



PRINT DATE: 2024-04-29 11:20:59 +0200

JOB ID: 29ae139a-3a41-4571-a19b-809af76a3ec5

RESULT PAGE: https://tygs.dsmz.de/user_results/show?guid=29ae139a-3a41-4571-a19b-809af76a3ec5

Table 1: Phylogenies

Publication-ready versions of both the genome-scale GBDP tree and the 16S rRNA gene sequence tree can be customized and exported either in SVG (vector graphic) or PNG format from within the phylogeny viewers in your TYGS result page. For publications the **SVG format is recommended** because it is lossless, always keeps its high resolution and can also be easily converted to other popular formats such as PDF or EPS. Please follow the link provided above!

Table 2: Identification

The below list contains the result of the TYGS species identification routine.

Explanation of remarks that might occur in the below table:

remark [R1]: The TYGS type strain database is automatically updated on an almost daily basis. However, if a particular type strain genome is not available in the TYGS database, this can have several reasons which are detailed in the FAQ. You can request an extended 16S rRNA gene analysis via the 16S tree viewer found in your result page to detect **not yet genome-sequenced** type strains relevant for your study.

remark [R2]: $> 70\%$ dDDH value (formula d_4) and (almost) minimal dDDH values for gene-content formulae d_0 and d_6 indicate a potentially unreliable identification result and should thus be checked via the 16S rRNA gene sequence similarity. Such strong deviations can, in principle, be caused by sequence contamination.

remark [R3]: G+C content difference of $> 1\%$ indicates a potentially unreliable identification result because within species G+C content varies no more than 1% , if computed from genome sequences (PMID: 24505073).

| Strain | Conclusion | Identification result | Remark |
|---|--------------------------|-----------------------------------|----------|
| 'Legionella septentrionalis' (RZGR00000000) | belongs to known species | <i>Legionella septentrionalis</i> | |
| 'Legionella septentrionalis' (RZGS00000000) | belongs to known species | <i>Legionella septentrionalis</i> | |
| 'Legionella septentrionalis' (RZGT00000000) | belongs to known species | <i>Legionella septentrionalis</i> | |
| 'Legionella septentrionalis' (RZGV00000000) | belongs to known species | <i>Legionella septentrionalis</i> | |
| 'Legionella sp. km535' (RZGU00000000) | belongs to known species | <i>Legionella moravica</i> | |
| 'Legionella qingyii' (QHJG00000000) | belongs to known species | <i>Legionella qingyii</i> | |
| 'Legionella qingyii' (RZGW00000000) | belongs to known species | <i>Legionella qingyii</i> | |
| 'Legionella qingyii' (RZGX00000000) | belongs to known species | <i>Legionella qingyii</i> | |
| 'Legionella sp. km772' (RZGQ00000000) | potential new species | | see [R1] |
| 'Legionella sainthelensi' (UFAL00000000) | potential new species | | see [R1] |
| 'Legionella sainthelensi' (UFAM00000000) | potential new species | | see [R1] |

Table 3: Pairwise comparisons of user genomes vs. type-strain genomes

The following table contains the pairwise dDDH values between your user genomes and the selected type-strain genomes. The dDDH values are provided along with their confidence intervals (C.I.) for the three different GBDP formulas:

- formula d_0 (a.k.a. GGDC formula 1): length of all HSPs divided by total genome length
- formula d_4 (a.k.a. GGDC formula 2): sum of all identities found in HSPs divided by overall HSP length
- formula d_6 (a.k.a. GGDC formula 3): sum of all identities found in HSPs divided by total genome length

Note: Formula d_4 is independent of genome length and is thus robust against the use of incomplete draft genomes. For other reasons for preferring formula d_4 , see the FAQ.

