGGCTGCGGGCATTCGTTGAATACCTGAACACCAACAAGA  
CTGCGGTCAACCAGGTGTTCCACTTCAACATCCAGCGTGAAGACGGCATCGGCGTGGAAATCGCCTTGCA  
GTGGAACGACAGCTTCAACGAGAACCTGTTGTGCTTACCAACAACATTCCTCAGCGCGACGGCGGTACC  
CACCTGGTGGGCTTCCGTTCGGCCCTGACCCGTAACCTGAACAACCTACATCGAGCAGGAAGGCCTGGCCA

AGAAACACAAGGTCGCCACCACTGGTGACGACGCTCGTGAAGGCCTGACCGCGATCATCTCGGTGAAGGT  
GCCGGATCCGAAGTTCAGCTCCAGACCAAGGACAAGCTGGTTTCTTCCGAAGTGAAGACCGCGGTGCGAA  
CAGGAGATGGGCAAGTACTTCTCCGACTTCTGCTGGAAAACCCCAACGAAGCCAAGTTGGTGGTGGGCA  
AGATGATCGACGCTGCCCCGCGCTCGTGAAGCGGCGCGTAAAGCCCGTGAAATGACCCGTCGCAAAGGCGC  
GCTGGATATCGCCGGCCTGCCGGGCAAACCTGGCGGACTGCCAGGAAAAGGATCCGGCCCTGTCCGAACCTC  
TACCTGGTGGAAAGGTGACTCTGCTGGCGGTTCGCCAAGCAGGGCCGCAACCGCAAGACCCAGGCGATCC  
TGCCGCTCAAGGGCAAGATCCTCAACGTCGAGAAAGGCACGCTTCGACAAGATGATCTCTCGCAAGAGGT  
GGGACCCCTGATCACCGCGCTGGGCTGCGGCATCGGCCGTGAAGAGTACAACATCGCCCCGAACCCCCGG  
>gyrB\_P.syringae\_pv.\_syringae\_DC3000 (AE016853.1; PSPTO\_0004)  
CGCAGGCGTCCGGATGTACATCGGTGATACAGACGATGGCAGCGGTCTGCACCATATGGTGTTCGAGGTG  
GTTGATAACTCGATCGACGAAGCATTTGGCAGGCCATTTGCGACGACATCAGCATCATCATCCATCCAGACG  
AATCTATCACCGTGC GCGACAACCGCCGCGGTATTTCCGGTAGACGTGCATAAAGAAGAAGGCGTGTCCGC  
AGCCGAAGTCATCATGACCGTGCTCCACGCGGGTGGTAAGTTTCGATGACAACCTCTACAAAGTATCCGGC  
GGTTTGCACGGTGTAGGTGTTTCCGTGGTCAACGCCCTTTTCAGAACTTCTGTTGCTGACAGTGGCTCGCA  
GCGGCAAGATCTGGGAACAGACCTACATTCACGGTGTTCACACAAGAACCAGATGAAAATCGCTCGGCGAAAG  
CGACAGCACCCGACCCAGATTCACTTCAAGCCATCTGCTGAGACCTTCAAGAATATCCACTTTCAGCTGG  
GACATTCTGGCCAAGCGGATCCGTGAACTGTCGTTCCTGAACTCCGGTGTGGCATCGTCTCAAGGACG  
AGCGTAGCGGCAAGGAAGAACTGTTCAAGTACGAAGGCGGTTTTGCGTGCCTTCGTTGAATACCTGAACAC  
CAACAAGACGCCGGTCAACGAAGTGTTCCACTTCAATGTCCAGCGCGATGACGGTATTGGCGTCGAGATT  
GCCCTGCAGTGGAAACGACAGCTTCAACGAGAACTGTTGTGCTTCACCAACAACATTTCCACAGCGCGATG  
GCGGCACTCACCTGGTGGGGTTCCGATCCGCACTGACGCGTAACCTGAACAACCTACATCGAGCAGGAAGG  
TCTGGCCAAGAAGCACAAGGTGCGGACCACCGGTGACGATGCGCGTGAAGGTCTGACTGCAATTATCTCG  
GTCAAAGTACCTGATCCGAAGTTCAGCTCGCAGACCAAAGACAAGCTGGTTTTCGTCCGAAGTCAAACTG  
CAGTCGAACAGGAAATGGGCAAGTACTTCTCCGACTTCTGCTGGAAAACCCGAACGAAGCCAAAGCCGT  
CGTCCGCAAGATGATCGACGACGCCGTGCCCGTGAAGCCGCGCGCAAGGCCCGTGAGATGACTCGCCGT  
AAAGGCGCGCTGGACATCGCCGGCTTGCAGGCAAACCTGGCTGACTGCCAGGAAAAAGACCCTGCCCTCT  
CCGAAGTACCTGGTGGAAAGGGGACTCTGCTGGCGGATCAGCCAAGCAGGGACGTAACCGTAGAACC  
GGCCATCTGCCTCTTAAGGGCAAGATTCTGAACGTTGAAAAAGCAGCTTCGACAAGATGATCTCTTCT  
CAGGAAGTGGGCACCTTGATCACCGCGCTGGGCTGTGGCATGGCCTGCGAAGAGTACAACATCGACA  
>gyrB\_P.alkylphenolica\_KL28 (CP009048.1; PSAKL28\_00120)  
CCGGTATGTACATTGGCGACACCGATGATGGTAGCGCCTGCACCACATGGTGTTCGAGGTGCTCGATAA  
CTCGATCGACGAAGCACTCGCCGGCCACTGTGATGACATTTACCCTAATCCACCCGGACGAATCCATC  
AGTGTTCGCGACAACGGTTCGCGGTATCCAGTCGACGTGCATAAAGAGGAAGGCGTATCCGCCCGCGAGG  
TCATCATGACCGTCTGCACGCTGGCGGTAAGTTCGACGACAACCTCTACAAAGTATCCGGCGGTCTGCA  
CGGTGTAGGCGTGTCTGTGGTTAACGCCCTCTCCGAAGAGCTGATCCTGACTGTTTCGCCGTAGCGGCAAG  
ATCTGGGAACAGACCTATGTTTACGGTGTTCGCCAAGCTCCGATGGCCATCGTCCGGTACAGTGAACCA  
CCGGTACCCATATTTCACTTCAAGCCGTCGTCCGAAACCTTCAAGAACATCCACTTCAGCTGGGACATCCT  
GGCCAAGCGGATTTCGTGAACTGTGCTTCTCAACTCTGGCGTCGGCATCCTCTTGAAGGACGAGCGTTTCG  
GGCAAGGAAGAGTACTTCAAGTACGAAGGCGGTCTGCGTGCCCTTCGTTGAGTACCTGAACACCAACAAGA  
CCCCGGTCAACCAGGTGTTCCACTTCAACGTTTCAGCGTGAAGACGGTGTGGGCGTGGAAATCGCTGCA  
ATGGAACGACAGCTTCAATGAGAACCTGTTGTGCTTCACCAACAACATTCGCGACGCGACGGTGTGTTACC  
CACCTGGTTCGGCTCCGCTCGCGTTGACCCGTAACCTGAACAACCTACATTTAGCAGGAAAGGTCTGGCCA  
AGAAGAACAAGGTTTTCGACCACCGGCGACGACGCCCGCAAGGTTTTGACCGGATCATTTTCGGTGAAGGT  
GCCAGATCCTAAGTTCAGCTCGCAGACCAAGGACAAGCTGGTTTTCTTCGGAAGTGAAAACTGCCGTGGAA  
CAGGAAATGGGCAAGTACTTCTCCGACTTCTGCTGGAGAACCCGAACGAAGCCAAGGCGGTTGTCCGGCA  
AGATGATCGACGCCGCGCGTGTCTGTAAGCAGCGCGCAAGGCGCGGGAAATGACTCGCCGTAAAGGCGC  
GCTGGATATTGCTGGTTTTGCCAGGCAAACCTGGCGGACTGCCAGGAGAAGGACCCCTGCCCTTTCCGAACCTG  
TACCTGGTGGAGGGTACTCCGCAAGTGGTTCGGCCAAGCAAGGTCGTAACCGTAAGACCCAGGCCATCC  
TGCCGCTCAAGGGTAAGATCCTCAACGTCGAGAAAAGCACGTTTTTCGACAAGATGATCTCGTCCCAGGAAGT  
TGGCACCCCTGATTACCGCACTGGGCTGTGGTATCGGTTCGCGAAGAGTACAACATCGACA  
>gyrB\_P.putida\_KT2440 (AE015451.2; PP\_0013)  
AGCGTCCCAGCATGTACATTGGCGACACCGATGATGGTAGTGGCCTGCACCACATGGTCTTCGAGGTGGT  
CGACAACCTCGATCGACGAAGCCCTCGCCGGTCACTGCGATGACATTTACCCTCATCATCCACCCGGACGAA  
TCTATCAGTGTGCGCGACAACGGTTCGCGCATTTCCGGTTCGATGTGCATAAAGGAAGAAGGCGTTTTCCGCG  
CCGAGGTATCATGACTGTGCTGCACGCCGCGGTAAGTTTTGACGACAACCTCTACAAAGTATCCGGCGG  
TCTGCACGGTGTAGGTGTGCTGTTGTAACGCCCTGTCCGAGAAGCTGGTTTTGACTGTTTCGCCGTAGC  
GGCAAGATCTGGGAACAGACTTACGTTACGGTGTTCACACAAGCGCCATGGCGGTTGTCCGGTACAGTG  
AAACCACGGGTACCCACATCCACTTCAAGCCATCGGCTGAAACCTTCAAGAACATTTCACTTCAGCTGGGA  
CATCCTGGCCAAGCGCATCCGCGAGCTGTCGTTCTCAACTCGGGCGTTGGCATTTCTGCTGAAGGATGAG  
CGCAGCGGTAAGGAAGAGTTCTTCAAGTACGAAGGCGGTCTGCGTGCCTTCGTCGAGTACTTGAACACCA  
ACAAGACGCCGGTCAACTCCCAGGTGTTCCACTTCAACGTTTCAGCGTGCAGATGGCGTGGGTGTTGAAGT  
CGCCCTGCAATGGAACGACAGCTTCAACGAAAACCTGCTGTGCTTTACCAACAATATTCGCGAGCGTGT  
GGCGGTACCCACCTGGTGGGTTTTCCGTTCTCGCTGACCCGTAGCCTTAAACAGCTACATCGAGCAGGAAG  
GCCTGGCCCAAGAAGAACAAGGTGGCAACCCTGGCGACGACGCCCGTGAAGGCTGACCGCATCATCT

