

| Consensus | 1 | 10 | 11 | | | | | | | | |
|---|-----|----|-----|---|---|---|---|---|---|---|---|
| Identity | | | | | | | | | | | |
| | 177 | | 187 | | | | | | | | |
| 1. <i>Campylobacter jejuni</i> | T | L | I | K | E | L | K | R | L | G | I |
| 2. <i>Campylobacter jejuni</i> subsp. <i>jejuni</i> CG8486 | . | . | . | . | . | . | . | . | . | . | . |
| 3. <i>Campylobacter jejuni</i> subsp. <i>jejuni</i> CG8421 | . | . | . | . | . | . | . | . | . | . | . |
| 4. <i>Campylobacter jejuni</i> RM1221 | . | . | . | . | . | . | . | . | . | . | . |
| 5. <i>Campylobacter jejuni</i> subsp. <i>jejuni</i> 260.94 | . | . | . | . | . | . | . | . | . | . | . |
| 6. <i>Campylobacter jejuni</i> subsp. <i>jejuni</i> LMG 23223 | . | . | . | . | . | . | . | . | . | . | . |
| 7. <i>Campylobacter jejuni</i> subsp. <i>jejuni</i> D2600 | . | . | . | . | . | . | . | . | . | . | . |
| 8. <i>Campylobacter jejuni</i> subsp. <i>jejuni</i> 414 | . | . | . | . | . | . | . | . | . | . | . |
| 9. <i>Campylobacter jejuni</i> subsp. <i>jejuni</i> CF93-6 | . | . | . | . | . | . | . | . | . | . | . |
| 10. <i>Campylobacter jejuni</i> subsp. <i>jejuni</i> 2008-979 | . | . | . | . | . | . | . | . | . | . | . |
| 11. <i>Campylobacter jejuni</i> subsp. <i>jejuni</i> 60004 | . | . | . | . | . | . | . | . | . | . | . |
| 12. <i>Campylobacter jejuni</i> | . | . | . | . | . | . | . | . | . | . | . |
| 13. <i>Campylobacter jejuni</i> subsp. <i>jejuni</i> DFVF1099 | . | . | . | . | . | . | . | . | . | . | . |
| 14. <i>Campylobacter coli</i> 111-3 | S | . | N | . | . | . | K | . | D | . | . |
| 15. <i>Campylobacter coli</i> RM2228 | S | . | N | . | . | . | K | . | D | . | . |
| 16. <i>Campylobacter coli</i> 1098 | S | . | N | . | . | . | K | . | D | . | . |
| 17. <i>Campylobacter upsaliensis</i> JV21 | N | . | . | . | . | . | . | . | . | D | . |
| 18. <i>Campylobacter upsaliensis</i> RM3195 | N | . | . | . | . | . | . | . | . | D | . |
| 19. <i>Campylobacter lari</i> RM2100 | S | . | . | D | . | . | A | M | N | . | . |
| 20. <i>Campylobacter fetus</i> subsp. <i>fetus</i> 82-40 | G | I | N | D | . | . | K | . | N | . | . |
| 21. <i>Campylobacter showae</i> RM3277 | S | I | V | R | D | . | K | . | . | . | . |
| 22. <i>Campylobacter rectus</i> RM3267 | S | I | V | R | D | . | K | . | . | . | . |
| 23. <i>Campylobacter curvus</i> 525.92 | S | I | V | R | D | . | N | . | . | . | . |
| 24. <i>Campylobacter concisus</i> 13826 | S | I | V | R | D | . | K | . | . | . | . |
| 25. <i>Campylobacter</i> sp. 10_1_50 | S | I | V | R | D | . | K | . | . | . | . |
| 26. <i>Campylobacter hominis</i> ATCC BAA-381 | N | I | V | . | S | . | D | . | . | . | . |
| 27. <i>Sulfurospirillum barnesii</i> SES-3 | S | I | V | Q | D | . | S | K | . | . | . |
| 28. <i>Sulfurospirillum deleyianum</i> DSM 6946 | S | I | V | Q | . | . | S | K | . | . | . |