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|---|-------|-----------------|-------|-----------------|-------|-----------------|-------------------|
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella qingyii</i> CCTCC AB 2018025 | 100.0 | [100.0 - 100.0] | 100.0 | [100.0 - 100.0] | 100.0 | [100.0 - 100.0] | 0.01 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella septentrionalis</i> km711T | 100.0 | [100.0 - 100.0] | 100.0 | [100.0 - 100.0] | 100.0 | [100.0 - 100.0] | 0.03 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella qingyii</i> CCTCC AB 2018025 | 85.0 | [81.3 - 88.1] | 99.9 | [99.8 - 100.0] | 90.3 | [87.6 - 92.5] | 0.02 |
| 'Legionella qingyii' (QHJG00000000) | 'Legionella qingyii' (RZGX00000000) | 85.0 | [81.3 - 88.1] | 99.9 | [99.8 - 100.0] | 90.3 | [87.6 - 92.5] | 0.02 |
| 'Legionella qingyii' (RZGW00000000) | 'Legionella qingyii' (RZGX00000000) | 98.5 | [97.5 - 99.2] | 98.3 | [97.5 - 98.8] | 99.2 | [98.7 - 99.5] | 0.0 |
| 'Legionella qingyii' (QHJG00000000) | 'Legionella qingyii' (RZGW00000000) | 80.4 | [76.5 - 83.8] | 97.9 | [97.0 - 98.5] | 86.2 | [83.1 - 88.9] | 0.02 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella qingyii</i> CCTCC AB 2018025 | 80.4 | [76.5 - 83.8] | 97.9 | [97.0 - 98.5] | 86.2 | [83.1 - 88.9] | 0.02 |
| 'Legionella septentrionalis' (RZGS00000000) | 'Legionella septentrionalis' (RZGT00000000) | 91.8 | [88.8 - 94.0] | 97.3 | [96.2 - 98.1] | 94.8 | [92.8 - 96.3] | 0.17 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella septentrionalis</i> km711T | 91.8 | [88.8 - 94.0] | 97.3 | [96.2 - 98.1] | 94.8 | [92.8 - 96.3] | 0.2 |
| 'Legionella septentrionalis' (RZGT00000000) | 'Legionella septentrionalis' (RZGV00000000) | 93.2 | [90.5 - 95.2] | 97.2 | [96.1 - 98.0] | 95.8 | [94.1 - 97.1] | 0.02 |
| 'Legionella septentrionalis' (RZGR00000000) | 'Legionella septentrionalis' (RZGT00000000) | 92.1 | [89.1 - 94.3] | 96.6 | [95.4 - 97.5] | 94.9 | [93.0 - 96.4] | 0.13 |
| 'Legionella septentrionalis' (RZGS00000000) | 'Legionella septentrionalis' (RZGV00000000) | 90.1 | [86.9 - 92.6] | 96.2 | [94.8 - 97.2] | 93.5 | [91.2 - 95.2] | 0.16 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella septentrionalis</i> km711T | 90.1 | [86.9 - 92.6] | 96.2 | [94.8 - 97.2] | 93.5 | [91.2 - 95.2] | 0.19 |
| 'Legionella septentrionalis' (RZGR00000000) | 'Legionella septentrionalis' (RZGV00000000) | 93.0 | [90.2 - 95.0] | 94.5 | [92.8 - 95.8] | 95.3 | [93.4 - 96.6] | 0.11 |
| 'Legionella septentrionalis' (RZGR00000000) | 'Legionella septentrionalis' (RZGS00000000) | 90.3 | [87.1 - 92.8] | 94.5 | [92.8 - 95.8] | 93.4 | [91.1 - 95.1] | 0.04 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella septentrionalis</i> km711T | 90.3 | [87.1 - 92.8] | 94.5 | [92.8 - 95.8] | 93.4 | [91.1 - 95.1] | 0.07 |
| 'Legionella sainthelensi' (UFAL00000000) | 'Legionella sainthelensi' (UFAM00000000) | 83.1 | [79.2 - 86.3] | 72.7 | [69.7 - 75.5] | 84.1 | [80.9 - 86.9] | 0.06 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella moravica</i> DSM 19234 | 76.7 | [72.7 - 80.3] | 72.2 | [69.2 - 75.1] | 78.7 | [75.2 - 81.8] | 0.12 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella sainthelensi</i> ATCC 35248 | 88.6 | [85.2 - 91.3] | 69.4 | [66.4 - 72.3] | 88.0 | [85.0 - 90.4] | 0.19 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella sainthelensi</i> ATCC 35248 | 78.9 | [74.9 - 82.3] | 66.5 | [63.6 - 69.4] | 79.3 | [75.9 - 82.3] | 0.13 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella gormanii</i> ATCC 33297 | 76.6 | [72.6 - 80.2] | 45.2 | [42.6 - 47.7] | 71.0 | [67.5 - 74.2] | 0.26 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella gormanii</i> ATCC 33342 | 76.4 | [72.5 - 80.0] | 45.2 | [42.6 - 47.8] | 70.9 | [67.4 - 74.1] | 0.26 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella gormanii</i> ATCC 33342 | 59.7 | [56.1 - 63.3] | 45.2 | [42.7 - 47.8] | 57.3 | [54.1 - 60.4] | 0.28 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella gormanii</i> ATCC 33342 | 78.3 | [74.4 - 81.9] | 45.2 | [42.6 - 47.7] | 72.4 | [68.9 - 75.6] | 0.26 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella gormanii</i> ATCC 33297 | 59.9 | [56.2 - 63.4] | 45.2 | [42.6 - 47.8] | 57.4 | [54.2 - 60.6] | 0.27 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella gormanii</i> ATCC 33297 | 78.6 | [74.6 - 82.1] | 45.1 | [42.6 - 47.7] | 72.6 | [69.1 - 75.8] | 0.25 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella santicrucis</i> ATCC 35301 | 53.4 | [49.9 - 56.8] | 38.3 | [35.8 - 40.8] | 49.9 | [46.8 - 52.9] | 0.19 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella longbeachae</i> NCTC 11477 | 62.2 | [58.5 - 65.8] | 37.5 | [35.1 - 40.0] | 56.5 | [53.3 - 59.6] | 0.21 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella santicrucis</i> ATCC 35301 | 54.6 | [51.1 - 58.1] | 37.3 | [34.9 - 39.8] | 50.5 | [47.5 - 53.6] | 0.13 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella cinцинnatiensis</i> ATCC 43753 | 57.5 | [53.9 - 61.0] | 37.1 | [34.6 - 39.6] | 52.7 | [49.6 - 55.7] | 0.01 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella longbeachae</i> NCTC 11477 | 55.7 | [52.1 - 59.2] | 36.6 | [34.2 - 39.1] | 51.1 | [48.0 - 54.2] | 0.15 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella cinцинnatiensis</i> ATCC 43753 | 53.8 | [50.2 - 57.2] | 36.5 | [34.0 - 39.0] | 49.6 | [46.5 - 52.6] | 0.07 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella fairfieldensis</i> ATCC 49588 | 13.5 | [10.7 - 16.8] | 35.4 | [32.9 - 37.9] | 13.9 | [11.5 - 16.7] | 2.56 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella jamestowniensis</i> DSM 19215 | 13.4 | [10.6 - 16.7] | 35.0 | [32.6 - 37.6] | 13.8 | [11.4 - 16.6] | 2.79 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella santicrucis</i> ATCC 35301 | 13.1 | [10.3 - 16.4] | 33.3 | [30.9 - 35.8] | 13.5 | [11.1 - 16.3] | 5.55 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella gratiana</i> ATCC 49413 | 13.2 | [10.5 - 16.5] | 31.5 | [29.1 - 34.0] | 13.6 | [11.2 - 16.4] | 5.47 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella gratiana</i> ATCC 49413 | 37.6 | [34.2 - 41.1] | 31.3 | [28.9 - 33.8] | 35.2 | [32.3 - 38.3] | 0.0 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella rubrilucens</i> ATCC 35304 | 13.5 | [10.8 - 16.9] | 30.9 | [28.5 - 33.4] | 13.9 | [11.5 - 16.7] | 5.45 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella norrlandica</i> LEGN | 13.3 | [10.6 - 16.7] | 30.2 | [27.8 - 32.7] | 13.7 | [11.4 - 16.5] | 4.69 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella gratiana</i> ATCC 49413 | 36.9 | [33.5 - 40.4] | 30.1 | [27.7 - 32.6] | 34.3 | [31.4 - 37.4] | 0.07 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella brunensis</i> ATCC 43878 | 13.1 | [10.4 - 16.4] | 29.6 | [27.2 - 32.1] | 13.5 | [11.2 - 16.3] | 3.54 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella norrlandica</i> LEGN | 13.2 | [10.5 - 16.5] | 29.2 | [26.8 - 31.7] | 13.6 | [11.2 - 16.4] | 4.84 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella jordanis</i> ATCC 33623 | 13.4 | [10.6 - 16.7] | 28.5 | [26.1 - 31.0] | 13.8 | [11.4 - 16.6] | 0.48 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella hackeliae</i> ATCC 35250 | 13.4 | [10.6 - 16.7] | 28.3 | [26.0 - 30.8] | 13.8 | [11.4 - 16.6] | 2.12 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella parisiensis</i> DSM 19216 | 13.0 | [10.3 - 16.3] | 28.3 | [25.9 - 30.8] | 13.4 | [11.1 - 16.2] | 4.34 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella quateirensis</i> ATCC 49507 | 36.5 | [33.1 - 40.0] | 28.0 | [25.7 - 30.5] | 33.5 | [30.5 - 36.6] | 0.88 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella erythra</i> ATCC 35303 | 13.0 | [10.3 - 16.3] | 27.8 | [25.4 - 30.2] | 13.4 | [11.0 - 16.1] | 9.85 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella pneumophila</i> Philadelphia 1 | 13.3 | [10.5 - 16.6] | 27.6 | [25.2 - 30.0] | 13.7 | [11.3 - 16.5] | 3.89 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella bozemananae</i> ATCC 33217 | 26.4 | [23.1 - 30.1] | 27.5 | [25.2 - 30.0] | 25.4 | [22.5 - 28.5] | 0.11 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella bozemananae</i> ATCC 33217 | 29.7 | [26.3 - 33.3] | 27.4 | [25.0 - 29.9] | 28.0 | [25.1 - 31.1] | 0.09 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella bozemananae</i> ATCC 33217 | 28.8 | [25.5 - 32.5] | 27.2 | [24.8 - 29.7] | 27.3 | [24.4 - 30.4] | 0.09 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella quateirensis</i> ATCC 49507 | 13.9 | [11.1 - 17.2] | 27.2 | [24.8 - 29.7] | 14.2 | [11.8 - 17.1] | 2.16 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella anisa</i> ATCC 35292 | 27.9 | [24.6 - 31.6] | 27.0 | [24.7 - 29.5] | 26.6 | [23.7 - 29.7] | 0.37 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella anisa</i> ATCC 35292 | 25.3 | [22.0 - 29.0] | 27.0 | [24.7 - 29.5] | 24.4 | [21.6 - 27.5] | 0.38 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella anisa</i> ATCC 35292 | 27.5 | [24.2 - 31.2] | 27.0 | [24.6 - 29.5] | 26.2 | [23.4 - 29.4] | 0.37 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella anisa</i> ATCC 35292 | 17.4 | [14.4 - 21.0] | 26.9 | [24.6 - 29.4] | 17.5 | [14.9 - 20.5] | 1.34 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella clemsonensis</i> CDC-D5610 | 13.2 | [10.5 - 16.6] | 26.9 | [24.6 - 29.4] | 13.6 | [11.2 - 16.4] | 2.95 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella tucsonensis</i> ATCC 49180 | 31.8 | [28.4 - 35.3] | 26.8 | [24.4 - 29.3] | 29.6 | [26.6 - 32.7] | 0.41 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella tucsonensis</i> ATCC 49180 | 27.5 | [24.2 - 31.1] | 26.8 | [24.5 - 29.3] | 26.2 | [23.3 - 29.3] | 0.39 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella tucsonensis</i> ATCC 49180 | 31.3 | [27.9 - 34.9] | 26.8 | [24.4 - 29.3] | 29.2 | [26.2 - 32.3] | 0.41 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella parisiensis</i> DSM 19216 | 17.0 | [14.0 - 20.5] | 26.5 | [24.2 - 29.0] | 17.1 | [14.5 - 20.1] | 1.13 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella dumoffii</i> NY 23 | 16.4 | [13.4 - 19.9] | 26.4 | [24.1 - 28.9] | 16.6 | [14.0 - 19.5] | 2.8 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella parisiensis</i> DSM 19216 | 27.3 | [23.9 - 30.9] | 26.3 | [23.9 - 28.8] | 25.9 | [23.0 - 29.0] | 0.15 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella parisiensis</i> DSM 19216 | 24.6 | [21.3 - 28.3] | 26.3 | [23.9 - 28.8] | 23.7 | [20.9 - 26.8] | 0.17 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella parisiensis</i> DSM 19216 | 26.9 | [23.6 - 30.6] | 26.2 | [23.8 - 28.7] | 25.6 | [22.7 - 28.7] | 0.16 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella pneumophila</i> subsp. <i>pascullei</i> ATCC 33737 | 13.3 | [10.6 - 16.6] | 26.1 | [23.8 - 28.6] | 13.7 | [11.3 - 16.5] | 4.23 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella steigerwaltii</i> ATCC 35302 | 26.3 | [23.0 - 30.0] | 26.0 | [23.6 - 28.5] | 25.1 | [22.2 - 28.2] | 0.44 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella steigerwaltii</i> ATCC 35302 | 24.0 | [20.7 - 27.7] | 26.0 | [23.6 - 28.5] | 23.2 | [20.4 - 26.3] | 0.46 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella fallonii</i> LLAP-10 | 12.7 | [10.0 - 15.9] | 25.9 | [23.6 - 28.4] | 13.1 | [10.7 - 15.8] | 3.99 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella pneumophila</i> Philadelphia 1 | 13.3 | [10.5 - 16.6] | 25.9 | [23.6 - 28.4] | 13.6 | [11.3 - 16.4] | 4.04 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella steigerwaltii</i> ATCC 35302 | 26.3 | [23.0 - 30.0] | 25.7 | [23.4 - 28.2] | 25.0 | [22.2 - 28.1] | 0.44 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella gormanii</i> ATCC 33297 | 17.2 | [14.1 - 20.7] | 25.6 | [23.3 - 28.1] | 17.2 | [14.6 - 20.2] | 1.23 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella parisiensis</i> DSM 19216 | 13.2 | [10.4 - 16.5] | 25.6 | [23.3 - 28.1] | 13.5 | [11.2 - 16.3] | 4.18 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella gormanii</i> ATCC 33342 | 17.1 | [14.1 - 20.7] | 25.5 | [23.2 - 28.0] | 17.2 | [14.6 - 20.2] | 1.24 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella cherrii</i> DSM 19213 | 22.5 | [19.3 - 26.2] | 25.4 | [23.0 - 27.8] | 21.9 | [19.1 - 25.0] | 1.05 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella cherrii</i> DSM 19213 | 25.0 | [21.6 - 28.6] | 25.3 | [23.0 - 27.8] | 23.9 | [21.0 - 27.0] | 1.04 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella cherrii</i> DSM 19213 | 24.7 | [21.4 - 28.3] | 25.3 | [23.0 - 27.8] | 23.7 | [20.8 - 26.8] | 1.04 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella santicrucis</i> ATCC 35301 | 13.5 | [10.7 - 16.8] | 25.1 | [22.7 - 27.5] | 13.8 | [11.4 - 16.6] | 2.33 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella clemsonensis</i> CDC-D5610 | 13.3 | [10.6 - 16.6] | 25.1 | [22.8 - 27.6] | 13.7 | [11.3 - 16.5] | 2.79 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella saoudiensis</i> LH-SWC | 14.3 | [11.5 - 17.7] | 25.0 | [22.7 - 27.5] | 14.6 | [12.1 - 17.4] | 2.58 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella drancourtii</i> LLAP 12 | 13.7 | [10.9 - 17.0] | 24.9 | [22.6 - 27.4] | 14.0 | [11.6 - 16.8] | 0.26 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella steelei</i> ATCC BAA-2169 | 24.3 | [21.0 - 28.0] | 24.9 | [22.6 - 27.4] | 23.3 | [20.5 - 26.4] | 0.95 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella steelei</i> ATCC BAA-2169 | 22.5 | [19.3 - 26.2] | 24.9 | [22.6 - 27.4] | 21.8 | [19.0 - 24.9] | 0.96 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella steelei</i> ATCC BAA-2169 | 24.1 | [20.8 - 27.7] | 24.8 | [22.4 - 27.2] | 23.1 | [20.3 - 26.2] | 0.94 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella sainthelensi</i> ATCC 35248 | 12.9 | [10.2 - 16.2] | 24.7 | [22.4 - 27.2] | 13.3 | [10.9 - 16.0] | 5.23 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella steigerwaltii</i> ATCC 35302 | 16.9 | [13.9 - 20.5] | 24.6 | [22.2 - 27.0] | 17.0 | [14.4 - 19.9] | 1.42 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella sainthelensi</i> ATCC 35248 | 13.0 | [10.3 - 16.3] | 24.6 | [22.3 - 27.1] | 13.4 | [11.0 - 16.2] | 5.34 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella fallonii</i> LLAP-10 | 12.7 | [10.0 - 15.9] | 24.5 | [22.1 - 26.9] | 13.1 | [10.7 - 15.8] | 3.88 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella hackeliae</i> ATCC 35250 | 13.1 | [10.3 - 16.4] | 24.5 | [22.2 - 27.0] | 13.4 | [11.1 - 16.2] | 1.16 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella hackeliae</i> ATCC 35250 | 13.1 | [10.4 - 16.5] | 24.4 | [22.1 - 26.9] | 13.5 | [11.1 - 16.3] | 1.15 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella pneumophila</i> subsp. <i>fraseri</i> ATCC 33156 | 13.1 | [10.4 - 16.4] | 24.4 | [22.1 - 26.9] | 13.5 | [11.1 - 16.2] | 0.03 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella fallonii</i> LLAP-10 | 12.7 | [10.0 - 15.9] | 24.3 | [22.0 - 26.8] | 13.1 | [10.7 - 15.8] | 3.83 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella dumoffii</i> NY 23 | 13.0 | [10.3 - 16.3] | 24.3 | [22.0 - 26.8] | 13.4 | [11.0 - 16.2] | 2.56 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella gratiana</i> ATCC 49413 | 13.1 | [10.4 - 16.4] | 24.2 | [21.9 - 26.7] | 13.5 | [11.1 - 16.3] | 5.31 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella spiritensis</i> ATCC 35249 | 13.0 | [10.3 - 16.3] | 24.2 | [21.9 - 26.7] | 13.4 | [11.0 - 16.1] | 3.18 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella pneumophila</i> subsp. <i>fraseri</i> ATCC 33156 | 13.2 | [10.5 - 16.5] | 24.2 | [21.9 - 26.6] | 13.6 | [11.2 - 16.4] | 0.01 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella birminghamensis</i> ATCC 43702 | 12.9 | [10.2 - 16.2] | 24.2 | [21.9 - 26.7] | 13.3 | [11.0 - 16.1] | 6.62 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella pneumophila</i> Philadelphia 1 | 13.2 | [10.5 - 16.6] | 24.1 | [21.8 - 26.5] | 13.6 | [11.2 - 16.4] | 1.43 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella nagasakiensis</i> JCM 15315 | 13.8 | [11.0 - 17.1] | 24.0 | [21.7 - 26.5] | 14.1 | [11.7 - 16.9] | 1.09 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella beliardensis</i> NCTC 13315 | 12.7 | [10.0 - 15.9] | 23.8 | [21.5 - 26.2] | 13.0 | [10.7 - 15.8] | 0.47 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella pneumophila</i> subsp. <i>fraseri</i> ATCC 33156 | 13.2 | [10.5 - 16.5] | 23.8 | [21.5 - 26.3] | 13.6 | [11.2 - 16.3] | 0.01 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella bozemanai</i> ATCC 33217 | 16.5 | [13.5 - 20.0] | 23.7 | [21.4 - 26.1] | 16.5 | [14.0 - 19.5] | 1.07 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella brunensis</i> ATCC 43878 | 13.0 | [10.3 - 16.3] | 23.6 | [21.3 - 26.0] | 13.3 | [11.0 - 16.1] | 1.82 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella waltersii</i> ATCC 51914 | 13.0 | [10.3 - 16.3] | 23.6 | [21.3 - 26.1] | 13.3 | [11.0 - 16.1] | 3.13 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella pneumophila</i> subsp. <i>fraseri</i> ATCC 33156 | 13.1 | [10.4 - 16.5] | 23.5 | [21.2 - 26.0] | 13.5 | [11.1 - 16.3] | 0.99 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella steelei</i> ATCC BAA-2169 | 13.3 | [10.5 - 16.6] | 23.4 | [21.1 - 25.9] | 13.6 | [11.2 - 16.4] | 0.21 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella saoudiensis</i> LH-SWC | 14.1 | [11.3 - 17.5] | 23.4 | [21.1 - 25.9] | 14.4 | [12.0 - 17.2] | 1.62 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella jamestowniensis</i> DSM 19215 | 13.0 | [10.3 - 16.3] | 23.3 | [21.0 - 25.7] | 13.4 | [11.1 - 16.2] | 2.57 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella cherrii</i> DSM 19213 | 15.6 | [12.7 - 19.1] | 23.3 | [21.0 - 25.8] | 15.8 | [13.2 - 18.7] | 2.08 |
| 'Legionella qingyii' (RZGX00000000) | 'Legionella sainthelensi' (UFAM00000000) | 16.3 | [13.4 - 19.8] | 23.3 | [21.0 - 25.8] | 16.4 | [13.8 - 19.3] | 0.98 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella qingyii</i> CCTCC AB 2018025 | 15.9 | [13.0 - 19.4] | 23.3 | [21.0 - 25.7] | 16.0 | [13.5 - 18.9] | 0.95 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella sainthelensi</i> ATCC 35248 | 13.6 | [10.8 - 16.9] | 23.3 | [21.0 - 25.8] | 13.9 | [11.5 - 16.7] | 2.91 |
| 'Legionella qingyii' (QHJG00000000) | 'Legionella sainthelensi' (UFAM00000000) | 15.9 | [13.0 - 19.4] | 23.3 | [21.0 - 25.7] | 16.0 | [13.5 - 18.9] | 0.96 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella santicrucis</i> ATCC 35301 | 15.9 | [12.9 - 19.4] | 23.3 | [21.0 - 25.7] | 16.0 | [13.5 - 18.9] | 1.15 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella birminghamensis</i> ATCC 43702 | 13.1 | [10.4 - 16.4] | 23.2 | [20.9 - 25.6] | 13.5 | [11.1 - 16.2] | 3.58 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella gratiana</i> ATCC 49413 | 16.6 | [13.6 - 20.2] | 23.2 | [21.0 - 25.7] | 16.7 | [14.1 - 19.6] | 0.96 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella qingyii</i> CCTCC AB 2018025 | 15.7 | [12.8 - 19.2] | 23.2 | [20.9 - 25.7] | 15.8 | [13.3 - 18.7] | 1.02 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella cinchonae</i> ATCC 43753 | 16.0 | [13.0 - 19.4] | 23.2 | [20.9 - 25.6] | 16.1 | [13.5 - 19.0] | 1.03 |
| 'Legionella qingyii' (QHJG00000000) | 'Legionella sainthelensi' (UFAL00000000) | 15.7 | [12.8 - 19.2] | 23.2 | [20.9 - 25.7] | 15.8 | [13.3 - 18.7] | 1.02 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella saoudiensis</i> LH-SWC | 14.3 | [11.5 - 17.7] | 23.2 | [20.9 - 25.7] | 14.6 | [12.1 - 17.4] | 1.61 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella steelei</i> ATCC BAA-2169 | 16.2 | [13.2 - 19.6] | 23.2 | [20.9 - 25.7] | 16.2 | [13.7 - 19.2] | 1.92 |
| 'Legionella qingyii' (RZGW00000000) | 'Legionella sainthelensi' (UFAL00000000) | 16.2 | [13.2 - 19.7] | 23.2 | [20.9 - 25.7] | 16.3 | [13.7 - 19.2] | 1.04 |
| 'Legionella qingyii' (RZGX00000000) | 'Legionella sainthelensi' (UFAL00000000) | 16.1 | [13.1 - 19.6] | 23.1 | [20.8 - 25.5] | 16.2 | [13.6 - 19.1] | 1.04 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella beliardensis</i> NCTC 13315 | 12.7 | [10.0 - 16.0] | 23.1 | [20.8 - 25.6] | 13.1 | [10.8 - 15.9] | 0.49 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella wadsworthii</i> ATCC 33877 | 15.4 | [12.5 - 18.8] | 23.1 | [20.8 - 25.6] | 15.6 | [13.0 - 18.4] | 1.14 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella gratiana</i> ATCC 49413 | 17.2 | [14.2 - 20.8] | 23.1 | [20.8 - 25.5] | 17.2 | [14.6 - 20.2] | 0.97 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella santicrucis</i> ATCC 35301 | 16.3 | [13.3 - 19.8] | 23.1 | [20.8 - 25.6] | 16.3 | [13.8 - 19.3] | 1.17 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella gratiana</i> ATCC 49413 | 17.4 | [14.3 - 20.9] | 23.1 | [20.9 - 25.6] | 17.3 | [14.7 - 20.3] | 0.98 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella cinchonae</i> ATCC 43753 | 16.5 | [13.5 - 20.0] | 23.1 | [20.8 - 25.5] | 16.6 | [14.0 - 19.5] | 1.04 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella santicrucis</i> ATCC 35301 | 16.3 | [13.3 - 19.8] | 23.1 | [20.8 - 25.5] | 16.3 | [13.8 - 19.3] | 1.17 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella anisa</i> ATCC 35292 | 16.4 | [13.5 - 19.9] | 23.0 | [20.8 - 25.5] | 16.5 | [13.9 - 19.4] | 1.41 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella brunensis</i> ATCC 43878 | 12.9 | [10.2 - 16.2] | 23.0 | [20.7 - 25.4] | 13.3 | [10.9 - 16.0] | 1.88 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella santicrucis</i> ATCC 35301 | 13.0 | [10.3 - 16.3] | 23.0 | [20.7 - 25.4] | 13.4 | [11.0 - 16.1] | 5.66 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella fallonii</i> LLAP-10 | 13.6 | [10.8 - 17.0] | 22.9 | [20.6 - 25.4] | 13.9 | [11.5 - 16.7] | 1.48 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella pneumophila</i> subsp. <i>fraseri</i> ATCC 33156 | 13.1 | [10.4 - 16.4] | 22.9 | [20.7 - 25.4] | 13.5 | [11.1 - 16.2] | 1.05 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella parisiensis</i> DSM 19216 | 16.2 | [13.3 - 19.7] | 22.9 | [20.6 - 25.3] | 16.3 | [13.7 - 19.2] | 1.2 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella erythra</i> ATCC 35303 | 13.3 | [10.6 - 16.6] | 22.9 | [20.6 - 25.3] | 13.7 | [11.3 - 16.5] | 4.49 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella cinchonae</i> ATCC 43753 | 16.6 | [13.6 - 20.1] | 22.9 | [20.6 - 25.4] | 16.6 | [14.0 - 19.5] | 1.05 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella birminghamensis</i> ATCC 43702 | 12.9 | [10.2 - 16.2] | 22.9 | [20.6 - 25.4] | 13.3 | [10.9 - 16.0] | 4.48 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella sainthelensi</i> ATCC 35248 | 16.3 | [13.3 - 19.7] | 22.8 | [20.6 - 25.3] | 16.3 | [13.8 - 19.2] | 0.85 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella massiliensis</i> LegA | 12.9 | [10.2 - 16.2] | 22.8 | [20.5 - 25.3] | 13.3 | [11.0 - 16.1] | 4.41 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella dumoffii</i> NY 23 | 21.4 | [18.1 - 25.0] | 22.8 | [20.5 - 25.2] | 20.6 | [17.9 - 23.7] | 1.84 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella dumoffii</i> NY 23 | 23.2 | [19.9 - 26.8] | 22.8 | [20.5 - 25.3] | 22.1 | [19.3 - 25.1] | 1.82 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella sainthelensi</i> ATCC 35248 | 16.1 | [13.2 - 19.6] | 22.8 | [20.5 - 25.2] | 16.2 | [13.6 - 19.1] | 0.85 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella tucsonensis</i> ATCC 49180 | 16.5 | [13.5 - 20.0] | 22.7 | [20.4 - 25.1] | 16.5 | [13.9 - 19.4] | 0.63 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella bozemanæ</i> ATCC 33217 | 16.1 | [13.1 - 19.6] | 22.7 | [20.4 - 25.2] | 16.2 | [13.6 - 19.1] | 1.13 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella dumoffii</i> NY 23 | 23.1 | [19.8 - 26.7] | 22.7 | [20.4 - 25.2] | 22.0 | [19.2 - 25.1] | 1.82 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella sainthelensi</i> ATCC 35248 | 15.7 | [12.8 - 19.2] | 22.7 | [20.5 - 25.2] | 15.8 | [13.3 - 18.7] | 0.83 |