CGGTGAAGGTACCGGACCCGAAGTTCAGCTCGCAGACCAAGGACAAGCTGGTCTCCTCGGAGGTGAAAAC  
CGCCGTGGAACAGGAGATGAACAAGTACTTCGCCGATTTCTCCTGGAAAACCCGAACGAGGCGAAGGCC  
GTCGTTGGCAAGATGATCGACGCCGCTCGCGCCCGTGAAGCCGCCCGTAAAGCCCGTGAGATGACCCGCC  
GTAAAGGTGCGCTGGATATCGCGGGTCTGCCGGGCAAGCTGGCCGACTGCCAAGAGAAGGATCCTGCTCT  
CTCCGAAGTGTACCTGGTGGAGGGTGACTCCGCGGGTGGTCTCGGCCAAGCAAGGCCGCAACCGTCTGATC  
CAGGCGATCTTGCCGCTGAAGGGTAAAATCCTCAACGTCGAGAAAAGCGCGCTTCGACAAGATGATTTCTG  
CCCAGGAAGTGGGCACGCTGATCACTGCGCTGGGCTGTGGCATCGGCCGCAAGAGTACAACATCGACA  
>gyrB\_P.sihuiensis\_N23 (LT629797.1; SAMN05216363\_3930)

GCAAACGTCCCGGGATGTACATCGGTGACACTGACGATGGTAGTGGTCTGCACCACATGGTGTTCGAGGT  
GGTGCACAACCTCGATCGACGAAGCGCTGGCAGGCTACTGCAGTAAAATCACCATCACCATCCACCCGGAT  
GAATCGATCAGTGTGCGCGATAACGGCCGTGGTATCCCGGTCGACATGCACAAGGAAGAAGGCGTCTCGG  
CGGCCGAGGTGATCATGACCGTGTCTCACGCCGGCGGTAAGTTCGATGACAACAGCTACAAGGTATCCGG  
CGGCCTGCATGGCGTGGGTGTCTCGGTGGTGAACGCCCTCTCCAAGGAGCTGGTGTGACCATCCGCCGT  
AGCGGCAAGATCTGGGAACAGACCTACGTGCATGGTGTACCGCAAGCGCCTCTGGCCGCTGTCCGGTGACA  
CCGACGGTACCGGTACGCAGATCCACTTCAAACCGTCCGAAGAGACCTTCGCCAACATTCACCTCAGCTG  
GGACATCCTGGCCAAGCGTCTGCGCGAACTGTCTTCTCAACTCCGGCGTGGGCATCCTGCTGCGCGAC  
GAGCGCACCGGCAAGGAAGAGCTGTTCAAGTACGAAGGTGGTCTGAAGGCTTTCGTTGAGTACCTGAACA  
CCAACAAGACCGTGGTCAACCAGGTGTTCCACTTCAACGTTCAAGCGCAAGAAGACGGCGTTGGTGTGCA  
AGTTGCCCTGCAGTGGAAACGACAGCTTCAACGAGAACCTGCTTTGCTTACCAACAACATTCGCGAGCGT  
GACGGTGGTACGCACCTGGCCGGTTTCCGTTCGCCCTCACCCGCCACCTGAACAACATACATCGAGGCCG  
AAGGCCTGGCCAAGAAGTTCAGGTTTCCACCACCGGTGACGATGCCCCGCAAGGTCTGACTGCGATCAT  
CTCGGTCAAGGTGCCGACCCGAAATTCAGCTCGCAGACCAAGGACAAAACCTGGTATCGAGCGAGGTAAAA  
ACTGCGGTGCAACAGGAGATGGGCAAGTACTTCTCCGACTTCTGCTGGAAAACCCCAACGAAGCAAGG  
CCGTGGTCCGCAAGATGATCGATGCCGCGCTGCCGCGCAAGCGGCTCGTAAAGCCCGTGAATGACTCG  
CCGTAAGGTGCACTGGACATTCGCCGGCTGCCGCGCAAACTGGCCGACTGCCAGGAAAAAGACCCGGCG  
CTGTCCGAACTCTACATCGTGGAGGGTGACTCCGCGGGCGGTTCTGCCAAGCAGGGCCGTAACCGCAAGA  
CCCAGGCGATCCTGCCGCTCAAGGGCAAGATCCTCAACGTCGAACGCGCGCTTCGACCGCATGATTTCT  
CTCGCAGGAAGTCGGCACGCTGATCACTGCGCTCGGCTGCGGCATGGCCGTGATGACTACAACATCGATC  
AA

>gyrB\_P.aeruginosa\_PA01 (AE004091.2; PA0004)