| 'Legionella sp. km535' (RZGU00000000) | 'Legionella septentrionalis' (RZGV00000000) | 13.1 | [10.4 - 16.4] | 22.7 | [20.4 - 25.1] | 13.5 | [11.1 - 16.2] | 2.43 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella waltersii</i> ATCC 51914 | 13.1 | [10.4 - 16.4] | 22.7 | [20.4 - 25.1] | 13.5 | [11.1 - 16.2] | 3.24 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella waltersii</i> ATCC 51914 | 13.2 | [10.5 - 16.5] | 22.6 | [20.3 - 25.0] | 13.5 | [11.2 - 16.3] | 3.09 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella beliardensis</i> NCTC 13315 | 13.0 | [10.3 - 16.3] | 22.6 | [20.3 - 25.0] | 13.3 | [11.0 - 16.1] | 4.83 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella steelei</i> ATCC BAA-2169 | 16.4 | [13.4 - 19.8] | 22.6 | [20.3 - 25.0] | 16.4 | [13.8 - 19.3] | 1.99 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella longbeachæ</i> NCTC 11477 | 15.9 | [13.0 - 19.4] | 22.6 | [20.3 - 25.0] | 16.0 | [13.4 - 18.9] | 0.82 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella steigerwaltii</i> ATCC 35302 | 16.3 | [13.3 - 19.8] | 22.6 | [20.4 - 25.1] | 16.4 | [13.8 - 19.3] | 1.48 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella fallonii</i> LLAP-10 | 13.5 | [10.8 - 16.9] | 22.6 | [20.3 - 25.1] | 13.9 | [11.5 - 16.7] | 0.52 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella pneumophila</i> Philadelphia 1 | 13.4 | [10.6 - 16.7] | 22.6 | [20.4 - 25.1] | 13.7 | [11.3 - 16.5] | 1.49 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella cherrii</i> DSM 19213 | 15.7 | [12.8 - 19.2] | 22.5 | [20.3 - 25.0] | 15.8 | [13.3 - 18.7] | 2.02 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella sainthelensi</i> ATCC 35248 | 12.9 | [10.2 - 16.2] | 22.5 | [20.3 - 25.0] | 13.3 | [10.9 - 16.0] | 5.19 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella dumoffii</i> NY 23 | 13.5 | [10.7 - 16.8] | 22.5 | [20.2 - 25.0] | 13.8 | [11.4 - 16.6] | 0.66 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella fallonii</i> LLAP-10 | 13.7 | [10.9 - 17.0] | 22.5 | [20.3 - 25.0] | 14.0 | [11.6 - 16.8] | 0.5 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella pneumophila</i> subsp. <i>pascullei</i> ATCC 33737 | 13.3 | [10.6 - 16.7] | 22.5 | [20.2 - 24.9] | 13.7 | [11.3 - 16.5] | 1.24 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella gormanii</i> ATCC 33342 | 16.5 | [13.5 - 20.0] | 22.5 | [20.2 - 24.9] | 16.5 | [13.9 - 19.4] | 1.3 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella gormanii</i> ATCC 33297 | 16.5 | [13.5 - 20.0] | 22.5 | [20.2 - 24.9] | 16.5 | [13.9 - 19.4] | 1.3 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella worsleiensis</i> ATCC 49508 | 22.7 | [19.4 - 26.3] | 22.5 | [20.3 - 25.0] | 21.7 | [18.9 - 24.7] | 0.43 |
| 'Legionella qingyii' (RZGW00000000) | 'Legionella sainthelensi' (UFAM00000000) | 16.1 | [13.2 - 19.6] | 22.5 | [20.3 - 25.0] | 16.2 | [13.6 - 19.1] | 0.98 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella longbeachæ</i> NCTC 11477 | 16.6 | [13.6 - 20.1] | 22.5 | [20.2 - 24.9] | 16.6 | [14.0 - 19.6] | 0.83 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella tucsonensis</i> ATCC 49180 | 16.4 | [13.4 - 19.9] | 22.5 | [20.2 - 24.9] | 16.4 | [13.8 - 19.3] | 0.57 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella sp. km772' (RZGQ00000000) | 'Legionella sainthelensi' (UFAM00000000) | 13.3 | [10.5 - 16.6] | 22.5 | [20.2 - 25.0] | 13.6 | [11.3 - 16.4] | 2.14 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella waltersii</i> ATCC 51914 | 13.4 | [10.6 - 16.7] | 22.4 | [20.1 - 24.8] | 13.7 | [11.3 - 16.5] | 2.23 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella longbeachae</i> NCTC 11477 | 16.5 | [13.5 - 20.0] | 22.4 | [20.1 - 24.8] | 16.5 | [13.9 - 19.4] | 0.83 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella anisa</i> ATCC 35292 | 13.5 | [10.7 - 16.8] | 22.4 | [20.2 - 24.9] | 13.8 | [11.4 - 16.6] | 1.7 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella beliardensis</i> NCTC 13315 | 12.7 | [10.0 - 16.0] | 22.4 | [20.1 - 24.9] | 13.1 | [10.7 - 15.8] | 0.49 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella pneumophila</i> subsp. <i>pascullei</i> ATCC 33737 | 13.2 | [10.5 - 16.6] | 22.4 | [20.2 - 24.9] | 13.6 | [11.2 - 16.4] | 4.08 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella jordanis</i> ATCC 33623 | 13.1 | [10.4 - 16.4] | 22.3 | [20.1 - 24.8] | 13.5 | [11.1 - 16.3] | 0.63 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella steelei</i> ATCC BAA-2169 | 13.6 | [10.9 - 17.0] | 22.3 | [20.1 - 24.8] | 13.9 | [11.5 - 16.7] | 1.12 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella drancourtii</i> LLAP 12 | 14.0 | [11.2 - 17.4] | 22.3 | [20.0 - 24.7] | 14.3 | [11.9 - 17.1] | 2.46 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella sainthelensi</i> ATCC 35248 | 13.2 | [10.5 - 16.5] | 22.3 | [20.0 - 24.7] | 13.6 | [11.2 - 16.3] | 2.01 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella clemsonensis</i> CDC-D5610 | 13.2 | [10.5 - 16.5] | 22.3 | [20.0 - 24.7] | 13.6 | [11.2 - 16.4] | 2.84 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella shakespearei</i> DSM 23087 | 13.2 | [10.5 - 16.6] | 22.3 | [20.0 - 24.8] | 13.6 | [11.2 - 16.4] | 4.86 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella brunensis</i> ATCC 43878 | 12.9 | [10.2 - 16.1] | 22.2 | [19.9 - 24.6] | 13.2 | [10.9 - 16.0] | 0.86 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella oakridgensis</i> ATCC 33761 | 13.0 | [10.3 - 16.3] | 22.2 | [19.9 - 24.6] | 13.4 | [11.0 - 16.1] | 4.08 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella rowbothamii</i> LLAP6 | 13.3 | [10.5 - 16.6] | 22.1 | [19.9 - 24.6] | 13.6 | [11.2 - 16.4] | 0.56 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella birminghamensis</i> ATCC 43702 | 13.0 | [10.3 - 16.3] | 22.1 | [19.9 - 24.6] | 13.4 | [11.0 - 16.2] | 1.31 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella saoudiensis</i> LH-SWC | 14.2 | [11.3 - 17.5] | 22.1 | [19.8 - 24.5] | 14.4 | [12.0 - 17.3] | 1.6 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella impletisoli</i> OA1-1 | 12.6 | [9.9 - 15.9] | 22.1 | [19.9 - 24.6] | 13.0 | [10.7 - 15.8] | 3.33 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella wadsworthii</i> ATCC 33877 | 19.3 | [16.1 - 22.9] | 22.0 | [19.7 - 24.4] | 18.8 | [16.1 - 21.8] | 0.16 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella wadsworthii</i> ATCC 33877 | 19.4 | [16.3 - 23.0] | 22.0 | [19.7 - 24.5] | 19.0 | [16.3 - 22.0] | 0.16 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella drancourtii</i> LLAP 12 | 14.3 | [11.5 - 17.7] | 22.0 | [19.7 - 24.4] | 14.6 | [12.1 - 17.4] | 1.44 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella dumoffii</i> NY 23 | 13.7 | [10.9 - 17.0] | 22.0 | [19.7 - 24.4] | 14.0 | [11.6 - 16.8] | 0.25 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella rowbothamii</i> LLAP6 | 13.8 | [11.0 - 17.1] | 22.0 | [19.7 - 24.4] | 14.1 | [11.7 - 16.9] | 2.55 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella waltersii</i> ATCC 51914 | 13.3 | [10.6 - 16.6] | 22.0 | [19.7 - 24.4] | 13.6 | [11.3 - 16.4] | 1.25 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella drancourtii</i> LLAP 12 | 14.6 | [11.7 - 18.0] | 22.0 | [19.7 - 24.4] | 14.8 | [12.3 - 17.7] | 1.42 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella fallonii</i> LLAP-10 | 12.6 | [10.0 - 15.9] | 22.0 | [19.8 - 24.5] | 13.0 | [10.7 - 15.8] | 4.0 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella wadsworthii</i> ATCC 33877 | 18.2 | [15.1 - 21.8] | 22.0 | [19.7 - 24.4] | 18.0 | [15.3 - 20.9] | 0.18 |
| 'Legionella sp. km535' (RZGU00000000) | 'Legionella sainthelensi' (UFAM00000000) | 13.5 | [10.7 - 16.8] | 21.9 | [19.6 - 24.3] | 13.8 | [11.4 - 16.6] | 3.04 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella oakridgensis</i> ATCC 33761 | 13.0 | [10.3 - 16.3] | 21.9 | [19.7 - 24.4] | 13.4 | [11.0 - 16.1] | 3.04 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella norrlandica</i> LEGN | 13.3 | [10.6 - 16.7] | 21.9 | [19.7 - 24.4] | 13.7 | [11.3 - 16.5] | 0.63 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella impletisoli</i> JCM 13919 | 12.6 | [9.9 - 15.9] | 21.9 | [19.7 - 24.4] | 13.0 | [10.7 - 15.8] | 3.32 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella brunensis</i> ATCC 43878 | 12.9 | [10.2 - 16.2] | 21.8 | [19.6 - 24.3] | 13.3 | [10.9 - 16.1] | 0.84 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella drancourtii</i> LLAP 12 | 14.5 | [11.7 - 17.9] | 21.8 | [19.6 - 24.3] | 14.8 | [12.3 - 17.6] | 1.42 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella brunensis</i> ATCC 43878 | 12.9 | [10.2 - 16.2] | 21.8 | [19.6 - 24.3] | 13.3 | [10.9 - 16.1] | 0.85 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella pneumophila</i> Philadelphia 1 | 13.5 | [10.8 - 16.9] | 21.8 | [19.5 - 24.2] | 13.9 | [11.5 - 16.7] | 0.45 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella parisiensis</i> DSM 19216 | 13.6 | [10.9 - 17.0] | 21.7 | [19.5 - 24.2] | 13.9 | [11.5 - 16.7] | 1.91 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella pneumophila</i> subsp. <i>pascaliei</i> ATCC 33737 | 13.4 | [10.6 - 16.7] | 21.7 | [19.4 - 24.1] | 13.7 | [11.3 - 16.5] | 0.28 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella cinclinatiensis</i> ATCC 43753 | 13.5 | [10.8 - 16.9] | 21.7 | [19.4 - 24.1] | 13.9 | [11.5 - 16.7] | 3.11 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella rowbothamii</i> LLAP6 | 13.3 | [10.5 - 16.6] | 21.7 | [19.4 - 24.1] | 13.6 | [11.2 - 16.4] | 0.35 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella drancourtii</i> LLAP 12 | 14.0 | [11.2 - 17.4] | 21.7 | [19.5 - 24.1] | 14.3 | [11.9 - 17.1] | 2.4 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella steigerwaltii</i> ATCC 35302 | 13.1 | [10.4 - 16.4] | 21.7 | [19.5 - 24.2] | 13.5 | [11.1 - 16.2] | 0.71 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella fallonii</i> LLAP-10 | 13.6 | [10.8 - 16.9] | 21.7 | [19.4 - 24.1] | 13.9 | [11.5 - 16.7] | 0.66 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella pneumophila</i> subsp. <i>pascaliei</i> ATCC 33737 | 13.4 | [10.7 - 16.7] | 21.7 | [19.5 - 24.2] | 13.7 | [11.3 - 16.5] | 1.3 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella hackeliae</i> ATCC 35250 | 13.0 | [10.3 - 16.3] | 21.7 | [19.5 - 24.1] | 13.3 | [11.0 - 16.1] | 2.19 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella rowbothamii</i> LLAP6 | 13.8 | [11.0 - 17.1] | 21.7 | [19.5 - 24.2] | 14.1 | [11.7 - 16.9] | 2.49 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella pneumophila</i> Philadelphia 1 | 13.4 | [10.6 - 16.7] | 21.6 | [19.4 - 24.1] | 13.7 | [11.3 - 16.5] | 0.47 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella brunensis</i> ATCC 43878 | 13.0 | [10.3 - 16.3] | 21.6 | [19.3 - 24.0] | 13.4 | [11.0 - 16.1] | 3.65 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella pneumophila</i> subsp. <i>pascaliei</i> ATCC 33737 | 13.5 | [10.8 - 16.9] | 21.6 | [19.4 - 24.0] | 13.8 | [11.4 - 16.6] | 0.26 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella moravica</i> DSM 19234 | 13.1 | [10.4 - 16.4] | 21.6 | [19.3 - 24.0] | 13.5 | [11.1 - 16.2] | 2.15 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella fallonii</i> LLAP-10 | 13.4 | [10.6 - 16.7] | 21.6 | [19.3 - 24.0] | 13.7 | [11.3 - 16.5] | 1.54 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella brunensis</i> ATCC 43878 | 13.0 | [10.3 - 16.3] | 21.5 | [19.2 - 23.9] | 13.4 | [11.0 - 16.1] | 3.49 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella waltersii</i> ATCC 51914 | 13.2 | [10.5 - 16.5] | 21.5 | [19.2 - 23.9] | 13.6 | [11.2 - 16.3] | 1.27 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella parisiensis</i> DSM 19216 | 12.9 | [10.2 - 16.2] | 21.5 | [19.2 - 23.9] | 13.3 | [10.9 - 16.0] | 4.23 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella fallonii</i> LLAP-10 | 13.5 | [10.7 - 16.8] | 21.5 | [19.3 - 24.0] | 13.8 | [11.4 - 16.6] | 0.5 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella jordanis</i> ATCC 33623 | 13.2 | [10.4 - 16.5] | 21.5 | [19.2 - 23.9] | 13.5 | [11.1 - 16.3] | 0.52 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella yabuuchiae</i> OA1-2 | 12.9 | [10.2 - 16.1] | 21.5 | [19.2 - 23.9] | 13.2 | [10.9 - 16.0] | 1.99 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella clemsonensis</i> CDC-D5610 | 13.1 | [10.4 - 16.4] | 21.5 | [19.3 - 24.0] | 13.4 | [11.1 - 16.2] | 2.52 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella birminghamensis</i> ATCC 43702 | 13.0 | [10.3 - 16.3] | 21.5 | [19.3 - 24.0] | 13.3 | [11.0 - 16.1] | 1.15 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella norrlandica</i> LEGN | 13.4 | [10.7 - 16.7] | 21.5 | [19.3 - 23.9] | 13.7 | [11.4 - 16.5] | 0.69 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella massiliensis</i> LegA | 13.0 | [10.2 - 16.2] | 21.5 | [19.3 - 24.0] | 13.3 | [11.0 - 16.1] | 0.97 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella pneumophila</i> Philadelphia 1 | 13.5 | [10.7 - 16.8] | 21.5 | [19.2 - 23.9] | 13.8 | [11.4 - 16.6] | 0.45 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella pneumophila</i> subsp. <i>pascullei</i> ATCC 33737 | 13.5 | [10.8 - 16.9] | 21.5 | [19.3 - 24.0] | 13.8 | [11.4 - 16.6] | 0.26 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella oakridgensis</i> ATCC 33761 | 12.9 | [10.2 - 16.1] | 21.5 | [19.3 - 24.0] | 13.2 | [10.9 - 16.0] | 3.06 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella dumoffii</i> NY 23 | 15.6 | [12.6 - 19.0] | 21.4 | [19.2 - 23.9] | 15.6 | [13.1 - 18.5] | 2.86 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella waltersii</i> ATCC 51914 | 13.3 | [10.5 - 16.6] | 21.4 | [19.1 - 23.8] | 13.6 | [11.2 - 16.4] | 1.25 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella hackeliae</i> ATCC 35250 | 13.1 | [10.4 - 16.4] | 21.4 | [19.1 - 23.8] | 13.4 | [11.1 - 16.2] | 1.14 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella beliardensis</i> NCTC 13315 | 12.7 | [10.0 - 16.0] | 21.4 | [19.2 - 23.9] | 13.1 | [10.8 - 15.9] | 0.55 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella moravica</i> DSM 19234 | 13.1 | [10.4 - 16.4] | 21.4 | [19.1 - 23.8] | 13.5 | [11.1 - 16.3] | 2.31 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella jamestowniensis</i> DSM 19215 | 13.1 | [10.4 - 16.4] | 21.4 | [19.2 - 23.9] | 13.4 | [11.1 - 16.2] | 0.47 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella moravica</i> DSM 19234 | 13.5 | [10.7 - 16.8] | 21.4 | [19.1 - 23.8] | 13.8 | [11.4 - 16.6] | 2.18 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella impletisoli</i> OA1-1 | 12.6 | [9.9 - 15.9] | 21.4 | [19.2 - 23.9] | 13.0 | [10.7 - 15.8] | 3.39 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella jamestowniensis</i> DSM 19215 | 13.1 | [10.4 - 16.4] | 21.4 | [19.2 - 23.8] | 13.5 | [11.1 - 16.2] | 0.43 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella hackeliae</i> ATCC 35250 | 12.9 | [10.2 - 16.2] | 21.3 | [19.0 - 23.7] | 13.3 | [11.0 - 16.1] | 3.19 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella saoudiensis</i> LH-SWC | 13.4 | [10.7 - 16.8] | 21.3 | [19.1 - 23.8] | 13.8 | [11.4 - 16.5] | 0.46 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella saoudiensis</i> LH-SWC | 13.3 | [10.6 - 16.7] | 21.3 | [19.1 - 23.7] | 13.7 | [11.3 - 16.5] | 0.45 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella septentrionalis' (RZGV00000000) | 'Legionella sainthelensi' (UFAM00000000) | 12.9 | [10.2 - 16.2] | 21.3 | [19.1 - 23.7] | 13.3 | [10.9 - 16.0] | 5.47 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella clemsonensis</i> CDC-D5610 | 12.9 | [10.2 - 16.1] | 21.2 | [19.0 - 23.7] | 13.2 | [10.9 - 16.0] | 1.56 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella saoudiensis</i> LH-SWC | 13.9 | [11.1 - 17.3] | 21.2 | [19.0 - 23.6] | 14.2 | [11.8 - 17.0] | 2.65 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella oakridgensis</i> ATCC 33761 | 13.0 | [10.3 - 16.3] | 21.2 | [19.0 - 23.6] | 13.4 | [11.0 - 16.2] | 4.02 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella moravica</i> DSM 19234 | 13.3 | [10.6 - 16.6] | 21.2 | [19.0 - 23.7] | 13.6 | [11.3 - 16.4] | 2.2 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella shakespearei</i> DSM 23087 | 12.9 | [10.2 - 16.2] | 21.2 | [18.9 - 23.6] | 13.3 | [10.9 - 16.1] | 0.61 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella impletisoli</i> JCM 13919 | 12.6 | [9.9 - 15.9] | 21.2 | [18.9 - 23.6] | 13.0 | [10.7 - 15.8] | 3.38 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella santicrucis</i> ATCC 35301 | 13.5 | [10.7 - 16.8] | 21.1 | [18.8 - 23.5] | 13.8 | [11.4 - 16.6] | 3.23 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella pneumophila</i> subsp. <i>fraseri</i> ATCC 33156 | 12.8 | [10.1 - 16.1] | 21.1 | [18.8 - 23.5] | 13.2 | [10.9 - 16.0] | 4.37 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella santicrucis</i> ATCC 35301 | 13.0 | [10.3 - 16.3] | 21.1 | [18.9 - 23.6] | 13.4 | [11.0 - 16.1] | 5.51 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella clemsonensis</i> CDC-D5610 | 13.0 | [10.3 - 16.3] | 21.1 | [18.8 - 23.5] | 13.4 | [11.0 - 16.2] | 0.52 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Tamlana fucoidanivorans</i> CW2-9T | 12.5 | [9.8 - 15.8] | 21.1 | [18.8 - 23.5] | 12.9 | [10.6 - 15.6] | 2.49 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella moravica</i> DSM 19234 | 13.4 | [10.7 - 16.8] | 21.1 | [18.9 - 23.6] | 13.8 | [11.4 - 16.6] | 2.18 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella anisa</i> ATCC 35292 | 13.4 | [10.7 - 16.8] | 21.0 | [18.7 - 23.4] | 13.7 | [11.4 - 16.5] | 0.79 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella shakespearei</i> DSM 23087 | 13.7 | [10.9 - 17.0] | 21.0 | [18.7 - 23.4] | 13.9 | [11.5 - 16.8] | 3.88 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella worsleiensis</i> ATCC 49508 | 13.5 | [10.7 - 16.8] | 21.0 | [18.7 - 23.4] | 13.8 | [11.4 - 16.6] | 2.49 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella jamestowniensis</i> DSM 19215 | 13.3 | [10.5 - 16.6] | 21.0 | [18.8 - 23.4] | 13.6 | [11.2 - 16.4] | 2.9 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella pneumophila</i> subsp. <i>fraseri</i> ATCC 33156 | 12.8 | [10.1 - 16.1] | 21.0 | [18.8 - 23.4] | 13.2 | [10.8 - 16.0] | 4.48 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella bozemanae</i> ATCC 33217 | 13.3 | [10.6 - 16.7] | 21.0 | [18.8 - 23.4] | 13.7 | [11.3 - 16.5] | 1.98 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella hackeliae</i> ATCC 35250 | 13.2 | [10.4 - 16.5] | 21.0 | [18.7 - 23.4] | 13.5 | [11.1 - 16.3] | 0.01 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella pneumophila</i> subsp. <i>fraseri</i> ATCC 33156 | 12.8 | [10.1 - 16.1] | 21.0 | [18.7 - 23.4] | 13.2 | [10.8 - 15.9] | 4.33 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella clemsonensis</i> CDC-D5610 | 12.9 | [10.2 - 16.2] | 21.0 | [18.7 - 23.4] | 13.3 | [10.9 - 16.0] | 1.54 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella gratiana</i> ATCC 49413 | 13.6 | [10.9 - 17.0] | 20.9 | [18.7 - 23.3] | 13.9 | [11.5 - 16.7] | 3.04 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Tamlana fucoidanivorans</i> CW2-9T | 12.5 | [9.8 - 15.8] | 20.9 | [18.6 - 23.3] | 12.9 | [10.6 - 15.7] | 7.86 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella oakridgensis</i> ATCC 33761 | 13.0 | [10.3 - 16.2] | 20.9 | [18.7 - 23.4] | 13.3 | [11.0 - 16.1] | 3.04 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella anisa</i> ATCC 35292 | 12.9 | [10.2 - 16.2] | 20.9 | [18.7 - 23.3] | 13.3 | [10.9 - 16.1] | 4.13 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella massiliensis</i> LegA | 12.9 | [10.2 - 16.2] | 20.9 | [18.7 - 23.3] | 13.3 | [10.9 - 16.1] | 1.12 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella worsleiensis</i> ATCC 49508 | 13.4 | [10.7 - 16.7] | 20.9 | [18.6 - 23.3] | 13.7 | [11.3 - 16.5] | 2.49 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella worsleiensis</i> ATCC 49508 | 13.3 | [10.5 - 16.6] | 20.9 | [18.7 - 23.3] | 13.6 | [11.2 - 16.4] | 2.51 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella rowbothamii</i> LLAP6 | 14.0 | [11.2 - 17.4] | 20.9 | [18.7 - 23.3] | 14.3 | [11.8 - 17.1] | 1.51 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella steigerwaltii</i> ATCC 35302 | 13.4 | [10.7 - 16.8] | 20.9 | [18.7 - 23.4] | 13.8 | [11.4 - 16.6] | 1.62 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella norrlandica</i> LEGN | 13.5 | [10.8 - 16.9] | 20.9 | [18.7 - 23.3] | 13.8 | [11.4 - 16.6] | 0.35 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella dumoffii</i> NY 23 | 13.0 | [10.3 - 16.3] | 20.9 | [18.7 - 23.3] | 13.4 | [11.0 - 16.1] | 2.67 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella clemsonensis</i> CDC-D5610 | 13.0 | [10.3 - 16.3] | 20.9 | [18.7 - 23.4] | 13.4 | [11.0 - 16.1] | 1.54 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella jordanis</i> ATCC 33623 | 13.0 | [10.3 - 16.3] | 20.9 | [18.7 - 23.3] | 13.4 | [11.0 - 16.2] | 2.7 |
| 'Legionella qingyii' (QHJG00000000) | 'Legionella sp. km535' (RZGU00000000) | 13.5 | [10.7 - 16.8] | 20.8 | [18.6 - 23.2] | 13.8 | [11.4 - 16.6] | 2.08 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Tamlana fucoidanivorans</i> CW2-9T | 12.5 | [9.8 - 15.8] | 20.8 | [18.6 - 23.3] | 12.9 | [10.6 - 15.6] | 4.69 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella quateirensis</i> ATCC 49507 | 13.6 | [10.8 - 16.9] | 20.8 | [18.6 - 23.3] | 13.9 | [11.5 - 16.7] | 1.2 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella oakridgensis</i> ATCC 33761 | 12.8 | [10.1 - 16.0] | 20.8 | [18.6 - 23.2] | 13.2 | [10.8 - 15.9] | 0.97 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella birminghamensis</i> ATCC 43702 | 12.9 | [10.2 - 16.2] | 20.8 | [18.6 - 23.2] | 13.2 | [10.9 - 16.0] | 6.68 |
| 'Legionella sp. km535' (RZGU00000000) | 'Legionella qingyii' (RZGW00000000) | 13.7 | [10.9 - 17.0] | 20.8 | [18.6 - 23.3] | 14.0 | [11.6 - 16.8] | 2.06 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella rowbothamii</i> LLAP6 | 13.9 | [11.1 - 17.3] | 20.8 | [18.6 - 23.3] | 14.2 | [11.7 - 17.0] | 1.51 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella qingyii</i> CCTCC AB 2018025 | 13.5 | [10.7 - 16.8] | 20.8 | [18.6 - 23.2] | 13.8 | [11.4 - 16.6] | 2.09 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Tamlana fucoidanivorans</i> CW2-9T | 12.5 | [9.8 - 15.8] | 20.8 | [18.6 - 23.2] | 12.9 | [10.6 - 15.6] | 7.91 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella norrlandica</i> LEGN | 13.4 | [10.7 - 16.7] | 20.8 | [18.5 - 23.2] | 13.7 | [11.3 - 16.5] | 0.33 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella rowbothamii</i> LLAP6 | 13.7 | [10.9 - 17.1] | 20.8 | [18.6 - 23.3] | 14.0 | [11.6 - 16.8] | 1.53 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella massiliensis</i> LegA | 13.0 | [10.3 - 16.3] | 20.8 | [18.5 - 23.2] | 13.4 | [11.0 - 16.1] | 3.37 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella hackeliae</i> ATCC 35250 | 12.9 | [10.2 - 16.2] | 20.8 | [18.5 - 23.2] | 13.3 | [10.9 - 16.0] | 3.35 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella gormanii</i> ATCC 33297 | 13.7 | [11.0 - 17.1] | 20.8 | [18.6 - 23.2] | 14.0 | [11.6 - 16.8] | 1.81 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella quateirensis</i> ATCC 49507 | 13.7 | [11.0 - 17.1] | 20.8 | [18.5 - 23.2] | 14.0 | [11.6 - 16.8] | 1.18 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella nagasakiensis</i> JCM 15315 | 12.9 | [10.2 - 16.2] | 20.8 | [18.5 - 23.2] | 13.3 | [10.9 - 16.1] | 3.24 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella hackeliae</i> ATCC 35250 | 12.9 | [10.2 - 16.2] | 20.8 | [18.6 - 23.2] | 13.3 | [10.9 - 16.1] | 3.24 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella nagasakiensis</i> JCM 15315 | 13.1 | [10.4 - 16.4] | 20.8 | [18.6 - 23.2] | 13.4 | [11.1 - 16.2] | 4.22 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella pneumophila</i> Philadelphia 1 | 13.2 | [10.4 - 16.5] | 20.8 | [18.6 - 23.3] | 13.5 | [11.1 - 16.3] | 3.93 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella beliardensis</i> NCTC 13315 | 12.8 | [10.1 - 16.1] | 20.8 | [18.6 - 23.3] | 13.2 | [10.8 - 15.9] | 0.49 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella norrlandica</i> LEGN | 13.5 | [10.8 - 16.9] | 20.7 | [18.5 - 23.1] | 13.9 | [11.5 - 16.7] | 0.35 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella shakespearei</i> DSM 23087 | 13.4 | [10.6 - 16.7] | 20.7 | [18.5 - 23.1] | 13.7 | [11.3 - 16.5] | 4.92 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella quateirensis</i> ATCC 49507 | 13.4 | [10.7 - 16.7] | 20.7 | [18.5 - 23.2] | 13.7 | [11.3 - 16.5] | 2.22 |