CCCGCATGTACATCGGCGACACCGACGATGGCACCGGTCTGCACCACATGGTGTTCGAGGTGGTGGATA  
ACTCCATCGACGAAGCGCTGGCCGGTACTGCAGCGAAATCAGCATCACCATCCATACGGATGAGTGCAT  
CACTGTCCGCGACAATGGACCGGTATTCCGGTGGATATCCACAAGGAAGAAGGGTTTTCTGCGGCGGAA  
GTGATCATGACCGTCTCCACGCCGGCGGCAAGTTCGACGACAACACCTACAAGGTGTCCGGCGGCTTGC  
ACGGTGTGGGCGTCTCGGTGGTGAACGCGCTGTCCCATGAACTACGCCGTGACCATCCGTGCCACAACAA  
GGTCTGGGAACAGGTCTACCACCACGGCGTTCGCGAGTTCCTCACTGCGCGAAGTGGGCGAGACCGATGGC  
TCCGGCACCGAAGTTCACCTTCAAGCCGTCCCGGAGACCTTCAGCAACATCCACTTCAAGTTGGGACATCC  
TGGCCAAGCGCATCCGCGAGCTGTCTTCTCAACTCCGGCGTCCGCATCCTGCTGCGCGACGAGCGTAC  
CGGCAAGGAGGAGCTGTTCAAGTACGAAGGCGGTCTGAAGGCCTTCGTCGAGTACCTGAACACCAACAAG  
ACCGCGGTGAACGAGGTATTCCACTTCAACGTCAGCGTGAAGAGGACGGCGTGGGTGTGGAAGTCCGCT  
TGCAGTGGAAACGACAGCTTCAACGAGAACCTGCTCTGCTTACCAACAACATCCCGCAGCGTGACGGCGG  
CACCCACCTGGCCGGTTTCCGTTCGGCGCTGACGCGTAACCTGAACAACATACATCGAGGCCGAAGGCCTG  
GCGAAGAAGTTCAAGATCGCCACCACCGGCGACGATGCCCGCAAGGCCTCACCGCATCATCTCGGTGA  
AGGTACCGGACCCGAAGTTCAGCTCGCAGACCAAGGACAAGCTGGTCTCCTCCGAGGTGAAGACTGCGGT  
GGAACAGGAGATGGGCAAGTACTTCGCCGACTTCTGCTGGAGAATCCCAACGAAGCCAAGGCCGTGGTCT  
GGCAAGATGATCGACGCCCGCCGTGCCCGGAGGCGCGCAAGGCGCGGAGATGACCCGCCGCAAGG  
GCGCGCTGGACATCGCCGGCCTGCCCGGCAAACTGGCCGATTGCCAGGAAAAGGACCCGGCGCTCTCCGA  
ACTGTACATCGTGGAGGGTGACTCCGCGGGCGGTTCCGCCAAGCAGGGCCGCAATCGCCGGACCCAGGCG  
ATCCTGCCGCTCAAGGGCAAGATCCTCAACGTCGAAAAGGCGCGCTTCGACAAGATGCTCTCCTCCAGG  
AGGTCCGTACGCTGATCACCGCCTGGGCTGTGGCATCGGCCGCGA

>gyrB\_P.stutzeri\_ATCC\_17588 (CP002881.1; PSTAB\_0004)

CATGTATATCGGCGACACCGATGACGGCACCGCCTGCACCACATGGTCTTCGAAGTCGTCGATAACTCG  
ATCGATGAAGCGCTGGCCGGTACTGCAGCGATATTTCCATCACCATCCATACCGATGAATCCATCACC  
TGCGCGATAACGGCCGCGGCAATTCGGTGGATATTCACGAAGAAGGCGTATCGGCAGCCGAGGTATCAT  
GACCGTGTGACGCGAGGCGGTAAGTTCGACGACAACCTTACAAGGTATCCGGTGGCCTGCACGGCGTG  
GGTGTCTCGGTAGTGAATGCATTTGTCGAGGAGCTGCTGCTGACCATCCGCCGCAAGGCAAGGTGTGGG  
AACAGCTCTATCGCCATGGTGTCCCGCAAGCGCCGCTCGCGGCCGTGGGCGAGACCGATACGTCCGGCAC  
GCAGATCCATTTCAAACCCCTCCGCCGAGACCTTCCAGAACATCCATTTAGCTGGGACATTTCTGGCCAAG  
CGTCTCCGCGAACTGTCTTTCTCAATTCGCGGTGGGTATCGTTCTGCGCGACGAACGCACGGCCAAGG  
AAGAACTGTTCAAGTACGAAGGCGGCCCTCAGCGCCTTCGTCGCCTACCTGAACACCAACAAGACCGCGGT  
GAATCAGGTGTTCCACTTCAACGTCAGCGTGACGATGGCGTCCGGCGTGGAAAGTCCGCGTGCAGTGGAA  
GACAGCTTCAACGAGAACATCCTCTGCTTTACCAACAACATTTCCCGAGCGTGACGGCGGCACCTCACCTGG  
CCGGCTTCCGCTCCGCACTGACGCGTAACCTGAACAACATACATCGAGCAGGAAGGCCTGGCGAAGAAGCA  
CAAGATCGCCACCACCGGTGACGATGCGCGTGAAGGTCTGACCGCGATCATCTCGGTCAAGGTGCCGGAT

CCGAAGTTCAGTTCCCAGACCAAGGACAAGCTGGTTTCTCCGAGGTGAAGACCGCGGTGGAACAGGAGA  
TGGGCAAGTACTTCGCCGACTTCTGCTGGAGCATCCAAACGAGGCGAAGGCGGTAGTCGGCAAGATGAT  
CGACGCTGCCCCGCGCCGTGAGGCTGCGCGCAAGGCACGGGAAATGACCCGGCGCAAAGGCGCGCTGGAT  
ATCGCCGGCCTGCCGGGCAAGCTTGGCGACTGTCAGGAGAAGGATCCTGCGCTGTCCGAAGTGTACATCG  
TGGAGGGTACTCCGCGGGTGGCTCGGCCAAGCAGGGCCGCAATCGCAAGACCCAGGCGATCCTCCCCT  
CAAGGGCAAGATTCTCAACGTCGAGAAGGCACGTTTCGACAAGATGCTCTCGTCCCAGGAAGTCGGCAGC  
CTGATCACCGCGCTGGGTTGCGGCATCGGCCGAGGAATACA

>gyrB\_Pseudomonas\_sp.\_1008 (CP019856.1; B1R45\_00020)

CCGGTATGTACATTGGCGACACTGATGACGGTAGCGGTCTGCACCACATGGTGTTCGAGGTGGTTCGACAA  
CTCCATCGACGAAGCTCTGGCCGGTCACTGCGACGACATCAGCATTATCATCCACCCGGATGAGTCGATT  
ACCGTACGCGACAACGGTTCGCGGCATTCCGGTAGACGTGCACAAAGAAGAAGGCGTTTCGGCGGCAGAGG  
TCATCATGACCGTGTCCACGCTGGCCGTAAGTTCGACGACAACCTCCTATAAAGTCTCCGGCGGTTTGCA  
CGGTGTGGGCGTTTCGGTAGTGAACGCACTGTCCGAAGAGCTGATCCTGACTGTGCGCCGACAGCGGCAAG  
ATCTGGGAACAGACCTACGTTTACGGCGTTCACAAAGAACCAGATGAAAATCGTCGGCGACAGTGAAACCA  
CCGGCACCCAGATTCACCTTCAAGCCATCGGCTGAAAACCTTCAAGAATATTCACCTTCAGCTGGGACATCCT  
GGCCAAGCGTATTTCGTGAACTGTGCTTCTTAACTCCGGCGTGGGTATCGTCTCAAGGACGAGCGCAGC  
GGCAAGGAAGAGCTGTTCAAGTACGAAGGCGGCTTGCCTGCGTTTCGTTGAATACCTGAACACCAACAAGA  
CTGCGGTCAACCAGGTGTTCCACTTCAACATCCAGCGTGAAGACGGCATTGGCGTGGAAATCGCCTTGCA  
GTGGAACGACAGCTTCAACGAGAACCTGTTGTGCTTACCAACAACATTCCTCAGCGCGATGGCGGTACT  
CACCTGGTGGGTTTCCGTTTCGGCACTGACGCGTAACTGAACACCTACATCGAAGCCGAAGGCCTGGCGA  
AGAAGCATAAAGTTGCCACCACCGGTGACGATGCCCCGGAAGGCTTGACCGCGATTATCTCGGTGAAAGT  
ACCGGATCCGAAGTTCAGCTCCCAGACCAAAGACAAGCTGGTGTCTTCCGAAGTGAAGACCGCAGTGGAG  
CAGGAGATGGGCAAGTACTTCTCCGACTTCTGCTGGAGAACCCGAACGAAGCCAAGTTGGTTCGTCGGCA  
AGATGATCGACGCTGCACGTGCCCCGTGAAGCCGCGCGTAAGGCCCGTGAATGACCCGTCGTAAAGGCGC  
GTTGGACATTGCCGGCCTGCCGGGCAAACTCGCTGACTGCCAGGAGAAGGACCCGCCCCCTCCGAAGTGC  
TACCTGGTGAAGGTGACTCTGCTGGCGGTTCCGCCAAGCAGGGTCGTAACCGTCGCACCCAGGCCATCC  
TGCCGTTGAAGGGTAAGATCCTCAACGTCGAGAAGGCGCGCTTCGACAAGATGATTTCTTCCCAGGAAGT  
TGGCACCTTGATCACGGCGTTGGGTTGCGGTATCGGTTCGTGACGAATACAACATCGA

>gyrB\_P.fluorescens\_SBW25 (AM181176.4; PFLU\_0004)

CCGGTATGTACATTGGCGACACTGATGACGGTAGCGGTCTGCACCACATGGTGTTCGAGGTGGTTCGACAA  
CTCCTCGACGAAGCTCTGGCCGGTCACTGCGACGACTCAGCATTATCATCCACCCGGATGAGTCGATTAC  
TGTGCGCGACAACGGTTCGCGGCATTCCGGTAGACGTACACAAAGAAGAAGGCGTTTCGGCGGCAGAGGTC  
ATCATGACCGTGTTCACGCCGGCGGTAAGTTCGACGACAACCTCCTATAAAGTCTCCGGTGGTTTGCACG  
GCGTGGGCGTGTGCGTTGTGAACGCGCTGTCCGAAGAAGTGAATCTGACGGTTCGCCGTAGCGGCAAGAT  
CTGGGAACAGACTTACGTCCACGGCGTTCACAAAGAACCAGATGAAAATCGTCGGCGACAGCGAGTCGACC  
GGTACGCAGATCCACTTCAAGCCATCGGCTGAAAACCTTCAAGAATATTCACCTTCAGCTGGGACATCCTGG  
CCAAGCGTATTTCGTGAATTGTCTTCTCAACTCCGGTGTGGGTATCGTCTCAAGGACGAACGACGCGG  
CAAGGAAGAGCTGTTCAAGTACGAAGGTGGTCTGCGTGCATTCGTTGAATACCTGAACACCAACAAGACT  
GCGGTCAACAGGTGTTCCACTTCAACATCCAGCGTGAAGACGGCATTGGCGTGGAAATCGCCCTGCAGT  
GGAACGACAGTTTTCAACGAGAACCTGTTGTGCTTACCAACAACATTCCTCAGCGGATGGCGGTACTCA  
CTTGGTGGGTTTCCGTTCCGCACTGACGCGTAACTGAACACCTACATCGAAGCCGAAGGCTTGGCCAAG  
AAGCACAAAGTCCACACCAGGTGACGATGCCCCGGAAGGCTGACCGCGATTATCTCGGTGAAAGTGC  
CGGACCCTAAGTTTACGTTCCAGACCAAAGACAAGTGGTGTCTTCCGAGGTGAAGACCGCAGTGGAAACA  
GGAGATGGGCAAGTACTTCTCCGACTTCTGCTGGAGAACCAGCAAGCCAAGCTGGTTCGTCGGCAAG  
ATGATCGACGCTGCACGTGCCCCGTGAAGCTGCGCGTAAAGCCCCTGAGATGACCCGCCGTAAAGGCGCGC  
TGGATATCGCTGGCCTGCCAGGCAAACTGGCTGACTGCCAGGAGAAGGACCCGCCCCCTCCGAGCTGTA  
TCTGGTGAAGGTGACTCTGCTGGCGGTTCCGCCAAGCAGGGTCGTAACCGTCGCACCCAAGCCATCCTG  
CCGTTGAAGGGTAAGATCCTCAACGTCGAGAAGGCGCGCTTCGACAAGATGATTTCTTCCCAGGAAGTTG  
GCACCTTGATCACGGCGTTGGGCTGCGGTATGGCCGCGACGAGTACAACATCGACA

>gyrB\_P.chlororaphis\_SMP3 (CP009290.1; JM49\_30525)

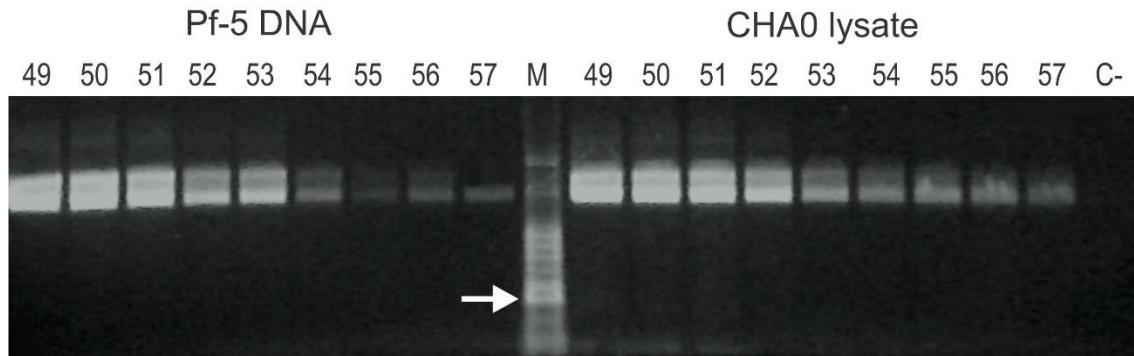
AACGTCGGTATGTACATTGGTGACACCGACGATGGCAGCGGTCTGCACCATATGGTGTTCGAGGTGGT  
CGATAACTCGATCGACGAAGCTCTGGCCGGCCACTGCGACGACATCAGCATCATCATCCATCCGGACGAA  
TCCATTACCGTGCCTGACAACGGTTCGCGGCATCCCGGTAGACGTGCATAAAGAAGAAGGCGTTTCCGCGG  
CCGAGGTATCATGACTGTGCTGCACGCCGGCGGTAAGTTCGACGACAACCTCCTACAAAGTATCCGGCGG  
TCTGCACGGTGTGGGTGTGCTGGTAGTGAACGCCCTGTCCGAAGAAGTGGTCTGACCGTTCCGCCGAGT  
GGCAAGATCTGGGAACAGACATACGTTTACGGTGTGCTCAGGCGCCTATGGCGATCGTCCGGTACAGCG  
AAACCACCGGTACCCAGATTCACCTTCAAGGCTTCTAGCGAGACCTTCAAGAACATCCATTTAGCTGGGA  
CATCCTGGCCAAGCGGATTCGTGAACTGTCTTCTCAACTCCGGTGTCCGGTATCGTTTCTGAAGGACGAG  
CGCAGCGGCAAGGAAGAGCTGTTCAAGTACGAAGGCGGCTGCGCGCATTCGTTGAATATCTGAACACCA  
ACAAGACCGCGGTCAACCAGGTGTTCCACTTCAATGTGCAGCGTGAAGATGGCATCGGCGTGGAAATCGC  
CCTGCAGTGGAAACGACAGCTTCAACGAAAACCTGCAGTGTCTTACCAACAACATTCGCGAGCGCGACGGC  
GGCACCCACCTGGTGGGCTTCCGTTTCGGCACTGACGCGTAACTGAACAACATTCGCGAGCGCGACGGC  
TGGCGAAGAAGCACAAGGTGCCACCACCGGTGACGATGCCCCGGAAGGCTGACCGCGATCATTTCCGGT  
CAAGGTGCCGGATCCGAAGTTCAGCTCCCAGACCAAAGACAAGCTGGTGTCTTCCGAAGTGAAGACCGCA  
GTCGAACAGGAAATGGGCAAGTACTTCTCCGACTTCTGCTGGAAAACCCGAACGAAGCCAAGCTGGTGG