| 'Legionella sp. km772' (RZGQ00000000) | 'Legionella sainthelensi' (UFAL00000000) | 13.3 | [10.5 - 16.6] | 20.7 | [18.5 - 23.2] | 13.6 | [11.2 - 16.4] | 2.2 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella gratiana</i> ATCC 49413 | 13.1 | [10.3 - 16.4] | 20.7 | [18.5 - 23.1] | 13.4 | [11.1 - 16.2] | 5.36 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella fairfieldensis</i> ATCC 49588 | 13.2 | [10.5 - 16.5] | 20.7 | [18.5 - 23.1] | 13.6 | [11.2 - 16.3] | 2.67 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella norrlandica</i> LEGN | 13.3 | [10.5 - 16.6] | 20.7 | [18.5 - 23.2] | 13.6 | [11.2 - 16.4] | 1.51 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella shakespearei</i> DSM 23087 | 15.5 | [12.6 - 19.0] | 20.7 | [18.5 - 23.1] | 15.6 | [13.1 - 18.5] | 1.81 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella clemsonensis</i> CDC-D5610 | 13.0 | [10.3 - 16.3] | 20.7 | [18.5 - 23.2] | 13.4 | [11.0 - 16.2] | 2.58 |
| 'Legionella sp. km535' (RZGU00000000) | 'Legionella qingyii' (RZGX00000000) | 13.6 | [10.8 - 16.9] | 20.7 | [18.5 - 23.2] | 13.9 | [11.5 - 16.7] | 2.07 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella jamestowniensis</i> DSM 19215 | 12.9 | [10.2 - 16.2] | 20.7 | [18.4 - 23.1] | 13.3 | [10.9 - 16.1] | 2.63 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella norrlandica</i> LEGN | 13.1 | [10.4 - 16.4] | 20.7 | [18.5 - 23.1] | 13.5 | [11.1 - 16.2] | 4.73 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella tucsonensis</i> ATCC 49180 | 13.5 | [10.7 - 16.8] | 20.7 | [18.4 - 23.1] | 13.8 | [11.4 - 16.6] | 2.48 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella quateirensis</i> ATCC 49507 | 13.8 | [11.0 - 17.1] | 20.7 | [18.5 - 23.2] | 14.1 | [11.7 - 16.9] | 1.18 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella gormanii</i> ATCC 33342 | 13.7 | [11.0 - 17.1] | 20.7 | [18.5 - 23.1] | 14.0 | [11.6 - 16.8] | 1.8 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella cherrii</i> DSM 19213 | 13.5 | [10.7 - 16.8] | 20.6 | [18.4 - 23.0] | 13.8 | [11.4 - 16.6] | 1.03 |
| 'Legionella qingyii' (QHJG00000000) | <i>Tamlana fucoidanivorans</i> CW2-9T | 12.5 | [9.8 - 15.8] | 20.6 | [18.4 - 23.0] | 12.9 | [10.6 - 15.6] | 3.51 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella jamestowniensis</i> DSM 19215 | 13.1 | [10.3 - 16.4] | 20.6 | [18.4 - 23.0] | 13.4 | [11.1 - 16.2] | 2.92 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella erythra</i> ATCC 35303 | 13.3 | [10.5 - 16.6] | 20.6 | [18.3 - 23.0] | 13.6 | [11.2 - 16.4] | 4.38 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella wadsworthii</i> ATCC 33877 | 15.0 | [12.1 - 18.5] | 20.6 | [18.4 - 23.0] | 15.2 | [12.7 - 18.0] | 1.2 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella moravica</i> DSM 19234 | 13.1 | [10.4 - 16.4] | 20.6 | [18.3 - 23.0] | 13.5 | [11.1 - 16.2] | 2.2 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella fairfieldensis</i> ATCC 49588 | 13.2 | [10.5 - 16.5] | 20.6 | [18.3 - 23.0] | 13.5 | [11.2 - 16.3] | 2.51 |
| 'Legionella sp. km535' (RZGU00000000) | 'Legionella sainthelensi' (UFAL00000000) | 13.5 | [10.7 - 16.8] | 20.6 | [18.4 - 23.0] | 13.8 | [11.4 - 16.6] | 3.11 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella massiliensis</i> LegA | 12.9 | [10.2 - 16.2] | 20.6 | [18.4 - 23.0] | 13.2 | [10.9 - 16.0] | 4.35 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella longbeachae</i> NCTC 11477 | 13.1 | [10.4 - 16.4] | 20.6 | [18.4 - 23.0] | 13.5 | [11.1 - 16.2] | 1.99 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella jordanis</i> ATCC 33623 | 12.9 | [10.2 - 16.2] | 20.6 | [18.4 - 23.0] | 13.3 | [10.9 - 16.1] | 1.8 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella shakespearei</i> DSM 23087 | 13.5 | [10.7 - 16.8] | 20.6 | [18.4 - 23.0] | 13.8 | [11.4 - 16.6] | 3.9 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella shakespearei</i> DSM 23087 | 13.6 | [10.8 - 16.9] | 20.6 | [18.4 - 23.0] | 13.9 | [11.5 - 16.7] | 3.88 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella longbeachae</i> NCTC 11477 | 13.4 | [10.6 - 16.7] | 20.6 | [18.4 - 23.0] | 13.7 | [11.3 - 16.5] | 2.9 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella cinцинnatiensis</i> ATCC 43753 | 12.9 | [10.2 - 16.2] | 20.5 | [18.2 - 22.9] | 13.2 | [10.9 - 16.0] | 5.54 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella wadsworthii</i> ATCC 33877 | 13.4 | [10.6 - 16.7] | 20.5 | [18.3 - 23.0] | 13.7 | [11.3 - 16.5] | 1.91 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella moravica</i> DSM 19234 | 13.4 | [10.6 - 16.7] | 20.5 | [18.2 - 22.9] | 13.7 | [11.3 - 16.5] | 3.22 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella quateirensis</i> ATCC 49507 | 12.9 | [10.2 - 16.2] | 20.5 | [18.3 - 22.9] | 13.3 | [10.9 - 16.0] | 3.31 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella waltersii</i> ATCC 51914 | 13.4 | [10.6 - 16.7] | 20.5 | [18.3 - 23.0] | 13.7 | [11.3 - 16.5] | 2.29 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella impletisoli</i> OA1-1 | 12.7 | [10.1 - 16.0] | 20.5 | [18.3 - 22.9] | 13.1 | [10.8 - 15.9] | 0.28 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Tamlana fucoidanivorans</i> CW2-9T | 12.5 | [9.8 - 15.8] | 20.5 | [18.2 - 22.9] | 12.9 | [10.6 - 15.6] | 5.59 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella impletisoli</i> OA1-1 | 13.3 | [10.5 - 16.6] | 20.5 | [18.2 - 22.9] | 13.6 | [11.2 - 16.4] | 2.14 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella quateirensis</i> ATCC 49507 | 13.8 | [11.0 - 17.1] | 20.5 | [18.3 - 22.9] | 14.0 | [11.6 - 16.9] | 0.02 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella drancourtii</i> LLAP 12 | 13.7 | [10.9 - 17.0] | 20.5 | [18.3 - 22.9] | 14.0 | [11.5 - 16.8] | 0.64 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella nagasakiensis</i> JCM 15315 | 13.1 | [10.4 - 16.4] | 20.5 | [18.3 - 22.9] | 13.4 | [11.1 - 16.2] | 4.28 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella impletisoli</i> JCM 13919 | 13.2 | [10.5 - 16.6] | 20.4 | [18.2 - 22.8] | 13.6 | [11.2 - 16.4] | 2.16 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella rubrilucens</i> ATCC 35304 | 12.9 | [10.2 - 16.2] | 20.4 | [18.2 - 22.8] | 13.3 | [10.9 - 16.0] | 10.88 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella impletisoli</i> JCM 13919 | 12.7 | [10.1 - 16.0] | 20.4 | [18.1 - 22.8] | 13.1 | [10.8 - 15.9] | 0.27 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella cinцинnatiensis</i> ATCC 43753 | 13.2 | [10.5 - 16.5] | 20.4 | [18.2 - 22.8] | 13.5 | [11.2 - 16.3] | 2.2 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Tamlana fucoidanivorans</i> CW2-9T | 12.5 | [9.8 - 15.8] | 20.4 | [18.2 - 22.8] | 12.9 | [10.6 - 15.6] | 2.55 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|---|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella jamestowniensis</i> DSM 19215 | 12.9 | [10.2 - 16.2] | 20.4 | [18.2 - 22.8] | 13.3 | [10.9 - 16.0] | 1.59 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella clemsonensis</i> CDC-D5610 | 12.9 | [10.2 - 16.2] | 20.3 | [18.1 - 22.7] | 13.3 | [10.9 - 16.1] | 0.38 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella beliardensis</i> NCTC 13315 | 12.8 | [10.1 - 16.1] | 20.3 | [18.1 - 22.7] | 13.2 | [10.8 - 15.9] | 2.55 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella erythra</i> ATCC 35303 | 12.8 | [10.1 - 16.1] | 20.3 | [18.0 - 22.7] | 13.2 | [10.8 - 15.9] | 9.91 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella worsleiensis</i> ATCC 49508 | 13.6 | [10.9 - 17.0] | 20.3 | [18.0 - 22.7] | 13.9 | [11.5 - 16.7] | 1.33 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella septentrionalis</i> km711T | 12.9 | [10.2 - 16.2] | 20.3 | [18.1 - 22.7] | 13.3 | [10.9 - 16.1] | 3.15 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella gratiana</i> ATCC 49413 | 13.4 | [10.6 - 16.7] | 20.3 | [18.1 - 22.7] | 13.7 | [11.3 - 16.5] | 2.13 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella parisiensis</i> DSM 19216 | 13.3 | [10.6 - 16.6] | 20.3 | [18.1 - 22.7] | 13.6 | [11.3 - 16.4] | 1.0 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella brunensis</i> ATCC 43878 | 13.0 | [10.3 - 16.3] | 20.3 | [18.1 - 22.7] | 13.3 | [11.0 - 16.1] | 0.31 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella moravica</i> DSM 19234 | 13.4 | [10.6 - 16.7] | 20.3 | [18.1 - 22.7] | 13.7 | [11.3 - 16.5] | 3.16 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella rubrilucens</i> ATCC 35304 | 12.9 | [10.2 - 16.1] | 20.3 | [18.1 - 22.7] | 13.2 | [10.9 - 16.0] | 10.81 |
| 'Legionella sp. km772' (RZGQ00000000) | ' Legionella septentrionalis' (RZGT00000000) | 12.9 | [10.2 - 16.2] | 20.3 | [18.1 - 22.7] | 13.2 | [10.9 - 16.0] | 3.35 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella waltersii</i> ATCC 51914 | 13.9 | [11.1 - 17.3] | 20.3 | [18.1 - 22.7] | 14.2 | [11.8 - 17.0] | 0.82 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella massiliensis</i> LegA | 12.9 | [10.2 - 16.2] | 20.3 | [18.1 - 22.7] | 13.3 | [10.9 - 16.1] | 1.01 |
| 'Legionella qingyii' (RZGW00000000) | <i>Tamlana fucoidanivorans</i> CW2-9T | 12.5 | [9.8 - 15.8] | 20.3 | [18.1 - 22.7] | 12.9 | [10.6 - 15.6] | 3.53 |
| 'Legionella sp. km772' (RZGQ00000000) | ' Legionella septentrionalis' (RZGS00000000) | 12.9 | [10.2 - 16.2] | 20.3 | [18.1 - 22.7] | 13.3 | [10.9 - 16.1] | 3.18 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella yabuuchiae</i> OA1-2 | 12.7 | [10.0 - 16.0] | 20.3 | [18.1 - 22.7] | 13.1 | [10.7 - 15.8] | 4.13 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella tucsonensis</i> ATCC 49180 | 12.8 | [10.1 - 16.1] | 20.2 | [18.0 - 22.6] | 13.2 | [10.8 - 16.0] | 4.75 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella nagasakiensis</i> JCM 15315 | 12.9 | [10.2 - 16.2] | 20.2 | [18.0 - 22.6] | 13.2 | [10.9 - 16.0] | 3.26 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella birminghamensis</i> ATCC 43702 | 12.9 | [10.2 - 16.2] | 20.2 | [17.9 - 22.6] | 13.3 | [10.9 - 16.0] | 1.26 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella quateirensis</i> ATCC 49507 | 12.9 | [10.2 - 16.2] | 20.2 | [18.0 - 22.6] | 13.3 | [10.9 - 16.1] | 3.2 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella wadsworthii</i> ATCC 33877 | 13.2 | [10.4 - 16.5] | 20.2 | [17.9 - 22.6] | 13.5 | [11.1 - 16.3] | 1.0 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella fairfieldensis</i> ATCC 49588 | 13.0 | [10.3 - 16.3] | 20.2 | [17.9 - 22.6] | 13.3 | [11.0 - 16.1] | 2.86 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella brunensis</i> ATCC 43878 | 12.9 | [10.2 - 16.2] | 20.2 | [18.0 - 22.6] | 13.3 | [10.9 - 16.1] | 3.66 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella rubrilucens</i> ATCC 35304 | 12.8 | [10.1 - 16.1] | 20.2 | [18.0 - 22.7] | 13.2 | [10.8 - 16.0] | 9.83 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella massiliensis</i> LegA | 12.9 | [10.2 - 16.2] | 20.2 | [17.9 - 22.6] | 13.3 | [10.9 - 16.0] | 3.39 |
| 'Legionella septentrionalis' (RZGR00000000) | 'Legionella sainthelensi' (UFAL00000000) | 12.9 | [10.2 - 16.2] | 20.2 | [18.0 - 22.6] | 13.2 | [10.9 - 16.0] | 5.42 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella bozemanai</i> ATCC 33217 | 13.3 | [10.5 - 16.6] | 20.1 | [17.9 - 22.6] | 13.6 | [11.2 - 16.4] | 1.07 |
| 'Legionella sp. km772' (RZGQ00000000) | 'Legionella sp. km535' (RZGU00000000) | 13.7 | [10.9 - 17.0] | 20.1 | [17.9 - 22.5] | 14.0 | [11.6 - 16.8] | 0.91 |
| 'Legionella sp. km772' (RZGQ00000000) | 'Legionella septentrionalis' (RZGR00000000) | 12.8 | [10.1 - 16.1] | 20.1 | [17.9 - 22.5] | 13.2 | [10.8 - 15.9] | 3.22 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella nagasakiensis</i> JCM 15315 | 12.9 | [10.2 - 16.2] | 20.1 | [17.9 - 22.6] | 13.3 | [10.9 - 16.0] | 3.24 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella hackeliae</i> ATCC 35250 | 13.0 | [10.3 - 16.3] | 20.1 | [17.9 - 22.5] | 13.4 | [11.0 - 16.1] | 0.92 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella oakridgensis</i> ATCC 33761 | 13.0 | [10.3 - 16.3] | 20.1 | [17.9 - 22.5] | 13.3 | [11.0 - 16.1] | 1.88 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella cherrii</i> DSM 19213 | 13.2 | [10.5 - 16.5] | 20.1 | [17.9 - 22.5] | 13.5 | [11.2 - 16.3] | 0.12 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella beliardensis</i> NCTC 13315 | 12.8 | [10.1 - 16.1] | 20.1 | [17.9 - 22.5] | 13.2 | [10.8 - 15.9] | 4.98 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Tamlana fucoidanivorans</i> CW2-9T | 12.5 | [9.8 - 15.8] | 20.1 | [17.9 - 22.5] | 12.9 | [10.6 - 15.7] | 8.02 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella anisa</i> ATCC 35292 | 12.9 | [10.2 - 16.2] | 20.1 | [17.9 - 22.5] | 13.3 | [11.0 - 16.1] | 4.01 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella rubrilucens</i> ATCC 35304 | 13.3 | [10.5 - 16.6] | 20.1 | [17.9 - 22.5] | 13.6 | [11.2 - 16.4] | 5.34 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella massiliensis</i> LegA | 13.0 | [10.3 - 16.3] | 20.1 | [17.9 - 22.5] | 13.4 | [11.0 - 16.2] | 1.31 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella fallonii</i> LLAP-10 | 14.2 | [11.4 - 17.5] | 20.1 | [17.9 - 22.5] | 14.4 | [12.0 - 17.2] | 1.56 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella jamestowniensis</i> DSM 19215 | 12.9 | [10.2 - 16.1] | 20.1 | [17.9 - 22.5] | 13.2 | [10.9 - 16.0] | 1.61 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella norrlandica</i> LEGN | 13.9 | [11.1 - 17.3] | 20.1 | [17.9 - 22.5] | 14.2 | [11.7 - 17.0] | 2.42 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella massiliensis</i> LegA | 13.0 | [10.3 - 16.3] | 20.0 | [17.8 - 22.4] | 13.3 | [11.0 - 16.1] | 3.37 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella anisa</i> ATCC 35292 | 12.9 | [10.2 - 16.2] | 20.0 | [17.8 - 22.4] | 13.3 | [11.0 - 16.1] | 3.97 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella shakespearei</i> DSM 23087 | 13.7 | [10.9 - 17.1] | 20.0 | [17.7 - 22.4] | 14.0 | [11.6 - 16.8] | 2.72 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella clemsonensis</i> CDC-D5610 | 12.9 | [10.2 - 16.2] | 20.0 | [17.8 - 22.4] | 13.3 | [10.9 - 16.0] | 2.97 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella pneumophila</i> subsp. <i>fraseri</i> ATCC 33156 | 13.3 | [10.6 - 16.6] | 20.0 | [17.8 - 22.4] | 13.6 | [11.3 - 16.4] | 1.15 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella waltersii</i> ATCC 51914 | 13.4 | [10.6 - 16.7] | 20.0 | [17.8 - 22.4] | 13.7 | [11.3 - 16.5] | 0.09 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella pneumophila</i> subsp. <i>pascullei</i> ATCC 33737 | 13.2 | [10.5 - 16.6] | 20.0 | [17.7 - 22.4] | 13.6 | [11.2 - 16.4] | 4.12 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella cinцинnatiensis</i> ATCC 43753 | 12.9 | [10.2 - 16.2] | 19.9 | [17.7 - 22.3] | 13.3 | [10.9 - 16.0] | 5.38 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella nagasakiensis</i> JCM 15315 | 12.9 | [10.2 - 16.2] | 19.9 | [17.7 - 22.3] | 13.3 | [10.9 - 16.1] | 2.08 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella cinцинnatiensis</i> ATCC 43753 | 13.0 | [10.3 - 16.2] | 19.9 | [17.7 - 22.3] | 13.3 | [11.0 - 16.1] | 5.43 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella gormanii</i> ATCC 33297 | 13.3 | [10.6 - 16.6] | 19.9 | [17.7 - 22.3] | 13.6 | [11.3 - 16.4] | 0.9 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella jamestowniensis</i> DSM 19215 | 13.2 | [10.5 - 16.5] | 19.9 | [17.7 - 22.3] | 13.6 | [11.2 - 16.3] | 2.75 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella worsleiensis</i> ATCC 49508 | 13.3 | [10.6 - 16.6] | 19.9 | [17.7 - 22.3] | 13.6 | [11.2 - 16.4] | 3.47 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Tamlana fucoidanivorans</i> CW2-9T | 12.5 | [9.8 - 15.8] | 19.8 | [17.6 - 22.2] | 12.9 | [10.6 - 15.6] | 8.04 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella longbeachae</i> NCTC 11477 | 12.8 | [10.1 - 16.1] | 19.8 | [17.6 - 22.2] | 13.2 | [10.8 - 15.9] | 5.33 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella gormanii</i> ATCC 33342 | 13.3 | [10.6 - 16.6] | 19.8 | [17.6 - 22.2] | 13.6 | [11.3 - 16.4] | 0.9 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella tucsonensis</i> ATCC 49180 | 12.9 | [10.2 - 16.2] | 19.8 | [17.6 - 22.2] | 13.3 | [10.9 - 16.0] | 4.9 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella erythra</i> ATCC 35303 | 13.2 | [10.5 - 16.5] | 19.8 | [17.6 - 22.2] | 13.5 | [11.2 - 16.3] | 4.53 |
| 'Legionella septentrionalis' (RZGR00000000) | ' <i>Legionella sainthelensi</i> ' (UFAM00000000) | 12.8 | [10.1 - 16.1] | 19.8 | [17.6 - 22.2] | 13.2 | [10.8 - 15.9] | 5.36 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella tucsonensis</i> ATCC 49180 | 12.9 | [10.2 - 16.2] | 19.8 | [17.6 - 22.2] | 13.3 | [10.9 - 16.1] | 4.79 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella fairfieldensis</i> ATCC 49588 | 13.0 | [10.2 - 16.2] | 19.8 | [17.6 - 22.2] | 13.3 | [11.0 - 16.1] | 2.8 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella taurinensis</i> NCTC 13314 | 12.8 | [10.1 - 16.1] | 19.8 | [17.6 - 22.2] | 13.2 | [10.9 - 16.0] | 11.21 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella taurinensis</i> NCTC 13314 | 12.9 | [10.2 - 16.2] | 19.8 | [17.6 - 22.2] | 13.3 | [10.9 - 16.0] | 10.23 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella yabuuchiae</i> OA1-2 | 12.7 | [10.0 - 15.9] | 19.8 | [17.6 - 22.2] | 13.1 | [10.7 - 15.8] | 4.19 |
| 'Legionella qingyii' (QHJG00000000) | ' <i>Legionella sp. km772</i> ' (RZGQ00000000) | 13.3 | [10.6 - 16.6] | 19.7 | [17.5 - 22.1] | 13.6 | [11.2 - 16.4] | 1.18 |
| 'Legionella sp. km772' (RZGQ00000000) | ' <i>Legionella septentrionalis</i> ' (RZGV00000000) | 12.8 | [10.1 - 16.1] | 19.7 | [17.5 - 22.1] | 13.2 | [10.8 - 15.9] | 3.33 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella taurinensis</i> NCTC 13314 | 13.2 | [10.5 - 16.5] | 19.7 | [17.5 - 22.1] | 13.5 | [11.2 - 16.3] | 5.74 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella massiliensis</i> LegA | 12.9 | [10.2 - 16.1] | 19.7 | [17.5 - 22.1] | 13.2 | [10.9 - 16.0] | 1.14 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella jamestowniensis</i> DSM 19215 | 12.9 | [10.2 - 16.2] | 19.7 | [17.5 - 22.1] | 13.3 | [10.9 - 16.0] | 1.59 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella pneumophila</i> subsp. <i>fraseri</i> ATCC 33156 | 14.0 | [11.2 - 17.4] | 19.7 | [17.5 - 22.1] | 14.3 | [11.8 - 17.1] | 2.05 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella qingyii</i> CCTCC AB 2018025 | 13.3 | [10.6 - 16.6] | 19.7 | [17.5 - 22.1] | 13.6 | [11.2 - 16.4] | 1.18 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella santicrucis</i> ATCC 35301 | 12.7 | [10.0 - 16.0] | 19.7 | [17.5 - 22.1] | 13.1 | [10.7 - 15.8] | 5.68 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella rubrilucens</i> ATCC 35304 | 12.7 | [10.0 - 16.0] | 19.7 | [17.5 - 22.1] | 13.1 | [10.8 - 15.9] | 9.85 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella septentrionalis</i> km711T | 13.0 | [10.3 - 16.3] | 19.6 | [17.4 - 22.0] | 13.4 | [11.0 - 16.1] | 2.24 |
| 'Legionella septentrionalis' (RZGR00000000) | 'Legionella sp. km535' (RZGU00000000) | 12.9 | [10.2 - 16.2] | 19.6 | [17.4 - 22.0] | 13.3 | [10.9 - 16.1] | 2.32 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella londiniensis</i> ATCC 49505 | 13.2 | [10.5 - 16.5] | 19.6 | [17.4 - 22.0] | 13.5 | [11.2 - 16.3] | 1.14 |
| 'Legionella septentrionalis' (RZGS00000000) | 'Legionella sp. km535' (RZGU00000000) | 13.0 | [10.3 - 16.3] | 19.6 | [17.4 - 22.0] | 13.4 | [11.0 - 16.1] | 2.27 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella gormanii</i> ATCC 33297 | 12.9 | [10.2 - 16.2] | 19.6 | [17.4 - 22.0] | 13.3 | [10.9 - 16.1] | 4.24 |
| 'Legionella sp. km772' (RZGQ00000000) | 'Legionella qingyii' (RZXG00000000) | 13.4 | [10.6 - 16.7] | 19.6 | [17.4 - 22.0] | 13.7 | [11.3 - 16.5] | 1.16 |
| 'Legionella sp. km772' (RZGQ00000000) | 'Legionella qingyii' (RZGW00000000) | 13.4 | [10.6 - 16.7] | 19.6 | [17.4 - 22.0] | 13.7 | [11.3 - 16.5] | 1.16 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella taurinensis</i> NCTC 13314 | 12.8 | [10.1 - 16.1] | 19.6 | [17.4 - 22.0] | 13.2 | [10.8 - 15.9] | 10.25 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella taurinensis</i> NCTC 13314 | 12.9 | [10.2 - 16.1] | 19.6 | [17.4 - 22.0] | 13.2 | [10.9 - 16.0] | 8.17 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella worsleiensis</i> ATCC 49508 | 13.3 | [10.6 - 16.6] | 19.6 | [17.4 - 22.0] | 13.6 | [11.2 - 16.4] | 3.53 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella rubrilucens</i> ATCC 35304 | 13.2 | [10.5 - 16.5] | 19.5 | [17.3 - 21.8] | 13.5 | [11.2 - 16.3] | 5.5 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella jordanis</i> ATCC 33623 | 13.0 | [10.3 - 16.3] | 19.5 | [17.3 - 21.9] | 13.3 | [11.0 - 16.1] | 3.86 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella pneumophila</i> Philadelphia 1 | 13.5 | [10.8 - 16.9] | 19.5 | [17.3 - 21.9] | 13.8 | [11.4 - 16.6] | 0.71 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella oakridgensis</i> ATCC 33761 | 13.5 | [10.7 - 16.8] | 19.5 | [17.3 - 21.9] | 13.8 | [11.4 - 16.6] | 1.45 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella fairfieldensis</i> ATCC 49588 | 12.9 | [10.2 - 16.2] | 19.5 | [17.3 - 21.9] | 13.3 | [10.9 - 16.0] | 1.82 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella taurinensis</i> NCTC 13314 | 12.9 | [10.2 - 16.2] | 19.5 | [17.3 - 21.9] | 13.3 | [10.9 - 16.1] | 11.27 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella jordanis</i> ATCC 33623 | 12.9 | [10.2 - 16.2] | 19.5 | [17.3 - 21.9] | 13.3 | [10.9 - 16.0] | 3.88 |
| 'Legionella qingyii' (RZXG00000000) | <i>Legionella rubrilucens</i> ATCC 35304 | 12.8 | [10.1 - 16.1] | 19.5 | [17.3 - 21.9] | 13.2 | [10.8 - 15.9] | 9.84 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella beliardensis</i> NCTC 13315 | 12.9 | [10.2 - 16.2] | 19.5 | [17.3 - 21.8] | 13.3 | [10.9 - 16.0] | 1.65 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella steelei</i> ATCC BAA-2169 | 12.9 | [10.2 - 16.2] | 19.5 | [17.3 - 21.9] | 13.3 | [10.9 - 16.0] | 3.55 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella hackeliae</i> ATCC 35250 | 12.9 | [10.2 - 16.2] | 19.4 | [17.2 - 21.8] | 13.2 | [10.9 - 16.0] | 3.36 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella saintelensis' (UFAM00000000) | <i>Legionella spiritensis</i> ATCC 35249 | 12.8 | [10.1 - 16.1] | 19.4 | [17.2 - 21.8] | 13.2 | [10.9 - 16.0] | 8.54 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella moravica</i> DSM 19234 | 13.6 | [10.8 - 16.9] | 19.4 | [17.2 - 21.8] | 13.8 | [11.5 - 16.7] | 1.02 |
| 'Legionella qingyii' (RZGX00000000) | <i>Tamlana fucoidanivorans</i> CW2-9T | 12.5 | [9.8 - 15.8] | 19.4 | [17.2 - 21.8] | 12.9 | [10.6 - 15.6] | 3.53 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella fairfieldensis</i> ATCC 49588 | 12.8 | [10.1 - 16.1] | 19.4 | [17.2 - 21.8] | 13.2 | [10.8 - 16.0] | 1.84 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella steigerwaltii</i> ATCC 35302 | 12.8 | [10.1 - 16.1] | 19.4 | [17.2 - 21.8] | 13.2 | [10.8 - 15.9] | 4.05 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella bozemanee</i> ATCC 33217 | 12.8 | [10.1 - 16.1] | 19.4 | [17.2 - 21.8] | 13.2 | [10.8 - 15.9] | 4.25 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella londiniensis</i> ATCC 49505 | 12.7 | [10.0 - 16.0] | 19.4 | [17.2 - 21.8] | 13.1 | [10.8 - 15.9] | 3.41 |
| 'Legionella saintelensis' (UFAL00000000) | <i>Legionella spiritensis</i> ATCC 35249 | 13.0 | [10.3 - 16.3] | 19.4 | [17.2 - 21.8] | 13.4 | [11.0 - 16.1] | 8.6 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella gormanii</i> ATCC 33342 | 12.9 | [10.2 - 16.2] | 19.4 | [17.2 - 21.8] | 13.3 | [10.9 - 16.1] | 4.23 |