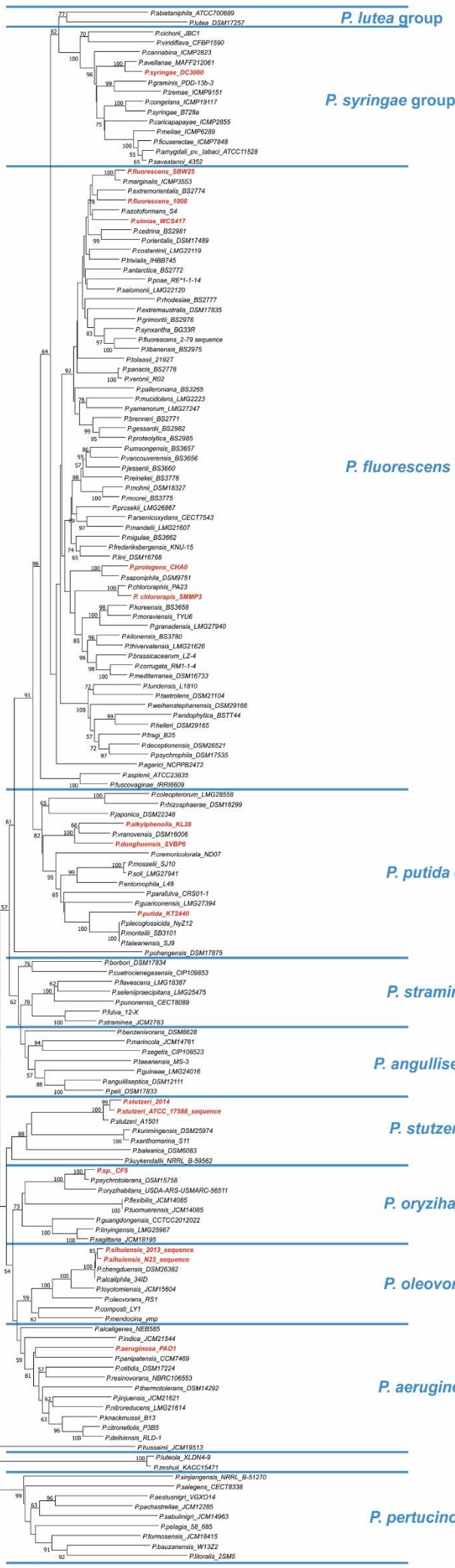
TCGGCAAGATGCTCGACGCCGCCCGTGCCCGTGAAGCGGCGCGTAAGGCTCGCGAGATGACCCGCCGTAA  
AGGTGCGCTGGATATCGCCGGCCTGCCGGGCAAACCTGGCGGACTGCCAGGAAAAAGACCCTGCCCTTTCC  
GAACTCTACCTGGTGAAGGTGACTCTGCTGGCGGCTCCGCCAAGCAGGGACGCAACCGTAAGACCCAGG  
CGATTCTGCCGCTCAAGGGCAAGATCCTTAACGTCGAGAAAAGCGCGTTTCGACAAGATGATTTCCCTCGCA  
AGAGGTCGGCACCTTGATCACTGCACTCGGTTGCGGCATCGGCCGTGAAGAGTACAACATCGACA  
>gyrB\_P.donghuensis\_SVBP6 (NZ\_JH650763.1; UW3\_RS0111960)  
CCGGTATGTACATTGGCGACACCGATGATGGTAGCGGCTGCACCACATGGTGTTCGAGGTGGTTCGATAA  
CTCGATCGACGAGGCACTCGCCGGCCACTGCGATGACATCACCGTAATTATTCACCCGGACGAATCCATC  
AGTGTTCGCGACAACGGTCGCGGCATTCCGGTTGACGTGCATAAAGAGGAAGGCGTTTCGCCCGCTGAGG  
TCATCATGACCGTCCACGCCGGCGGTAATTCGATGACAACCTCTACAAGGTATCCGGCGGTCTGCA  
CGGTGTAGGTGTGTCGGTGGTTAACGCCCTTTCGAGCAGTTGATCCTCACCGTTCGCCGCAGTGGCAAG  
ATCTGGGAACAGACCTACGTCCACGGTGTCCACAAGCGCGCATGAAGATCGTTGGCGAAAGTGAAACCA  
CCGGTACCCACATCCACTTCAAGCCGTGCGCTGAAACCTTCAAGAACATCCACTTCAGCTGGGACATCCT  
GGCCAAGCGGATTTCGTGAACTGTCTTCCCTCAACTCCGGCGTTGGCATCCTGCTGAAAGACGAGCGTTCC  
GGCAAGGAAGAGTACTTCAAGTACGAAGGCGGTCTGCGTGCCTTCGTTGAGTACCTGAACACCAACAAGA  
CGCCGGTCAACCAGGTGTTCCATTTCAATGTTACGCGTGAAGACGGCGTGGGCGTGGAAATTGCCCTGCA  
GTGGAACGACAGCTTCAACGAGAACCTGTTGTGCTTCACCAACAACATTCGCGCAGCGCGACGGTGGTACC  
CACCTGGTTCGGTTTTCGCTCGGCGTTGACCCGTAACCTGAACAACATACATCGAGCAAGAAGGCCTGGCCA  
AGAAGAACAAGGTTTCGACCACTGGCGACGACGCCCGTGAAGGTCTGACCGCGATCATCTCGGTGAAGGT  
GCCGGATCCGAAGTTCAGCTCGCAGACCAAAGACAAGCTGGTGTCTCGGAAGTGAAGAACTGCCGTGGAA  
CAGGAGATGGGCAAATACTTCTCCGACTTCTGCTGGAGAACCCTGAACGAAGCCAAGGCGGTGTGTCGGCA  
AGATGATCGACGCCGCTCGTGCCTGAAAGCTGCACGTAAGCGCGGGAAATGACTCGCCGCAAAGGTGC  
GCTGGATATCGCCGGCCTGCCTGGCAAGCTGGCGGACTGCCAGGAGAAGGACCCCTGCTCTTTCCGAAGT  
TACCTGGTGGAGGGTACTCCGCGGGTGGCTCGGCCAAGCAAGGCCGTAACCGCAAGACCCAGGCGATCC  
TGCCGCTCAAGGGCAAGATCCTCAACGTCGAGAAAAGCAGCTTCGACAAGATGATCTCGTCCCAGGAAGT  
GGGACCCCTGATCACTGCGCTGGGCTGTGGTATCGGCCGCAAGAGTACAACATCGACA  
>gyrB\_P.simiae\_WCS417 (CP007637.1; PS417\_00020)  
ACGTCCCGGTATGTACATTGGCGACACTGATGACGGTAGCGGTCTGCACCACATGGTGTTCGAGGTGGTC  
GACAACTCCATCGACGAAGCTCTGGCCGGTCACTGCGACGACATCAGCATCATCCACCCGGATGAGT  
CTATTACCGTGC CGCACAATGGTTCGCGGCATTCCGGTAGACGTACACAAAAGAAGAAGGCGTTTCGGCAGC  
AGAGGTATCATGACCGTGTCCACGCCGGCGGTAAGTTCGACGACAACCTCTATAAAGTTTCCGGCGGT  
CTGCACGGTGTGGGCGTTTCGGTAGTGAACGCTCTTCTGAAGAGTTGATCCTGACTGTTCCGCCAGTG  
GCAAGATCTGGGAACAGACCTACGTTACGGTGTTCAAAAAGAACCGATGAAAATCGTCCGTGACAGTGA  
AACCACCGGTACGCAGATCCACTTCAAGCCATCGGCTGAGACCTTCAAGAATATCCACTTTAGCTGGGAC  
ATCCTGGCCAAGCGTATTCGTGAACTGTCTTCTGAACTCCGGTGTGGGTATCGTCTCAAGGATGAGC  
GCAGCGGTAAGGAAGAGCTGTTCAAGTATGAAGGTGGCCTGCGCGCATTCGTTGAATACCTGAACACCAA  
CAAGACCGCGGTCAACCAGGTGTTCCACTTCAACATTCAGCGTGAAGACGGCATCGGCCGGAATCGCT  
CTGCAGTGGAAACGACAGCTTCAACGAGAACCCTGTTGTGCTTCACCAACAACATTCCTCAGCGCAGGGT  
GTACTCACCTGGTGGGTTTCCGTTCCGCACTGACGCGTAACCTGAACACCTACATTGAAGCCGAAGGATT  
GGCCAAAAAGCACAAAGTCGCCACCACCGGTGACGATGCGCGTGAAGGCCGTGACCGGATTATCTCGGTA  
AAAGTACCTGATCCGAAGTTCAGCTCTCAGACCAAAGACAAGCTGGTGTCTTCCGAAGTGAAGACTGCGG  
TGGAACAGGAGATGGGCAAGTATTTCTCCGACTTCTGCTGGAGAACCCTGAACGAAGCCAAGCTGGTTGT  
CGGCAAGATGATCGATGCCCGCGGTGCCAGGCAAACCTGACTGACGCAAGAGAAGGACCCGTGCCCTCTCCG  
GGCGCGCTGGATATCGCCGGCTTGCAGGCAAACCTGACTGACGCAAGAGAAGGACCCGTGCCCTCTCCG  
AACTGTACCTGGTGGAAAGGTGACTCTGCTGGCGGTTCCGCCAAGCAGGGTCTGTAACCGTTCGACCCAAAGC  
CATCCTGCCGTTGAAAGGTAAAGATCCTCAACGTCGAGAAGGCTCGCTTCGACAAGATGATTTCCCTCCAG  
GAAGTCGGCACCTTGATCACGGCGTTGGGCTGCGGTATCGGCCGCGACGAGTACAACATCGACAAGTTGC  
GCTATCACAACATCATCATCATGACC