| 'Legionella saintelensis' (UFAM00000000) | <i>Legionella jordanis</i> ATCC 33623 | 13.1 | [10.4 - 16.4] | 19.4 | [17.2 - 21.8] | 13.4 | [11.1 - 16.2] | 4.84 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella oakridgensis</i> ATCC 33761 | 13.5 | [10.7 - 16.8] | 19.4 | [17.2 - 21.8] | 13.8 | [11.4 - 16.6] | 1.3 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella beliardensis</i> NCTC 13315 | 13.0 | [10.3 - 16.3] | 19.4 | [17.2 - 21.8] | 13.3 | [11.0 - 16.1] | 4.87 |
| 'Legionella saintelensis' (UFAL00000000) | <i>Legionella jordanis</i> ATCC 33623 | 13.1 | [10.4 - 16.4] | 19.3 | [17.1 - 21.7] | 13.5 | [11.1 - 16.2] | 4.9 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella jordanis</i> ATCC 33623 | 12.9 | [10.2 - 16.2] | 19.3 | [17.1 - 21.7] | 13.3 | [10.9 - 16.0] | 3.86 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella pneumophila</i> subsp. <i>pascullei</i> ATCC 33737 | 14.6 | [11.7 - 18.0] | 19.3 | [17.1 - 21.7] | 14.7 | [12.3 - 17.6] | 1.81 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella tucsonensis</i> ATCC 49180 | 13.3 | [10.5 - 16.6] | 19.3 | [17.1 - 21.7] | 13.6 | [11.2 - 16.4] | 1.57 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella rubrilucens</i> ATCC 35304 | 12.9 | [10.2 - 16.2] | 19.3 | [17.1 - 21.7] | 13.2 | [10.9 - 16.0] | 7.77 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella brunensis</i> ATCC 43878 | 13.1 | [10.4 - 16.4] | 19.3 | [17.1 - 21.7] | 13.4 | [11.1 - 16.2] | 1.22 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella oakridgensis</i> ATCC 33761 | 13.5 | [10.8 - 16.9] | 19.3 | [17.1 - 21.7] | 13.8 | [11.4 - 16.6] | 1.47 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella yabuuchiae</i> OA1-2 | 12.7 | [10.0 - 15.9] | 19.3 | [17.1 - 21.7] | 13.1 | [10.7 - 15.8] | 3.15 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella yabuuchiae</i> OA1-2 | 12.6 | [10.0 - 15.9] | 19.3 | [17.1 - 21.7] | 13.0 | [10.7 - 15.8] | 3.17 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella worsleiensis</i> ATCC 49508 | 13.0 | [10.3 - 16.3] | 19.3 | [17.1 - 21.7] | 13.4 | [11.0 - 16.2] | 2.0 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella fairfieldensis</i> ATCC 49588 | 12.9 | [10.2 - 16.2] | 19.3 | [17.1 - 21.7] | 13.2 | [10.9 - 16.0] | 0.67 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella oakridgensis</i> ATCC 33761 | 13.6 | [10.8 - 16.9] | 19.3 | [17.1 - 21.7] | 13.8 | [11.5 - 16.7] | 1.34 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella worsleiensis</i> ATCC 49508 | 13.0 | [10.3 - 16.3] | 19.2 | [17.0 - 21.6] | 13.4 | [11.0 - 16.2] | 1.85 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella septentrionalis</i> km711T | 12.9 | [10.2 - 16.2] | 19.2 | [17.0 - 21.6] | 13.3 | [10.9 - 16.0] | 5.29 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella impletisoli</i> OA1-1 | 13.1 | [10.4 - 16.5] | 19.2 | [17.0 - 21.6] | 13.5 | [11.1 - 16.3] | 1.99 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella shakespearei</i> DSM 23087 | 12.8 | [10.1 - 16.1] | 19.2 | [17.0 - 21.6] | 13.2 | [10.8 - 15.9] | 0.63 |
| 'Legionella septentrionalis' (RZGS00000000) | 'Legionella sainthelensi' (UFAM00000000) | 12.9 | [10.2 - 16.2] | 19.2 | [17.0 - 21.6] | 13.3 | [10.9 - 16.0] | 5.32 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella sainthelensi</i> ATCC 35248 | 12.7 | [10.0 - 16.0] | 19.2 | [17.0 - 21.6] | 13.1 | [10.8 - 15.8] | 5.36 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella saoudiensis</i> LH-SWC | 13.1 | [10.3 - 16.4] | 19.2 | [17.0 - 21.6] | 13.4 | [11.0 - 16.2] | 2.89 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella pneumophila</i> Philadelphia 1 | 14.6 | [11.8 - 18.0] | 19.2 | [17.1 - 21.6] | 14.8 | [12.3 - 17.6] | 1.61 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella nagasakiensis</i> JCM 15315 | 13.2 | [10.5 - 16.5] | 19.2 | [17.0 - 21.6] | 13.6 | [11.2 - 16.3] | 1.14 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella fairfieldensis</i> ATCC 49588 | 12.9 | [10.2 - 16.2] | 19.2 | [17.0 - 21.5] | 13.2 | [10.9 - 16.0] | 1.83 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella taurinensis</i> NCTC 13314 | 12.8 | [10.1 - 16.1] | 19.1 | [16.9 - 21.5] | 13.2 | [10.8 - 15.9] | 10.23 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella quateirensis</i> ATCC 49507 | 12.9 | [10.2 - 16.2] | 19.1 | [17.0 - 21.5] | 13.3 | [10.9 - 16.1] | 3.16 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella pneumophila</i> subsp. <i>pascaliei</i> ATCC 33737 | 13.5 | [10.7 - 16.8] | 19.1 | [16.9 - 21.5] | 13.8 | [11.4 - 16.6] | 0.9 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella pneumophila</i> subsp. <i>fraseri</i> ATCC 33156 | 12.8 | [10.1 - 16.0] | 19.1 | [16.9 - 21.5] | 13.1 | [10.8 - 15.9] | 4.5 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella erythra</i> ATCC 35303 | 12.9 | [10.2 - 16.2] | 19.1 | [16.9 - 21.5] | 13.3 | [10.9 - 16.0] | 8.87 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella londiniensis</i> ATCC 49505 | 12.7 | [10.0 - 15.9] | 19.1 | [16.9 - 21.5] | 13.1 | [10.7 - 15.8] | 6.52 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella dumoffii</i> NY 23 | 13.0 | [10.3 - 16.3] | 19.1 | [16.9 - 21.5] | 13.4 | [11.0 - 16.1] | 2.52 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella impletisoli</i> OA1-1 | 12.8 | [10.1 - 16.0] | 19.1 | [16.9 - 21.5] | 13.1 | [10.8 - 15.9] | 1.19 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella nagasakiensis</i> JCM 15315 | 13.3 | [10.6 - 16.7] | 19.1 | [16.9 - 21.5] | 13.6 | [11.3 - 16.4] | 1.25 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella shakespearei</i> DSM 23087 | 12.8 | [10.1 - 16.1] | 19.1 | [16.9 - 21.5] | 13.2 | [10.9 - 16.0] | 0.5 |
| 'Legionella septentrionalis' (RZGV00000000) | 'Legionella sainthelensi' (UFAL00000000) | 12.9 | [10.2 - 16.2] | 19.1 | [16.9 - 21.5] | 13.3 | [10.9 - 16.0] | 5.53 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella impletisoli</i> OA1-1 | 12.8 | [10.1 - 16.0] | 19.0 | [16.8 - 21.4] | 13.1 | [10.8 - 15.9] | 2.35 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella taurinensis</i> NCTC 13314 | 13.2 | [10.5 - 16.5] | 19.0 | [16.8 - 21.4] | 13.5 | [11.2 - 16.3] | 5.85 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella steigerwaltii</i> ATCC 35302 | 12.8 | [10.1 - 16.1] | 19.0 | [16.8 - 21.4] | 13.2 | [10.8 - 15.9] | 3.89 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella worsleiensis</i> ATCC 49508 | 13.0 | [10.3 - 16.3] | 19.0 | [16.9 - 21.4] | 13.4 | [11.0 - 16.2] | 1.89 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella impletisoli</i> JCM 13919 | 13.1 | [10.4 - 16.4] | 19.0 | [16.9 - 21.4] | 13.5 | [11.1 - 16.3] | 2.0 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella longbeachae</i> NCTC 11477 | 12.8 | [10.1 - 16.1] | 19.0 | [16.8 - 21.4] | 13.2 | [10.8 - 15.9] | 5.21 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella spiritensis</i> ATCC 35249 | 13.1 | [10.3 - 16.4] | 19.0 | [16.8 - 21.3] | 13.4 | [11.0 - 16.2] | 3.23 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella bozemanii</i> ATCC 33217 | 12.8 | [10.1 - 16.1] | 19.0 | [16.8 - 21.4] | 13.2 | [10.8 - 15.9] | 4.29 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella shakespearei</i> DSM 23087 | 12.9 | [10.2 - 16.2] | 19.0 | [16.8 - 21.4] | 13.3 | [10.9 - 16.1] | 0.46 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella impletisoli</i> JCM 13919 | 12.8 | [10.1 - 16.0] | 19.0 | [16.8 - 21.4] | 13.1 | [10.8 - 15.9] | 1.18 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella yabuuchiae</i> OA1-2 | 12.8 | [10.1 - 16.0] | 19.0 | [16.8 - 21.3] | 13.1 | [10.8 - 15.9] | 1.09 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella impletisoli</i> OA1-1 | 12.7 | [10.0 - 15.9] | 18.9 | [16.7 - 21.2] | 13.1 | [10.7 - 15.8] | 2.37 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella birminghamensis</i> ATCC 43702 | 13.0 | [10.3 - 16.3] | 18.9 | [16.7 - 21.3] | 13.4 | [11.0 - 16.1] | 5.64 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella parisiensis</i> DSM 19216 | 12.8 | [10.1 - 16.1] | 18.9 | [16.7 - 21.2] | 13.2 | [10.8 - 15.9] | 4.35 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella impletisoli</i> JCM 13919 | 12.8 | [10.1 - 16.0] | 18.9 | [16.7 - 21.3] | 13.1 | [10.8 - 15.9] | 2.34 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella taurinensis</i> NCTC 13314 | 13.0 | [10.2 - 16.2] | 18.9 | [16.8 - 21.3] | 13.3 | [11.0 - 16.1] | 9.07 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella wadsworthii</i> ATCC 33877 | 12.8 | [10.1 - 16.1] | 18.9 | [16.8 - 21.3] | 13.2 | [10.8 - 15.9] | 4.18 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella yabuuchiae</i> OA1-2 | 12.7 | [10.0 - 15.9] | 18.9 | [16.7 - 21.3] | 13.0 | [10.7 - 15.8] | 3.15 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella drancourtii</i> LLAP 12 | 12.9 | [10.2 - 16.2] | 18.9 | [16.7 - 21.2] | 13.3 | [10.9 - 16.0] | 2.91 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella steigerwaltii</i> ATCC 35302 | 12.8 | [10.1 - 16.1] | 18.9 | [16.7 - 21.3] | 13.2 | [10.8 - 15.9] | 3.94 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella drancourtii</i> LLAP 12 | 12.9 | [10.2 - 16.2] | 18.9 | [16.7 - 21.3] | 13.3 | [10.9 - 16.1] | 3.07 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella impletisoli</i> OA1-1 | 13.1 | [10.4 - 16.4] | 18.9 | [16.7 - 21.3] | 13.5 | [11.1 - 16.2] | 2.03 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella spiritensis</i> ATCC 35249 | 12.9 | [10.2 - 16.2] | 18.8 | [16.6 - 21.1] | 13.3 | [10.9 - 16.0] | 7.56 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella spiritensis</i> ATCC 35249 | 12.8 | [10.1 - 16.1] | 18.8 | [16.6 - 21.1] | 13.2 | [10.8 - 15.9] | 7.58 |
| 'Legionella septentrionalis' (RZGT00000000) | 'Legionella sp. km535' (RZGU00000000) | 12.9 | [10.2 - 16.2] | 18.8 | [16.6 - 21.1] | 13.3 | [10.9 - 16.0] | 2.44 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella birminghamensis</i> ATCC 43702 | 12.9 | [10.2 - 16.2] | 18.8 | [16.6 - 21.2] | 13.3 | [10.9 - 16.1] | 5.66 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella beliardensis</i> NCTC 13315 | 12.8 | [10.1 - 16.0] | 18.8 | [16.6 - 21.1] | 13.1 | [10.8 - 15.9] | 5.0 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella taurinensis</i> NCTC 13314 | 13.1 | [10.4 - 16.5] | 18.8 | [16.6 - 21.2] | 13.5 | [11.1 - 16.3] | 5.9 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella impletisoli</i> JCM 13919 | 13.1 | [10.4 - 16.4] | 18.8 | [16.6 - 21.2] | 13.4 | [11.1 - 16.2] | 2.04 |
| 'Legionella sainthelensi' (UFAL00000000) | <i>Legionella septentrionalis</i> km711T | 13.0 | [10.3 - 16.3] | 18.7 | [16.6 - 21.1] | 13.4 | [11.0 - 16.2] | 5.35 |
| 'Legionella septentrionalis' (RZGS00000000) | 'Legionella sainthelensi' (UFAL00000000) | 13.0 | [10.3 - 16.3] | 18.7 | [16.6 - 21.1] | 13.4 | [11.0 - 16.2] | 5.38 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella spiritensis</i> ATCC 35249 | 12.8 | [10.1 - 16.1] | 18.7 | [16.6 - 21.1] | 13.2 | [10.9 - 16.0] | 7.56 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella impletisoli</i> JCM 13919 | 12.7 | [10.0 - 15.9] | 18.7 | [16.5 - 21.1] | 13.1 | [10.7 - 15.8] | 2.36 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella moravica</i> DSM 19234 | 12.9 | [10.2 - 16.2] | 18.7 | [16.6 - 21.1] | 13.3 | [10.9 - 16.1] | 2.33 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella taurinensis</i> NCTC 13314 | 13.2 | [10.4 - 16.5] | 18.6 | [16.4 - 21.0] | 13.5 | [11.1 - 16.3] | 5.73 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella longbeachae</i> NCTC 11477 | 12.8 | [10.1 - 16.0] | 18.6 | [16.4 - 20.9] | 13.1 | [10.8 - 15.9] | 5.17 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella fairfieldensis</i> ATCC 49588 | 13.0 | [10.3 - 16.2] | 18.6 | [16.5 - 21.0] | 13.3 | [11.0 - 16.1] | 2.68 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella erythra</i> ATCC 35303 | 12.9 | [10.2 - 16.2] | 18.6 | [16.4 - 21.0] | 13.3 | [10.9 - 16.0] | 8.87 |
| 'Legionella sainthelensi' (UFAM00000000) | <i>Legionella londiniensis</i> ATCC 49505 | 12.7 | [10.0 - 16.0] | 18.6 | [16.4 - 20.9] | 13.1 | [10.8 - 15.9] | 6.46 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella bozemanae</i> ATCC 33217 | 12.8 | [10.1 - 16.0] | 18.6 | [16.4 - 20.9] | 13.1 | [10.8 - 15.9] | 4.4 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella erythra</i> ATCC 35303 | 12.8 | [10.1 - 16.1] | 18.6 | [16.5 - 21.0] | 13.2 | [10.9 - 16.0] | 8.89 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella massiliensis</i> LegA | 13.0 | [10.3 - 16.3] | 18.6 | [16.4 - 21.0] | 13.4 | [11.0 - 16.1] | 2.21 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella nagasakiensis</i> JCM 15315 | 13.2 | [10.5 - 16.5] | 18.6 | [16.4 - 21.0] | 13.5 | [11.2 - 16.3] | 1.27 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella birminghamensis</i> ATCC 43702 | 12.8 | [10.1 - 16.1] | 18.5 | [16.3 - 20.9] | 13.2 | [10.8 - 15.9] | 1.14 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella erythra</i> ATCC 35303 | 13.0 | [10.3 - 16.3] | 18.5 | [16.4 - 20.9] | 13.3 | [11.0 - 16.1] | 7.71 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella birminghamensis</i> ATCC 43702 | 13.0 | [10.3 - 16.3] | 18.5 | [16.3 - 20.8] | 13.3 | [11.0 - 16.1] | 5.64 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella saoudiensis</i> LH-SWC | 13.1 | [10.3 - 16.4] | 18.5 | [16.3 - 20.9] | 13.4 | [11.0 - 16.2] | 2.73 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella steelei</i> ATCC BAA-2169 | 12.9 | [10.2 - 16.2] | 18.5 | [16.4 - 20.9] | 13.3 | [10.9 - 16.1] | 3.39 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|---|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella nagasakiensis</i> JCM 15315 | 13.0 | [10.2 - 16.2] | 18.5 | [16.4 - 20.9] | 13.3 | [10.9 - 16.1] | 1.18 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella jordanis</i> ATCC 33623 | 12.9 | [10.2 - 16.2] | 18.5 | [16.4 - 20.9] | 13.2 | [10.9 - 16.0] | 0.65 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella impletisoli</i> OA1-1 | 12.7 | [10.0 - 16.0] | 18.5 | [16.3 - 20.9] | 13.1 | [10.8 - 15.9] | 2.35 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella drancourtii</i> LLAP 12 | 12.9 | [10.2 - 16.2] | 18.4 | [16.3 - 20.8] | 13.2 | [10.9 - 16.0] | 2.96 |
| 'Legionella septentrionalis' (RZGT00000000) | ' <i>Legionella sainthelensi</i> ' (UFAM00000000) | 12.7 | [10.0 - 16.0] | 18.4 | [16.2 - 20.8] | 13.1 | [10.7 - 15.8] | 5.49 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella steelei</i> ATCC BAA-2169 | 12.8 | [10.1 - 16.1] | 18.4 | [16.3 - 20.8] | 13.2 | [10.8 - 15.9] | 3.44 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella wadsworthii</i> ATCC 33877 | 12.8 | [10.1 - 16.1] | 18.4 | [16.3 - 20.8] | 13.2 | [10.8 - 15.9] | 4.33 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella spiritensis</i> ATCC 35249 | 12.9 | [10.2 - 16.2] | 18.4 | [16.3 - 20.8] | 13.3 | [10.9 - 16.0] | 5.5 |
| 'Legionella septentrionalis' (RZGT00000000) | ' <i>Legionella sainthelensi</i> ' (UFAL00000000) | 12.8 | [10.1 - 16.0] | 18.4 | [16.3 - 20.8] | 13.1 | [10.8 - 15.9] | 5.55 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella londiniensis</i> ATCC 49505 | 13.2 | [10.5 - 16.5] | 18.4 | [16.3 - 20.8] | 13.5 | [11.1 - 16.3] | 1.1 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella londiniensis</i> ATCC 49505 | 13.2 | [10.5 - 16.5] | 18.4 | [16.3 - 20.8] | 13.5 | [11.1 - 16.3] | 0.99 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella londiniensis</i> ATCC 49505 | 12.7 | [10.0 - 16.0] | 18.3 | [16.2 - 20.7] | 13.1 | [10.8 - 15.9] | 5.48 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella rubrilucens</i> ATCC 35304 | 12.9 | [10.2 - 16.2] | 18.3 | [16.1 - 20.7] | 13.3 | [10.9 - 16.1] | 8.68 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella rowbothamii</i> LLAP6 | 12.9 | [10.2 - 16.2] | 18.3 | [16.1 - 20.6] | 13.3 | [10.9 - 16.0] | 2.87 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella impletisoli</i> JCM 13919 | 12.7 | [10.0 - 16.0] | 18.3 | [16.2 - 20.7] | 13.1 | [10.8 - 15.8] | 2.34 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella londiniensis</i> ATCC 49505 | 12.7 | [10.0 - 15.9] | 18.3 | [16.1 - 20.6] | 13.0 | [10.7 - 15.8] | 5.5 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella pneumophila</i> Philadelphia 1 | 12.9 | [10.2 - 16.2] | 18.2 | [16.0 - 20.6] | 13.3 | [10.9 - 16.0] | 4.06 |
| 'Legionella septentrionalis' (RZGR00000000) | ' <i>Legionella qingyii</i> ' (RZGW00000000) | 12.8 | [10.1 - 16.1] | 18.2 | [16.0 - 20.6] | 13.2 | [10.9 - 16.0] | 4.38 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella wadsworthii</i> ATCC 33877 | 12.8 | [10.1 - 16.1] | 18.2 | [16.0 - 20.5] | 13.2 | [10.8 - 15.9] | 4.22 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella saoudiensis</i> LH-SWC | 12.9 | [10.2 - 16.2] | 18.2 | [16.1 - 20.6] | 13.3 | [10.9 - 16.1] | 2.78 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella gormanii</i> ATCC 33297 | 12.9 | [10.2 - 16.1] | 18.2 | [16.0 - 20.6] | 13.2 | [10.9 - 16.0] | 4.08 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella quateirensis</i> ATCC 49507 | 12.8 | [10.1 - 16.1] | 18.2 | [16.1 - 20.6] | 13.2 | [10.8 - 15.9] | 3.33 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella fairfieldensis</i> ATCC 49588 | 13.1 | [10.4 - 16.4] | 18.1 | [16.0 - 20.5] | 13.4 | [11.1 - 16.2] | 0.24 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|---|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella steigerwaltii</i> ATCC 35302 | 12.8 | [10.1 - 16.0] | 18.1 | [16.0 - 20.5] | 13.1 | [10.8 - 15.9] | 4.06 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella rowbothamii</i> LLAP6 | 12.9 | [10.2 - 16.2] | 18.1 | [15.9 - 20.4] | 13.3 | [10.9 - 16.0] | 2.98 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella waltersii</i> ATCC 51914 | 12.8 | [10.1 - 16.1] | 18.1 | [16.0 - 20.5] | 13.2 | [10.8 - 15.9] | 3.26 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella dumoffii</i> NY 23 | 12.8 | [10.1 - 16.1] | 18.1 | [15.9 - 20.4] | 13.2 | [10.9 - 16.0] | 2.69 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella steelei</i> ATCC BAA-2169 | 12.8 | [10.1 - 16.1] | 18.1 | [15.9 - 20.4] | 13.2 | [10.8 - 15.9] | 3.56 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella londiniensis</i> ATCC 49505 | 12.8 | [10.1 - 16.1] | 18.0 | [15.8 - 20.3] | 13.2 | [10.8 - 15.9] | 4.32 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella gormanii</i> ATCC 33297 | 12.8 | [10.2 - 16.1] | 18.0 | [15.9 - 20.4] | 13.2 | [10.9 - 16.0] | 4.13 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella gratiana</i> ATCC 49413 | 12.8 | [10.1 - 16.0] | 18.0 | [15.8 - 20.3] | 13.1 | [10.8 - 15.9] | 5.48 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella qingyii</i> CCTCC AB 2018025 | 12.8 | [10.1 - 16.0] | 18.0 | [15.9 - 20.4] | 13.1 | [10.8 - 15.9] | 4.4 |
| 'Legionella qingyii' (QHJG00000000) | 'Legionella septentrionalis' (RZGR00000000) | 12.8 | [10.1 - 16.0] | 18.0 | [15.9 - 20.4] | 13.1 | [10.8 - 15.9] | 4.4 |
| 'Legionella sp. km535' (RZGU00000000) | <i>Legionella erythra</i> ATCC 35303 | 13.0 | [10.2 - 16.2] | 18.0 | [15.8 - 20.3] | 13.3 | [10.9 - 16.1] | 6.8 |
| 'Legionella septentrionalis' (RZGS00000000) | 'Legionella qingyii' (RZGW00000000) | 13.0 | [10.3 - 16.3] | 18.0 | [15.9 - 20.4] | 13.3 | [11.0 - 16.1] | 4.34 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella impletisoli</i> OA1-1 | 13.1 | [10.4 - 16.4] | 18.0 | [15.9 - 20.3] | 13.4 | [11.1 - 16.2] | 2.16 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella anisa</i> ATCC 35292 | 12.7 | [10.0 - 16.0] | 18.0 | [15.9 - 20.4] | 13.1 | [10.7 - 15.8] | 4.14 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella cherrii</i> DSM 19213 | 12.9 | [10.2 - 16.1] | 18.0 | [15.9 - 20.4] | 13.2 | [10.9 - 16.0] | 3.3 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella spiritensis</i> ATCC 35249 | 12.8 | [10.1 - 16.1] | 18.0 | [15.9 - 20.4] | 13.2 | [10.8 - 15.9] | 3.07 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella bozemanae</i> ATCC 33217 | 12.8 | [10.1 - 16.0] | 18.0 | [15.9 - 20.4] | 13.1 | [10.8 - 15.9] | 4.42 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella norrlandica</i> LEGN | 12.8 | [10.2 - 16.1] | 18.0 | [15.9 - 20.4] | 13.2 | [10.9 - 16.0] | 4.86 |
| 'Legionella septentrionalis' (RZGV00000000) | 'Legionella qingyii' (RZGW00000000) | 13.0 | [10.3 - 16.2] | 18.0 | [15.9 - 20.4] | 13.3 | [11.0 - 16.1] | 4.49 |
| 'Legionella qingyii' (RZGW00000000) | <i>Legionella septentrionalis</i> km711T | 13.0 | [10.3 - 16.3] | 18.0 | [15.9 - 20.4] | 13.3 | [11.0 - 16.1] | 4.31 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella yabuuchiae</i> OA1-2 | 13.2 | [10.4 - 16.5] | 17.9 | [15.8 - 20.2] | 13.5 | [11.1 - 16.3] | 1.23 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|---|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella gormanii</i> ATCC 33342 | 12.8 | [10.2 - 16.1] | 17.9 | [15.8 - 20.3] | 13.2 | [10.9 - 16.0] | 4.08 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella cherrii</i> DSM 19213 | 12.9 | [10.2 - 16.2] | 17.9 | [15.8 - 20.3] | 13.2 | [10.9 - 16.0] | 3.34 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella cherrii</i> DSM 19213 | 12.9 | [10.2 - 16.2] | 17.9 | [15.8 - 20.3] | 13.3 | [10.9 - 16.0] | 3.46 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella yabuuchiae</i> OA1-2 | 13.2 | [10.4 - 16.5] | 17.9 | [15.7 - 20.2] | 13.5 | [11.1 - 16.3] | 1.34 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella londiniensis</i> ATCC 49505 | 13.1 | [10.4 - 16.4] | 17.9 | [15.8 - 20.3] | 13.4 | [11.1 - 16.2] | 0.97 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella impletisoli</i> JCM 13919 | 13.1 | [10.4 - 16.4] | 17.9 | [15.8 - 20.3] | 13.4 | [11.0 - 16.2] | 2.17 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella longbeachae</i> NCTC 11477 | 12.7 | [10.1 - 16.0] | 17.9 | [15.8 - 20.3] | 13.1 | [10.8 - 15.9] | 5.34 |
| 'Legionella qingyii' (QHJG00000000) | <i>Legionella septentrionalis</i> km711T | 12.9 | [10.2 - 16.2] | 17.8 | [15.6 - 20.1] | 13.2 | [10.9 - 16.0] | 4.32 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella tucsonensis</i> ATCC 49180 | 12.7 | [10.0 - 16.0] | 17.8 | [15.7 - 20.1] | 13.1 | [10.8 - 15.9] | 4.92 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella cherrii</i> DSM 19213 | 12.9 | [10.2 - 16.1] | 17.8 | [15.6 - 20.1] | 13.2 | [10.9 - 16.0] | 3.47 |
| 'Legionella septentrionalis' (RZGV00000000) | <i>Legionella qingyii</i> CCTCC AB 2018025 | 12.8 | [10.1 - 16.1] | 17.8 | [15.6 - 20.1] | 13.2 | [10.8 - 15.9] | 4.52 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella londiniensis</i> ATCC 49505 | 12.7 | [10.0 - 16.0] | 17.8 | [15.7 - 20.2] | 13.1 | [10.7 - 15.8] | 5.48 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella qingyii</i> CCTCC AB 2018025 | 12.9 | [10.2 - 16.2] | 17.8 | [15.6 - 20.1] | 13.2 | [10.9 - 16.0] | 4.36 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella erythra</i> ATCC 35303 | 13.0 | [10.3 - 16.3] | 17.8 | [15.7 - 20.2] | 13.3 | [11.0 - 16.1] | 4.36 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella wadsworthii</i> ATCC 33877 | 12.8 | [10.1 - 16.1] | 17.8 | [15.6 - 20.1] | 13.2 | [10.8 - 15.9] | 4.35 |
| 'Legionella qingyii' (QHJG00000000) | 'Legionella septentrionalis' (RZGS00000000) | 12.9 | [10.2 - 16.2] | 17.8 | [15.6 - 20.1] | 13.2 | [10.9 - 16.0] | 4.35 |
| 'Legionella qingyii' (QHJG00000000) | 'Legionella septentrionalis' (RZGV00000000) | 12.8 | [10.1 - 16.1] | 17.8 | [15.6 - 20.1] | 13.2 | [10.8 - 15.9] | 4.51 |
| 'Legionella septentrionalis' (RZGR00000000) | <i>Legionella gormanii</i> ATCC 33342 | 12.8 | [10.2 - 16.1] | 17.7 | [15.6 - 20.0] | 13.2 | [10.9 - 16.0] | 4.12 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella saoudiensis</i> LH-SWC | 12.9 | [10.2 - 16.2] | 17.7 | [15.5 - 20.0] | 13.3 | [10.9 - 16.0] | 2.9 |
| 'Legionella septentrionalis' (RZGR00000000) | 'Legionella qingyii' (RZGX00000000) | 12.8 | [10.1 - 16.1] | 17.7 | [15.6 - 20.1] | 13.2 | [10.8 - 15.9] | 4.38 |
| 'Legionella septentrionalis' (RZGV00000000) | 'Legionella qingyii' (RZGX00000000) | 12.9 | [10.2 - 16.2] | 17.6 | [15.5 - 20.0] | 13.2 | [10.9 - 16.0] | 4.49 |

| Query | Subject | d_0 | C.I. d_0 | d_4 | C.I. d_4 | d_6 | C.I. d_6 | Diff. G+C Percent |
|---|--|-------|---------------|-------|---------------|-------|---------------|-------------------|
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella rowbothamii</i> LLAP6 | 12.9 | [10.2 - 16.2] | 17.6 | [15.5 - 19.9] | 13.3 | [10.9 - 16.0] | 2.83 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella cincinnatiensis</i> ATCC 43753 | 12.7 | [10.0 - 16.0] | 17.6 | [15.5 - 20.0] | 13.1 | [10.7 - 15.8] | 5.55 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella worsleiensis</i> ATCC 49508 | 13.0 | [10.2 - 16.2] | 17.6 | [15.5 - 20.0] | 13.3 | [10.9 - 16.1] | 2.02 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella gormanii</i> ATCC 33297 | 12.8 | [10.1 - 16.1] | 17.6 | [15.4 - 19.9] | 13.2 | [10.8 - 15.9] | 4.25 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella rubrilucens</i> ATCC 35304 | 13.0 | [10.3 - 16.3] | 17.6 | [15.5 - 20.0] | 13.3 | [11.0 - 16.1] | 5.33 |
| 'Legionella septentrionalis' (RZGT00000000) | ' <i>Legionella qingyii</i> ' (RZGW00000000) | 12.8 | [10.1 - 16.1] | 17.5 | [15.4 - 19.9] | 13.2 | [10.8 - 15.9] | 4.51 |
| 'Legionella qingyii' (RZGX00000000) | <i>Legionella septentrionalis</i> km711T | 12.9 | [10.2 - 16.2] | 17.5 | [15.4 - 19.8] | 13.3 | [10.9 - 16.0] | 4.31 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella yabuuchiae</i> OA1-2 | 13.2 | [10.4 - 16.5] | 17.5 | [15.4 - 19.8] | 13.5 | [11.1 - 16.3] | 1.36 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella pneumophila</i> subsp. <i>pascullei</i> ATCC 33737 | 12.9 | [10.2 - 16.2] | 17.5 | [15.3 - 19.8] | 13.2 | [10.9 - 16.0] | 4.25 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella gormanii</i> ATCC 33342 | 12.8 | [10.1 - 16.1] | 17.5 | [15.4 - 19.9] | 13.2 | [10.8 - 15.9] | 4.25 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella rowbothamii</i> LLAP6 | 12.9 | [10.2 - 16.2] | 17.5 | [15.4 - 19.9] | 13.3 | [10.9 - 16.0] | 3.0 |
| 'Legionella septentrionalis' (RZGS00000000) | ' <i>Legionella qingyii</i> ' (RZGX00000000) | 12.9 | [10.2 - 16.2] | 17.5 | [15.4 - 19.8] | 13.3 | [10.9 - 16.0] | 4.34 |
| 'Legionella septentrionalis' (RZGS00000000) | <i>Legionella yabuuchiae</i> OA1-2 | 13.3 | [10.5 - 16.6] | 17.5 | [15.4 - 19.9] | 13.6 | [11.2 - 16.4] | 1.18 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella drancourtii</i> LLAP 12 | 12.8 | [10.1 - 16.1] | 17.4 | [15.3 - 19.7] | 13.2 | [10.8 - 15.9] | 3.09 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella spiritensis</i> ATCC 35249 | 12.8 | [10.1 - 16.1] | 17.4 | [15.3 - 19.7] | 13.2 | [10.8 - 15.9] | 3.06 |
| 'Legionella sp. km772' (RZGQ00000000) | <i>Legionella spiritensis</i> ATCC 35249 | 12.9 | [10.2 - 16.2] | 17.3 | [15.2 - 19.6] | 13.3 | [10.9 - 16.0] | 6.4 |
| 'Legionella septentrionalis' (RZGT00000000) | <i>Legionella qingyii</i> CCTCC AB 2018025 | 12.7 | [10.1 - 16.0] | 17.2 | [15.1 - 19.6] | 13.1 | [10.8 - 15.9] | 4.53 |
| 'Legionella qingyii' (QHJG00000000) | ' <i>Legionella septentrionalis</i> ' (RZGT00000000) | 12.7 | [10.1 - 16.0] | 17.2 | [15.1 - 19.6] | 13.1 | [10.8 - 15.9] | 4.53 |
| 'Legionella septentrionalis' (RZGT00000000) | ' <i>Legionella qingyii</i> ' (RZGX00000000) | 12.8 | [10.1 - 16.1] | 17.1 | [15.0 - 19.4] | 13.2 | [10.8 - 15.9] | 4.51 |