Genbank accession numbers:

- gyrB* of *P. sihuiensis* 2013: MG757236
- gyrB* of *P. stutzeri* 2014: MG757237
- gyrB* of *P. stutzeri* 2018: MG757238
- gyrB* of *Pseudomonas* sp. CF5: MG757239
- gyrB* of *P. sihuiensis* N23: MG757240
- gyrB* of *Pseudomonas* sp. 1008: G757243
- gyrB* of *P. chlororaphis* SMMP3: G757241
- gyrB* of *P. donghuensis* SVBP6: MG757242

**Supplementary Figure S1.** Gradient PCR of *gyrB* gene. The reactions were performed using genomic DNA from *P. protegens* Pf-5 or *P. protegens* CHA0 lysate as template. Reactions were carried out with primers listed in Table 2 with the annealing temperatures shown above each lane. The negative control without DNA (C-) was assayed at 49 °C. Molecular mass marker (M) correspond to the 100-bp DNA ladder (Embiotec, Argentina), and the 500 bp band is marked with a white arrow. Specificity was obtained at 57 °C, where the double band disappears using both kind of templates.





**Supplementary Figure S2. Evolutionary relationships of *Pseudomonas* species based on the amplicon sequences of the *gyrB* gene.** The evolutionary history was inferred using the Neighbor-Joining method. The optimal tree with the sum of branch length = 7.21 is shown. The percentage of replicate trees in which the associated taxa clustered together in the bootstrap test (1000 replicates) are shown next to the branches. The tree is drawn to scale, with branch lengths in the same units as those of the evolutionary distances used to infer the phylogenetic tree. The evolutionary distances were computed using the Kimura 2-parameter method and are in the units of the number of base substitutions per site. The analysis involved 157 nucleotide sequences. All ambiguous positions were removed for each sequence pair. There were a total of 1476 positions in the final dataset. Evolutionary analyses were conducted in MEGA7. *Pseudomonas* groups classification was based on Gomila et al (2015). Groups are indicated in blue, and the isolates employed in sequencing and PCR-RFLP set up assays are shown in red.



**Supplementary Figure S3.** Polymerase chain reaction targetting the *gyrB* gene of non-pseudomonads strains of our laboratory collection, with the newly designed primers described in this study. We employed thermal lysates as templates for the PCR reaction described in Material and Methods section, with primers from in the Table 2. Strains were as follows: 1, *Shinorhizobium meliloti* 2011; 2, *Rhizobium etlii* CE3; 3, *Rhizobium fredii* NGR234; 5, *Escherichia coli* K12; 6, *Chromobacterium violaceum* ViR07; 7, *Azospirillum brasilense* ATCC29710; 8, *Serratia marcescens* AS-1; 9, *Burkholderia cepacia* (environmental isolate); 10, *Salmonella* spp.; 11, *Staphylococcus aureus* ATCC 25923; *Agrobacterium tumefaciens* NTL4; 13, *Bacillus cereus* (environmental isolate); 14, *Bacillus subtilis* (environmental isolate); 15, *Vibrio harveyii* BB170; 16, *Pantoea* spp. (environmental isolate); 17, negative control (without DNA) ; 18, positive control (*P. protegens* CHA0 as template). M, molecular weight marker  $\lambda$ BstEII (Embiotec, Buenos Aires, Argentina). A DNA band of 1371 bp is indicated with an arrow.



**Supplementary Table S1.** Sequences of *gyrB* gene from the *Pseudomonas* species included in the analysis

<i>Pseudomonas</i> species <sup>a</sup>	Strain	GenBank accession number	Observations
<i>P. aeruginosa</i>	PA01	AE004091.2	
<i>P. abietaniphila</i>	ATCC 700689	FNCO01000018.1	
<i>P. aestusnigri</i>	VGXO14	NZ_NBYK01000006.1	
<i>P. agarici</i>	NCPPB2472	CP014135.1	
<i>P. alcaliphila</i>	34	ANGB01000004.1	
<i>P. alcaligenes</i>	NEB 585	CP014784.1	
<i>P. alkylphenolia</i>	KL28	CP009048.1	
<i>P. amygdali</i> pv. <i>tabaci</i>	ATCC 11528	LCWS01000009.1	
<i>P. anguilliseptica</i>	DSM 12111	NZ_FNCS01000001.1	
<i>P. antarctica</i>	BS2772	LT629704.1	
<i>P. argentinensis</i> *	LMG 22563	FN554170.1	<i>gyrB</i> sequence not complete
<i>P. arsenicoxydans</i>	CECT 7543	LT629705.1	
<i>P. asplenii</i>	ATCC 23835	LT629777.1	
<i>P. asturiensis</i> *	LPPA 221	HF546083.1	<i>gyrB</i> sequence not complete
<i>P. asuensis</i> *	CP155-2	--	<i>gyrB</i> sequence not available
<i>P. avellanae</i>	MAFF 212061	NKQU01000008.1	
<i>P. azotifigens</i> *	JCM 12708	KM103930.1	<i>gyrB</i> sequence not complete
<i>P. azotoformans</i>	S4	CP014546.1	
<i>P. baetica</i> *	CECT 7720	HE800470.1	<i>gyrB</i> sequence not complete
<i>P. balearica</i>	DSM 6083	CP007511.1	
<i>P. bauzanensis</i>	W13Z2	JFHS01000003.1	
<i>P. benzenivorans</i>	DSM 8628	NZ_FNCT01000008.1	
<i>P. borbiri</i>	DSM 17834	NZ_FOWX01000035.1	
<i>P. brassicacearum</i>	LZ-4	JNCR01000040.1	
<i>P. brenneri</i>	BS2771	NZ_LT629800.1	
<i>P. caeni</i> *	CECT 7778	HE800473.1	<i>gyrB</i> sequence not complete
<i>P. cannabina</i>	ICMP 2823	LJPX01000020.1	
<i>P. carboxydohydrogena</i> *	DSM 1083	--	<i>gyrB</i> sequence not available
<i>P. caricapapayae</i>	ICMP2855	LJPW01000146.1	
<i>P. cedrina</i>	BS2981	LT629753.1	
<i>P. chengduensis</i>	DSM 26382	NZ_FMZQ01000001.1	
<i>P. chlororaphis</i>	PA23	CP008696.1	
<i>P. cichorii</i>	JBC1	CP007039.1	
<i>P. citronellolis</i>	P3B5	CP014158.1	
<i>P. coleopterorum</i>	LMG 28558	NZ_FNTZ01000001.1	
<i>P. composti</i>	LY1	LSSW01000029.1	
<i>P. congelans</i>	ICMP19117	LJQB01000051.1	
<i>P. corrugata</i>	RM1-1-4	CP014262.1	
<i>P. costantinii</i>	LMG 22119	FN554180.1	
<i>P. cremoricolorata</i>	ND07	CP009455.1	
<i>P. cuatrocienegasensis</i>	CIP 109853	NZ_FOFP01000011.1	
<i>P. deceptionensis</i>	DSM 26521	JYKX01000009.1	
<i>P. delhiensis</i>	RLD-1	FZPC01000017.1	
<i>P. donghuensis</i>	SVBP6	SUB3052350	
<i>P. duriflava</i> *	KCTC 22129	HE800478.1	

<i>P. endophytica</i>	BSTT44	LLWH01000045.1	
<i>P. entomophila</i>	L48	CT573326.1	
<i>P. extremaustralis</i>	DSM 17835	LT629689.1	
<i>P. extremorientalis</i>	BS2774	LT629708.1	
<i>P. ficuserectae</i>	ICMP7848	LJQJ01000012.1	
<i>P. flavescens</i>	LMG 18387	NZ_FNDG01000003.1	
<i>P. flexibilis</i>	JCM 14085	JTAK01000006.1	
<i>P. fluorescens</i>	SBW25	AM181176.4	
<i>P. formosensis</i>	JCM18415	NZ_FOYD01000007.1	
<i>P. fragi</i>	B25	NZ_JH604624.1	
<i>P. frederiksbergensis</i>	KNU-15	CP023466.1	
<i>P. fulva</i>	12-X	CP002727.1	
<i>P. fuscovaginae</i>	IRRI6609	JSYZ01000014.1	
<i>P. glareae*</i>	NR_145562.1	--	<i>gyrB</i> sequence not available
<i>P. gessardii</i>	BS2982	NZ_FNKR01000003.1	
<i>P. graminis</i>	PDD-13b-3	MTSB01000006.1	
<i>P. granadensis</i>	LMG 27940	LT629778.1	
<i>P. grimontii</i>	BS2976	NZ_FNKM01000002.1	
<i>P. guangdongensis</i>	CCTCC 2012022	LT629780.1	
<i>P. guariconensis</i>	LMG 27394	NZ_FMYX01000004.1	
<i>P. guineae</i>	LMG 24016	NZ_FOQL01000001.1	
<i>P. helleri</i>	DSM 29165	JYLD01000021.1	
<i>P. helmanticensis*</i>	CECT 8548	LT601023.1	<i>gyrB</i> sequence not complete
<i>P. hussainii</i>	JCM 19513	NZ_FOAS01000013.1	
<i>P. indica</i>	JCM 21544	FNFD01000025.1	
<i>P. japonica</i>	DSM 22348	NZ_BBIR01000012.1	
<i>P. jessenii</i>	BS3660	FNTC01000002.1	
<i>P. jinjuensis</i>	JCM 21621	FNIJ01000013.1	
<i>P. kilonensis</i>	BS3780	FNTT01000002.1	
<i>P. knackmussii</i>	B13	HG322950.1	
<i>P. koreensis</i>	BS3658	LT629687.1	
<i>P. kunmingensis</i>	DSM 25974	NZ_FOR01000009.1	
<i>P. kuykendallii</i>	NRRL B-59562	FNNU01000007.1	
<i>P. libanensis</i>	BS2975	LT629699.1	
<i>P. lini</i>	DSM 16768	JYLB01000011.1	
<i>P. linyingensis</i>	LMG 25967	FNZE01000025.1	
<i>P. litoralis</i>	2SM5	LT629748.1	
<i>P. lundensis</i>	L1810	NQKH01000001.1	
<i>P. lurida*</i>	DSM 15835	JN589908.1	<i>gyrB</i> sequence not complete
<i>P. lutea</i>	DSM 17257	JRMB01000002.1	
<i>P. luteola</i>	XLDN4-9	NZ_ALAT01000183.1	
<i>P. mandelii</i>	LMG 21607	LT629796.1	
<i>P. marginalis</i>	ICMP 3553	LKEG01000034.1	
<i>P. marincola</i>	JCM 14761	NZ_FPBC01000007.1	
<i>P. matsuisoli*</i>	CC-MHH0089	KM249139.1	<i>gyrB</i> sequence not complete
<i>P. mediterranea</i>	DSM 16733	LT629790.1	
<i>P. meliae</i>	ICMP6289	LJQT01000046.1	
<i>P. mendocina</i>	ymp	CP000680.1	
<i>P. meridiana*</i>	CIP 108465	FN554203.1	<i>gyrB</i> sequence not complete