Table 4: Strains in your dataset

Joint dataset of automatically determined closest type strains (if this mode was chosen), manually selected type strains (if selected accordingly) and the provided user strains, if provided (marked in **yellow**).

| Strain | Authority | Other deposits | Synonyms | Base pairs | Percent G+C | No. proteins | Goldstamp | Bioproject accession | Biosample accession | Assembly accession | IMG OID |
|--|--------------------------|--|--|-------------|-------------|--------------|-----------|----------------------|---------------------|--------------------|------------|
| <i>Legionella oakridgensis</i> ATCC 33761 | Orrison et al. 1983 | CIP 103884; CCUG 16414; DSM 21215; NCTC 11531; Oak Ridge 10; OR-10 | <i>Legionella oakridgensis</i> | 2773 209 | 40.9 | 2932 | Gp0013845 | PRJNA183980 | SAMN02641506 | GCA_000512355 | 2558860203 |
| <i>Legionella pneumophila</i> subsp. <i>pascullei</i> ATCC 33737 | Brenner et al. 1989 | CIP 105570; CCUG 31226 A; CCUG 31226; DSM 7515; U8W | <i>Legionella pneumophila</i> subsp. <i>pascullei</i> | 3431 069 | 38.1 | 3048 | Gp0133674 | PRJNA239272 | SAMN02650970 | GCA_000586255 | |
| <i>Legionella beliardensis</i> NCTC 13315 | Lo Presti et al. 2001 | CIP 106632; ATCC 700512; DSM 19152; liard A1; Montbeliard A1; Montbéliard A1 | <i>Legionella beliardensis</i> | 3538 304 | 37.3 | 3125 | Gp0384399 | PRJEB6403 | SAMEA4412675 | GCA_900452395 | |
| <i>Legionella septentrionalis</i> km711T | Li et al. 2021 | KCTC 15655; NBRC 113219 | <i>Legionella septentrionalis</i> | 2651 472 | 42.1 | 2359 | | PRJNA224116 | SAMN10610692 | GCF_003989745 | |
| <i>Legionella shakespearei</i> DSM 23087 | Verma et al. 1992 | 214; CIP 103541; ATCC 49655; CCUG 31228 A; CCUG 31228; NCTC 12829 | <i>Legionella shakespearei</i> | 3508 986 | 41.7 | 2985 | Gp0013848 | PRJNA169766 | SAMN02440432 | GCA_000373765 | 2515154162 |

| Strain | Authority | Other deposits | Synonyms | Base pairs | Percent G+C | No. proteins | Goldstamp | Bioproject accession | Biosample accession | Assembly accession | IMG OID |
|--|-----------------------|--|--------------------------------|------------|-------------|--------------|-----------|----------------------|---------------------|--------------------|------------|
| <i>Legionella longbeachae</i> NCTC 11477 | McKinney et al. 1982 | CIP 103880; ATCC 33462; CCUG 46622; DSM 10572; Long Beach 4 | <i>Legionella longbeachae</i> | 4121 576 | 37.0 | 3445 | | PRJNA510202 | SAMN10599827 | GCA_004283175 | |
| <i>Legionella taurinensis</i> NCTC 13314 | Lo Presti et al. 1999 | CIP 106300; ATCC 700508; CCUG 44901; DSM 21897; Turin I n° 1 | <i>Legionella taurinensis</i> | 3151 601 | 48.1 | 2876 | Gp0384400 | PRJEB6403 | SAMEA4412680 | GCA_900452865 | |
| <i>Legionella impletisoli</i> OA1-1 | Kuroki et al. 2007 | DSM 18493; JCM 13919; OA1-1 | <i>Legionella impletisoli</i> | 2492 103 | 40.2 | 2316 | | PRJEB24896 | SAMEA5198051 | GCA_900639875 | |
| <i>Legionella clemsonensis</i> CDC-D5610 | Palmer et al. 2016 | | <i>Legionella clemsonensis</i> | 3272 100 | 39.4 | 2932 | Gp0258950 | PRJNA326348 | SAMN05254214 | GCA_002240035 | |
| <i>Legionella moravica</i> DSM 19234 | Wilkinson et al. 1989 | 316-36; CIP 103883; ATCC 43877; CCUG 31117; NCTC 12239; CDC 1634; CDC 1634-CZK-E | <i>Legionella moravica</i> | 3761 766 | 40.0 | 3219 | Gp0013844 | PRJNA185635 | SAMN02441510 | GCA_000423305 | 2522572178 |

| Strain | Authority | Other deposits | Synonyms | Base pairs | Percent G+C | No. proteins | Goldstamp | Bioproject accession | Biosample accession | Assembly accession | IMG OID |
|---|----------------------|---|---|------------|-------------|--------------|-----------|----------------------|---------------------|--------------------|------------|
| <i>Legionella gormanii</i> ATCC 33342 | Morris et al. 1980 | CIP 104724; ATCC 33297; ATCC 33342; CCUG 12267; DSM 16641; DSM 25296; NCTC 11401; LS-13 | <i>Fluoribacter gormanii</i> ; <i>Legionella gormanii</i> | 3812 314 | 38.1 | 3345 | Gp0131767 | PRJNA329785 | SAMN05421777 | GCA_900156395 | 2681812897 |
| <i>Legionella rowbothamii</i> LLAP6 | Adeleke et al. 2001 | ATCC 700991; CCUG 43886; DSM 21678 | <i>Legionella rowbothamii</i> | 3966 228 | 39.3 | 3426 | | PRJEB24896 | SAMEA5198062 | GCA_900639985 | |
| <i>Legionella yabuuchiae</i> OA1-2 | Kuroki et al. 2007 | DSM 18492; JCM 14148 | <i>Legionella yabuuchiae</i> | 2638 659 | 41.0 | 2378 | | PRJEB24896 | SAMEA5198072 | GCA_900640115 | |
| <i>Legionella nagasakiensis</i> JCM 15315 | Yang et al. 2012 | ATCC BAA-1557; CDC-1796-JAP-E | <i>Legionella nagasakiensis</i> | 2676 583 | 41.1 | 2534 | | PRJEB24896 | SAMEA5198055 | GCA_900639915 | |
| <i>Legionella saoudiensis</i> LH-SWC | Bajrai et al. 2016 | DSM 101682; CSUR P2101; LS-1 | <i>Legionella saoudiensis</i> | 3846 014 | 39.4 | 3341 | Gp0143847 | PRJEB11688 | SAMEA3647790 | GCA_001465875 | |
| <i>Legionella sainthelensi</i> ATCC 35248 | Campbell et al. 1984 | CIP 103885; CCUG 29672; DSM 19231; NCTC 11988; Mt. St. Helens 4 | <i>Legionella sainthelensi</i> | 4108 625 | 37.0 | 3550 | Gp0018889 | PRJNA223118 | SAMN02744009 | GCA_000621685 | 2558309002 |

| Strain | Authority | Other deposits | Synonyms | Base pairs | Percent G+C | No. proteins | Goldstamp | Bioproject accession | Biosample accession | Assembly accession | IMG OID |
|--|--------------------------|---|-----------------------------------|-------------|-------------|--------------|-----------|----------------------|---------------------|--------------------|------------|
| <i>Legionella cherrii</i> DSM 19213 | Brenner et al. 1985 | CIP 103842; ATCC 35252; CCUG 29666; NCTC 11976; ORW | <i>Legionella cherrii</i> | 3698 064 | 38.9 | 3177 | Gp0013839 | PRJNA222237 | SAMN02743988 | GCA_000621385 | 2558309037 |
| <i>Legionella fairfieldensis</i> ATCC 49588 | Thacker et al. 1991 | 1725-Aus- E; CIP 105266; CCUG 31235 A; CCUG 31235; NCTC 12488 | <i>Legionella fairfieldensis</i> | 2651 631 | 39.6 | 2506 | Gp0044111 | PRJNA223037 | SAMN02743993 | GCA_000621525 | 2558860982 |
| <i>Legionella wadsworthii</i> ATCC 33877 | Edelstein et al. 1983 | CIP 103886; CCUG 16415; DSM 21896; NCTC 11532; Wadsworth 81-716A | <i>Legionella wadsworthii</i> | 3573 650 | 38.0 | 3168 | Gp0018919 | PRJNA234416 | SAMN02744130 | GCA_000701265 | 2561511070 |
| <i>Tamlana fucoidanivorans</i> CW2-9T | Li et al. 2020 | CICC 24749; KCTC 72389 | <i>Tamlana fucoidanivorans</i> | 3999 027 | 34.3 | 3345 | | PRJNA544675 | SAMN11845908 | GCA_006265225 | |
| <i>Legionella jamestowniensis</i> DSM 19215 | Brenner et al. 1985 | CIP 103845; ATCC 35298; CCUG 29669; JCM 7590; NCTC 11981; JA- 26-G1-E2 | <i>Legionella jamestowniensis</i> | 3408 907 | 39.4 | 3036 | Gp0013842 | PRJNA221073 | SAMN02746073 | GCA_900114725 | 2600255316 |
| <i>Legionella qingyii</i> CCTCC AB 2018025 | Wu et al. 2019 | KCTC 15636; km488; NRBC 113223 | <i>Legionella qingyii</i> | 5227 415 | 37.8 | 3955 | Gp0389901 | PRJNA465828 | SAMN09090942 | GCA_003184185 | |