<i>P. migulae</i>	BS3662	NZ_FNTY01000002	
<i>P. mohnii</i>	DSM 18327	NZ_FNRV01000001.1	
<i>P. monteilii</i>	SB3101	CP006979.1	
<i>P. moorei</i>	BS3775	FNKJ01000003.1	
<i>P. moravinesis</i>	TYU6	NRST01000001.1	
<i>P. mosselii</i>	SJ10	CP009365.1	
<i>P. mucidolens</i>	LMG 2223	LT629802.1	
<i>P. nitritireducens</i> *	LMG 25966	LT601026.1	<i>gyrB</i> sequence not complete
<i>P. nitroreducens</i>	LMG 21614	FZOM01000003.1	
<i>P. oceani</i> *	DSM 100277	KU187947.1	<i>gyrB</i> sequence not complete
<i>P. oleovorans</i>	RS1	FNZC01000014.1	
<i>P. orientalis</i>	DSM 17489	JYLM01000012.1	
<i>P. oryzihabitans</i>	56511	CP013987.1	
<i>P. otitidis</i>	DSM 17224	FOJP01000007.1	
<i>P. pachastrellae</i>	JCM 12285	NZ_FOUD01000003.1	
<i>P. palleroniana</i>	BS3265	NZ_FNUA01000002.1	
<i>P. panacis</i>	BS2778	NZ_FNSP01000004.1	
<i>P. panipatensis</i>	CCM7469	FNDS01000012.1	
<i>P. parafulva</i>	CRS01-1	CP009747.1	
<i>P. pelagja</i>	58 685	NWMT01000063.1	
<i>P. peli</i>	DSM 17833	NZ_FMTL01000003.1	
<i>P. pertucinogena</i> *	JCM 11950	DQ350613.2	<i>gyrB</i> sequence not complete
<i>P. plecoglossicida</i>	NyZ12	CP010359.1	
<i>P. poae</i>	RE*1-1-14	CP004045.1	
<i>P. pohangensis</i>	DSM 17875	LT629785.1	
<i>P. populi</i> *	KBL-4-9	KJ561381.1	<i>gyrB</i> sequence not complete
<i>P. prosekii</i>	LMG 26867	LT629762.1	
<i>P. protegens</i>	CHA0	CP003190.1	
<i>P. proteolytica</i>	BS2985	NZ_FNTR01000004.1	
<i>P. psychrophila</i>	DSM 17535	JYKZ01000013.1	
<i>P. psychrotolerans</i>	DSM 15758	FMWB01000002.1	
<i>P. punonensis</i>	CECT 8089	FRBQ01000001.1	
<i>P. putida</i>	KT2440	AE015451.2	
<i>P. reinekei</i>	BS3776	LT629709.1	
<i>P. resinovorans</i>	NBRC 106553	AP013068.1	
<i>P. rhizosphaerae</i>	DSM 16299	CP009533.1	
<i>P. rhodesiae</i>	BS2777	LT629801.1	
<i>P. sabulinigri</i>	JCM 14963	LT629763.1	
<i>P. sagittaria</i>	JCM 18195	NZ_FOXM01000021.1	
<i>P. salegens</i>	CECT 8338	LT629787.1	
<i>P. salina</i> *	XCD-X85	KP098570.1	<i>gyrB</i> sequence not complete
<i>P. salomonii</i>	LMG 22120	MDFI01000010.1	
<i>P. saponiphila</i>	DSM 9751	NZ_FNTJ01000002.1	
<i>P. savastanoi</i>	4352	LGKR01000057.1	
<i>P. segetis</i>	CIP 108523	NZ_FZOG01000003.1	
<i>P. seleniipraecipitans</i>	LMG 25475	FNBM01000012.1	
<i>P. simiae</i>	WCS417	CP007637.1	
<i>P. soli</i>	LMG 27941	NZ_FOEQ01000003.1	
<i>P. straminea</i>	JCM 2783	NZ_FOMO01000001.1	

<i>P. stutzeri</i>	A1501	CP000304.1	
<i>P. synxantha</i>	BG33R	CM001514.1	
<i>P. syringae</i> pv. <i>syringae</i>	B728a	CP000075.1	
<i>P. taeanensis</i>	MS-3	AWSQ01000001.1	
<i>P. taetrolens</i>	DSM 21104	JYLA01000004.1	
<i>P. taiwanensis</i>	SJ9	AXUP01000002.1	
<i>P. thermotolerans</i>	DSM 14292	AQPA01000058.1	
<i>P. thivervalensis</i>	LMG 21626	LRSO01000016.1	
<i>P. tolaasii</i>	NCPPB 2192	CP020369.1	
<i>P. toyotomiensis</i>	JCM 15604	FOXK01000005.1	
<i>P. tremae</i>	ICMP9151	LJRO01000492.1	
<i>P. trivialis</i>	IHBB745	CP011507.1	
<i>P. tuomuerensis</i>	JCM 14085	KR706346.1	
<i>P. turukhanskensis</i> *	IB-1.1	LT219440.1	<i>gyrB</i> sequence not complete
<i>P. umsongensis</i>	DSM 16611	NIWU01000003.1	
<i>P. vancouverensis</i>	BS3656	LT629803.1	
<i>P. veronii</i>	R02	CP018420.1	
<i>P. viridiflava</i>	CFBP 1590	LT855380.1	
<i>P. vranovensis</i>	DSM 16006	AUED01000002.1	
<i>P. weihenstephanensis</i>	DSM 29166	JYLF01000003.1	
<i>P. xanthomarina</i>	S11	CCYE01000001.1	
<i>P. xiamenensis</i> *	DSM 22326	DQ350612.2	<i>gyrB</i> sequence not complete
<i>P. xinjiangensis</i>	NRRL B-51270	LT629736.1	
<i>P. yamanorum</i>	LMG 27247	NZ_LT629793.1	
<i>P. zeshuii</i>	KACC 15471	FQYS01000008.1	
<i>P. zhaodongensis</i> *	NEAU-ST5-21	KP151495.1	<i>gyrB</i> sequence not complete

<sup>a</sup> The analysis included all the *gyrB* sequences available on Genbank at date (September 2017), based on the species list described in LPSN.

\* Sequences with an asterisk were not included because their complete *gyrB* sequence were not available on Genbank

**Supplementary Table S2.** Coverage and accuracy of the sequencing of *gyrB* gene from the *Pseudomonas* strains tested *in vitro*

Strain designation	Amplicon size <sup>a</sup>	Sequence obtained	Coverage	Accuracy <sup>e</sup>
<i>P. aeruginosa</i> PAO1	1467 bp	1376 bp	93.8 %	
<i>P. alkylphenolica</i> KL28	1464 bp	1389 bp	94.9 %	
<i>P. chlororaphis</i> SMMP3	1464 bp	1395 bp	95.3 %	
<i>P. donghuensis</i> SVBP6	1464 bp	1389 bp	94.9 %	
<i>Pseudomonas</i> sp. 1008	1464 bp	1397 bp	95.4 %	
<i>P. fluorescens</i> 2-79	1464 bp	1391 bp	95.0 %	
<i>P. fluorescens</i> SBW25	1464 bp	1386 bp	94.7 %	
<i>P. protegens</i> CHA0	1464 bp	1400 bp	95.6 %	
<i>P. putida</i> KT2440	1467 bp	1399 bp	95.4 %	
<i>P. sihuiensis</i> 2013 <sup>b</sup>	1467 bp	1387 bp	94.5 %	99.1 % <i>P. sihuiensis</i> KCTC 32246
<i>P. sihuiensis</i> N23 <sup>b</sup>	1467 bp	1402 bp	95.6 %	99.5 % <i>P. sihuiensis</i> KCTC 32246
<i>P. simiae</i> WCS417	1464 bp	1426 bp	97.4 %	
<i>P. stutzeri</i> 2014 <sup>c</sup>	1461 bp	1380 bp	94.5 %	98.2 % <i>P. stutzeri</i> DSM 4166
<i>P. stutzeri</i> 2018 <sup>c</sup>	1461 bp	1379 bp	94.4 %	99.4 % <i>P. stutzeri</i> DSM 4166
<i>P. stutzeri</i> ATCC 17588	1461 bp	1373 bp	94.0 %	
<i>P. syringae</i> pv. <i>tomato</i> DC3000	1464 bp	1397 bp	95.4 %	
<i>Pseudomonas</i> sp. CF5 <sup>d</sup>	1467 bp	1383 bp	94.3 %	99.8% <i>P. psychrotolerans</i> L19

<sup>a</sup> Fragment size calculated in silico with the AmplifX software v.1.7.0, from the *gyrB* complete sequence of the corresponding strain.

<sup>b</sup> Amplified fragment size based on the *P. sihuiensis* KCTC 32246 *gyrB* gene.

<sup>c</sup> Amplified fragment size based on the *P. stutzeri* ATCC 17588 *gyrB* gene.

<sup>d</sup> Amplified fragment size based on the *P. psychrotolerans* L19 *gyrB* gene.

<sup>e</sup> Percentage values of accuracy comparing with the corresponding type strain sequences from BlastN analyses. Type strains showed 100% accuracy with their corresponding sequences on Genbank database