| Strain | Authority | Other deposits | Synonyms | Base pairs | Percent G+C | No. proteins | Goldstamp | Bioproject accession | Biosample accession | Assembly accession | IMG OID |
|--|---|--|---|------------|-------------|--------------|-----------|----------------------|---------------------|--------------------|---------|
| <i>Legionella fallonii</i> LLAP-10 | Adeleke et al. 2001 | ATCC 700992; CCUG 43887; DSM 19889 | <i>Legionella fallonii</i> | 4434 890 | 38.3 | 3850 | Gp0122638 | PRJEB7322 | SAMEA2785663 | GCA_000953135 | |
| <i>Legionella hackeliae</i> ATCC 35250 | Brenner et al. 1985 | CIP 103844; CCUG 31232 A; CCUG 31232; DSM 19214; JCM 7563; NCTC 11979; Lansing 2 | <i>Legionella hackeliae</i> | 3570 857 | 39.0 | 3218 | Gp0122637 | PRJEB7321 | SAMEA2785664 | GCA_000953655 | |
| <i>Legionella norrlandica</i> LEGN | Rizzardi et al. 2015 | ATCC BAA-2678; CCUG 65936; NCTC 14631 | <i>Legionella norrlandica</i> | 3070 847 | 37.5 | 2338 | Gp0094869 | PRJNA246269 | SAMN02746164 | GCA_000770585 | |
| <i>Legionella massiliensis</i> LegA | Campocasso et al. 2012 | DSM 24804; CSUR P146 | <i>Legionella massiliensis</i> | 4387 007 | 41.2 | 3767 | Gp0044362 | PRJEB6598 | SAMEA2747211 | GCA_000756815 | |
| <i>Legionella bozemanæ</i> ATCC 33217 | (Garrity et al. 1980) Brenner et al. 1980 | ALLO1; CIP 103872; DSM 16523; WIGA | <i>Fluoribacter bozemanæ</i> ; <i>Legionella bozemanæ</i> | 4113 435 | 37.9 | 3624 | | PRJNA281295 | SAMN03486950 | GCA_001648595 | |
| <i>Legionella jordanis</i> ATCC 33623 | Cherry et al. 1982 | CIP 105268; CCUG 16413; DSM 19212; NCTC 11533; BL-540 | <i>Legionella jordanis</i> | 3087 298 | 41.7 | 2825 | | PRJNA281299 | SAMN03486956 | GCA_001648675 | |

| Strain | Authority | Other deposits | Synonyms | Base pairs | Percent G+C | No. proteins | Goldstamp | Bioproject accession | Biosample accession | Assembly accession | IMG OID |
|---|----------------------|---|---|------------|-------------|--------------|-----------|----------------------|---------------------|--------------------|------------|
| <i>Legionella gormanii</i> ATCC 33297 | Morris et al. 1980 | CIP 104724; ATCC 33297; ATCC 33342; CCUG 12267; DSM 16641; DSM 25296; NCTC 11401; LS-13 | <i>Fluoribacter gormanii</i> ; <i>Legionella gormanii</i> | 3812 103 | 38.1 | 3301 | | PRJNA281301 | SAMN03486957 | GCA_001648685 | |
| <i>Legionella dumoffii</i> NY 23 | Brenner et al. 1980 | CIP 103876; ATCC 33279; CCUG 11881; DSM 17625; NCTC 11370 | <i>Fluoribacter dumoffii</i> ; <i>Legionella dumoffii</i> | 3894 641 | 39.6 | 3449 | Gp0012805 | PRJNA74015 | SAMN02469353 | GCA_000236165 | 2547132117 |
| <i>Legionella impletisoli</i> JCM 13919 | Kuroki et al. 2007 | DSM 18493; JCM 13919; OA1-1 | <i>Legionella impletisoli</i> | 2485 448 | 40.2 | 2291 | | PRJDB10510 | SAMD00245244 | GCA_014646855 | |
| <i>Legionella drancourtii</i> LLAP 12 | La Scola et al. 2004 | ATCC 50991 | <i>Legionella drancourtii</i> | 8140 168 | 39.2 | 3959 | Gp0004932 | PRJNA39279 | SAMN02471332 | GCA_000162755 | 645058794 |
| <i>Legionella parisiensis</i> DSM 19216 | Brenner et al. 1985 | CIP 103847; ATCC 35299; CCUG 29670; JCM 7561; NCTC 11983; PF-209C-C2 | <i>Legionella parisiensis</i> | 4232 284 | 38.0 | 3916 | Gp0378973 | PRJNA312141 | SAMN04495209 | GCA_001736145 | |

| Strain | Authority | Other deposits | Synonyms | Base pairs | Percent G+C | No. proteins | Goldstamp | Bioproject accession | Biosample accession | Assembly accession | IMG OID |
|--|-----------------------|--|-----------------------------------|------------|-------------|--------------|-----------|----------------------|---------------------|--------------------|---------|
| <i>Legionella anisa</i> ATCC 35292 | Gorman et al. 1985 | CIP 103870; CCUG 29665; DSM 17627; JCM 7573; NBIMCC 8852; NCTC 11974; WA-316-C3 | <i>Legionella anisa</i> | 4396893 | 38.2 | 3732 | Gp0133607 | PRJNA224116 | SAMN04274764 | GCF_001467525 | |
| <i>Legionella gratiana</i> ATCC 49413 | Bornstein et al. 1991 | CIP 105267; CCUG 44894; DSM 21233; NCTC 12388; CDC 1242; Lyon 8420412 | <i>Legionella gratiana</i> | 3924747 | 36.8 | 3446 | Gp0132661 | PRJNA224116 | SAMN04274776 | GCF_001467695 | |
| <i>Legionella brunensis</i> ATCC 43878 | Wilkinson et al. 1989 | 441-1; CIP 103874; CCUG 31114; DSM 19236; NCTC 12240; CDC 1635 | <i>Legionella brunensis</i> | 3748018 | 38.7 | 3170 | Gp0132962 | PRJNA224116 | SAMN04274767 | GCF_001467025 | |
| <i>Legionella londiniensis</i> ATCC 49505 | Dennis et al. 1993 | 1477; CIP 105269; CCUG 44895; DSM 21234; NCTC 12374 | <i>Legionella londiniensis</i> | 2400013 | 43.3 | 2129 | Gp0133319 | PRJNA224116 | SAMN04274782 | GCF_001467825 | |
| <i>Legionella birminghamensis</i> ATCC 43702 | Wilkinson et al. 1988 | 1407-AL-H; CIP 103871; CCUG 31233 A; CCUG 31233; DSM 19232; JCM 7559; NCTC 12437 | <i>Legionella birminghamensis</i> | 3736683 | 43.5 | 3235 | Gp0133232 | PRJNA224116 | SAMN04274765 | GCF_001467505 | |

| Strain | Authority | Other deposits | Synonyms | Base pairs | Percent G+C | No. proteins | Goldstamp | Bioproject accession | Biosample accession | Assembly accession | IMG OID |
|--|-----------------------|---|-------------------------------|------------|-------------|--------------|-----------|----------------------|---------------------|--------------------|---------|
| <i>Legionella erythra</i> ATCC 35303 | Brenner et al. 1985 | CIP 103843; CCUG 29667; DSM 17644; JCM 7564; NCTC 11977; SE-32A-C8 | <i>Legionella erythra</i> | 3237 543 | 46.7 | 2961 | Gp0133677 | PRJNA224116 | SAMN04274772 | GCF_001467615 | |
| <i>Legionella rubrilucens</i> ATCC 35304 | Brenner et al. 1985 | CIP 103848; CCUG 29671; DSM 11884; JCM 7565; NCTC 11987; WA-270A-C2 | <i>Legionella rubrilucens</i> | 3128 807 | 47.7 | 2874 | Gp0132663 | PRJNA224116 | SAMN04274791 | GCF_001468125 | |
| <i>Legionella santicrucis</i> ATCC 35301 | Brenner et al. 1985 | CIP 103849; CCUG 29673; DSM 19325; DSM 23075; JCM 7557; NCTC 11989; SC-63-C7 | <i>Legionella santicrucis</i> | 4818 052 | 36.7 | 4254 | Gp0133608 | PRJNA224116 | SAMN04274793 | GCF_001468135 | |
| <i>Legionella spiritensis</i> ATCC 35249 | Brenner et al. 1985 | CIP 103850; CCUG 29715; CCUG 31118; DSM 19324; JCM 7562; NCTC 11990; Mount Saint Helens 9; Mt St Helens-9 | <i>Legionella spiritensis</i> | 3312 138 | 45.4 | 2944 | Gp0133505 | PRJNA224116 | SAMN04274795 | GCF_001468165 | |
| <i>Legionella steelei</i> ATCC BAA-2169 | Edelstein et al. 2012 | IMVS 3113; IMVS 3376 | <i>Legionella steelei</i> | 4227 062 | 38.8 | 3716 | Gp0133443 | PRJNA224116 | SAMN04274796 | GCF_001468005 | |

| Strain | Authority | Other deposits | Synonyms | Base pairs | Percent G+C | No. proteins | Goldstamp | Bioproject accession | Biosample accession | Assembly accession | IMG OID |
|--|--|---|---|------------|-------------|--------------|-----------|----------------------|---------------------|--------------------|-----------|
| <i>Legionella steigerwaltii</i> ATCC 35302 | Brenner et al. 1985 | CIP 103851; CCUG 29674; DSM 23076; JCM 7558; NCTC 11991; SC-18-C9 | <i>Legionella steigerwaltii</i> | 3948340 | 38.3 | 3471 | Gp0133609 | PRJNA224116 | SAMN04274797 | GCF_001468065 | |
| <i>Legionella waltersii</i> ATCC 51914 | Benson et al. 1996 | 2074-AUS-E; CIP 104965; CCUG 44924; DSM 21908 | <i>Legionella waltersii</i> | 3648718 | 39.1 | 3387 | Gp0132986 | PRJNA224116 | SAMN04274799 | GCF_001468085 | |
| <i>Legionella pneumophila</i> Philadelphia 1 | Brenner et al. 1979 emend. Brenner et al. 1988 | CIP 103854; ATCC 33152; CCUG 9568; DSM 25069; DSM 7513; JCM 7571; NBIMCC 8848; NCTC 11192 | <i>Legionella pneumophila</i> ; <i>Legionella pneumophila</i> subsp. <i>pneumophila</i> | 3397753 | 38.3 | 2942 | Gp0000541 | PRJNA22 | SAMN02603156 | GCA_000008485 | 637000148 |
| <i>Legionella quateirensis</i> ATCC 49507 | Dennis et al. 1993 | 1335; CIP 105271; CCUG 44899; DSM 21253; NCTC 12376 | <i>Legionella quateirensis</i> | 4197232 | 39.0 | 3522 | Gp0133462 | PRJNA224116 | SAMN04274789 | GCF_001467955 | |
| <i>Legionella worsleiensis</i> ATCC 49508 | Dennis et al. 1993 | 1347; CIP 105114; CCUG 44923; DSM 21907; NCTC 12377 | <i>Legionella worsleiensis</i> | 3065894 | 40.3 | 2643 | Gp0133187 | PRJNA224116 | SAMN04274800 | GCF_001467535 | |

| Strain | Authority | Other deposits | Synonyms | Base pairs | Percent G+C | No. proteins | Goldstamp | Bioproject accession | Biosample accession | Assembly accession | IMG OID |
|---|------------------------|--|---|-------------|-------------|--------------|-----------|----------------------|---------------------|--------------------|---------|
| <i>Legionella pneumophila</i> subsp. <i>fraseri</i> ATCC 33156 | Brenner et al. 1989 | CIP 103858; CCUG 13398; DSM 7514; NBIMCC 8887; NCTC 11233; Los Angeles 1; Los Angelos-1 | <i>Legionella pneumophila</i> subsp. <i>fraseri</i> | 2203 310 | 37.8 | 1968 | Gp0133226 | PRJNA224116 | SAMN02650967 | GCF_000586315 | |
| <i>Legionella tucsonensis</i> ATCC 49180 | Thacker et al. 1990 | 1087-AZ-H; CIP 105113; CCUG 31119; DSM 19246; NCTC 12439 | <i>Legionella tucsonensis</i> | 3356 307 | 37.4 | 2965 | Gp0133365 | PRJNA224116 | SAMN04274798 | GCF_001468035 | |
| <i>Legionella cincinnatiensis</i> ATCC 43753 | Thacker et al. 1989 | 72-OH-H; CIP 103875; CCUG 31230 A; CCUG 31230; DSM 19233; NCTC 12438 | <i>Legionella cincinnatiensis</i> | 4052 168 | 36.8 | 3467 | Gp0132660 | PRJNA224116 | SAMN04274769 | GCF_001467545 | |
| ' <i>Legionella qingyii</i> ' (QHJG000000000) | | | | 5241 559 | 37.8 | 4197 | | | | | |
| ' <i>Legionella</i> sp. km772' (RZGQ000000000) | | | | 3407 521 | 39.0 | 3274 | | | | | |
| ' <i>Legionella septentrionalis</i> ' (RZGR000000000) | | | | 2569 255 | 42.2 | 2411 | | | | | |
| ' <i>Legionella septentrionalis</i> ' (RZGS000000000) | | | | 2660 547 | 42.2 | 2491 | | | | | |

| Strain | Authority | Other deposits | Synonyms | Base pairs | Percent G+C | No. proteins | Goldstamp | Bioproject accession | Biosample accession | Assembly accession | IMG OID |
|---|-----------|----------------|----------|------------|-------------|--------------|-----------|----------------------|---------------------|--------------------|---------|
| 'Legionella septentrionalis' (RZGT00000000) | | | | 2445666 | 42.3 | 2266 | | | | | |
| 'Legionella sp. km535' (RZGU00000000) | | | | 3677876 | 39.9 | 3125 | | | | | |
| 'Legionella septentrionalis' (RZGV00000000) | | | | 2545809 | 42.3 | 2366 | | | | | |
| 'Legionella qingyii' (RZGW00000000) | | | | 3721623 | 37.8 | 3225 | | | | | |
| 'Legionella qingyii' (RZGX00000000) | | | | 3808297 | 37.8 | 3314 | | | | | |
| 'Legionella sainthelensi' (UFAL00000000) | | | | 4095037 | 36.8 | 3511 | | | | | |
| 'Legionella sainthelensi' (UFAM00000000) | | | | 4516585 | 36.8 | 3990 | | | | | |

Methods, Results and References

The genome sequence data were uploaded to the Type (Strain) Genome Server (TYGS), a free bioinformatics platform available under <https://tygs.dsmz.de>, for a whole genome-based taxonomic analysis [1]. The analysis also made use of recently introduced methodological updates and features [2]. Information on nomenclature, synonymy and associated taxonomic literature was provided by TYGS's sister database, the List of Prokaryotic names with Standing in Nomenclature (LPSN, available at <https://lpsn.dsmz.de>) [2]. The results were provided by the TYGS on 2021-03-27. The TYGS analysis was subdivided into the following steps:

Determination of closely related type strains

Determination of closest type strain genomes was done in two complementary ways: First, all user genomes were compared against all type strain genomes available in the TYGS database via the MASH algorithm, a fast approximation of intergenomic relatedness [3], and, the ten type strains with the smallest MASH distances chosen per user genome. Second, an additional set of ten closely related type strains was determined via the 16S rDNA gene sequences. These were extracted from the user genomes using RNAmmer [4] and each sequence was subsequently BLASTed [5] against the 16S rDNA gene sequence of each of the currently 20940 type strains available in the TYGS database. This was used as a proxy to find the best 50 matching type strains (according to the bitscore) for each user genome and to subsequently calculate precise distances using the Genome BLAST Distance Phylogeny approach (GBDP) under the algorithm 'coverage' and distance formula d_5 [6]. These distances were finally used to determine the 10 closest type strain genomes for each of the user genomes.

Pairwise comparison of genome sequences

For the phylogenomic inference, all pairwise comparisons among the set of genomes were conducted using GBDP and accurate intergenomic distances inferred under the algorithm 'trimming' and distance formula d_5 [6]. 100 distance replicates were calculated each. A second GBDP phylogenomic analysis was inferred using the amino acid sequences of the entire proteome, promising a better resolved phylogeny in datasets of only remotely related strains. Digital DDH values and confidence intervals were calculated using the recommended settings of the GGDC 4.0 [2,6].

Phylogenetic inference

The resulting intergenomic distances were used to infer a balanced minimum evolution tree with branch support via FASTME 2.1.6.1 including SPR postprocessing [7]. Branch support was inferred from 100 pseudo-bootstrap replicates each. The trees were rooted at the midpoint [8] and visualized with PhyD3 [9].

Type-based species and subspecies clustering

The type-based species clustering using a 70% dDDH radius around each of the 51 type strains was done as previously described [1]. The resulting groups are shown in Table 1 and 4. Subspecies clustering was done using a 79% dDDH threshold as previously introduced [10].

Results

Type-based species and subspecies clustering

The resulting species and subspecies clusters are listed in Table 4, whereas the taxonomic identification of the query strains is found in Table 1. Briefly, the clustering yielded 51 species clusters and the provided query strains were assigned to 5 of these. Moreover, user strains were located in 6 of 53 subspecies clusters.

Figure caption SSU tree

Figure 1. Tree inferred with FastME 2.1.6.1 [7] from GBDP distances calculated from 16S rDNA gene sequences. The branch lengths are scaled in terms of GBDP distance formula d_5 . The numbers above branches are GBDP pseudo-bootstrap support values > 60 % from 100 replications, with an average branch support of 61.3 %. The tree was rooted at the midpoint [8].

Figure caption genome tree

Figure 2. Tree inferred with FastME 2.1.6.1 [7] from GBDP distances calculated from genome sequences. The branch lengths are scaled in terms of GBDP distance formula d_5 . The numbers above branches are GBDP pseudo-bootstrap support values > 60 % from 100 replications, with an average branch support of 37.6 %. The tree was rooted at the midpoint [8].

Figure caption proteome tree

Figure 3. Tree inferred with FastME 2.1.6.1 [7] from whole-proteome-based GBDP distances. The branch lengths are scaled via GBDP distance formula d_s . Branch values are GBDP pseudo-bootstrap support values > 60 % from 100 replications, with an average branch support of 91.4 %. The tree was midpoint-rooted [8].

References

- [1] Meier-Kolthoff JP, Göker M. TYGS is an automated high-throughput platform for state-of-the-art genome-based taxonomy. *Nat. Commun.* 2019;10: 2182. DOI: 10.1038/s41467-019-10210-3
- [2] Meier-Kolthoff JP, Sardà Carbasse J, Peinado-Olarte RL, Göker M. TYGS and LPSN: a database tandem for fast and reliable genome-based classification and nomenclature of prokaryotes. *Nucleic Acid Res.* 2022;50: D801–D807. DOI: 10.1093/nar/gkab902
- [3] Ondov BD, Treangen TJ, Melsted P, et al. Mash: Fast genome and metagenome distance estimation using MinHash. *Genome Biol* 2016;17: 1–14. DOI: 10.1186/s13059-016-0997-x
- [4] Lagesen K, Hallin P. RNAmmer: consistent and rapid annotation of ribosomal RNA genes. *Nucleic Acids Res. Oxford Univ Press*; 2007;35: 3100–3108. DOI: 10.1093/nar/gkm160
- [5] Camacho C, Coulouris G, Avagyan V, Ma N, Papadopoulos J, Bealer K, et al. BLAST+: architecture and applications. *BMC Bioinformatics.* 2009;10: 421. DOI: 10.1186/1471-2105-10-421
- [6] Meier-Kolthoff JP, Auch AF, Klenk H-P, Göker M. Genome sequence-based species delimitation with confidence intervals and improved distance functions. *BMC Bioinformatics.* 2013;14: 60. DOI: 10.1186/1471-2105-14-60
- [7] Lefort V, Desper R, Gascuel O. FastME 2.0: A comprehensive, accurate, and fast distance-based phylogeny inference program. *Mol Biol Evol.* 2015;32: 2798–2800. DOI: 10.1093/molbev/msv150
- [8] Farris JS. Estimating phylogenetic trees from distance matrices. *Am Nat.* 1972;106: 645–667.
- [9] Kreft L, Botzki A, Coppens F, Vandepoele K, Van Bel M. PhyD3: A phylogenetic tree viewer with extended phyloXML support for functional genomics data visualization. *Bioinformatics.* 2017;33: 2946–2947. DOI: 10.1093/bioinformatics/btx324
- [10] Meier-Kolthoff JP, Hahnke RL, Petersen J, Scheuner C, Michael V, Fiebig A, et al. Complete genome sequence of DSM 30083^T, the type strain (U5/41^T) of *Escherichia coli*, and a proposal for delineating subspecies in microbial taxonomy. *Stand Genomic Sci.* 2014;9: 2. DOI: 10.1186/1944-3277-9-2