| 29. <i>Arcobacter nitrofigilis</i> DSM 7299 | E | I | . | N | Q | . | T | L | R | . | . |
| 30. <i>Campylobacter gracilis</i> RM3268 | S | I | V | R | D | . | S | D | . | . | . |
| 31. <i>Arcobacter</i> sp. L | E | I | . | H | Q | . | T | K | I | N | . |
| 32. <i>Arcobacter butzleri</i> RM4018 | E | I | . | H | Q | . | T | K | I | N | . |
| 33. <i>Helicobacter hepaticus</i> ATCC 51449 | N | I | . | L | R | . | T | E | . | D | . |
| 34. <i>Helicobacter cinaedi</i> CCUG 18818 | N | I | . | L | K | . | T | Q | . | . | . |
| 35. <i>Helicobacter cinaedi</i> PAGU611 | N | I | . | L | K | . | T | Q | . | . | . |
| 36. uncultured <i>Sulfuricurvum</i> sp. RIFRC-1 | S | V | . | S | Q | . | V | E | Y | . | . |
| 37. <i>Sulfurimonas denitrificans</i> DSM 1251 | . | V | . | Q | . | . | V | S | Y | . | . |
| 38. <i>Sulfurovum</i> sp. AR | N | I | . | Q | . | . | V | D | . | D | M |
| 39. <i>Helicobacter bilis</i> ATCC 43879 | K | I | . | Q | T | . | V | E | M | D | . |
| 40. <i>Helicobacter felis</i> ATCC 49179 | K | I | . | E | H | . | V | E | M | N | . |
| 41. <i>Helicobacter mustelae</i> 12198 | K | I | . | Q | K | . | V | K | . | D | . |
| 42. <i>Sulfuricurvum kujiense</i> DSM 16994 | G | V | . | S | Q | . | V | E | Y | . | . |
| 43. <i>Helicobacter cetorum</i> MIT 00-7128 | K | I | . | E | S | . | I | E | . | N | . |
| 44. <i>Helicobacter pylori</i> Aklavik117 | K | I | . | E | S | . | I | K | . | N | . |
| 45. <i>Helicobacter cetorum</i> MIT 99-5656 | K | I | . | E | S | . | V | E | . | N | . |
| 46. <i>Nitratiruptor</i> sp. SB155-2 | K | V | . | N | . | . | K | S | . | . | . |
| 47. <i>Helicobacter suis</i> HS1 | K | I | . | E | H | . | V | E | R | K | . |
| 48. <i>Helicobacter pylori</i> Shi417 | K | I | . | E | S | . | I | K | . | N | . |
| 49. <i>Helicobacter pylori</i> CPY1662 | K | I | . | E | S | . | I | E | . | N | . |
| 50. <i>Sulfurimonas gotlandica</i> GD1 | K | V | . | H | Q | . | V | S | Y | D | . |
| 51. <i>Helicobacter pylori</i> 83 | K | I | . | E | S | . | I | K | . | N | . |
| 52. <i>Helicobacter bizzozeronii</i> CIII-1 | K | I | . | E | R | . | V | E | M | N | . |
| 53. <i>Helicobacter pylori</i> FD423 | K | I | . | Q | S | . | I | E | . | N | . |
| 54. <i>Helicobacter pylori</i> CPY3281 | K | I | . | E | N | . | I | G | . | N | . |
| 55. <i>Helicobacter pylori</i> CPY1124 | K | I | . | E | S | . | I | G | . | N | . |
| 56. <i>Helicobacter pylori</i> PeCan4 | K | I | . | E | S | . | I | G | . | N | . |
| 57. <i>Helicobacter pylori</i> Shi470 | R | I | . | E | S | . | I | G | . | N | . |
| 58. <i>Helicobacter pylori</i> Hp P-41 | R | I | . | E | S | . | I | G | . | N | . |
| 59. <i>Helicobacter pylori</i> Aklavik86 | K | I | . | E | S | . | I | G | . | N | . |
| 60. <i>Helicobacter pylori</i> F32 | K | I | . | E | S | . | I | K | . | N | . |
| 61. <i>Helicobacter pylori</i> GAM264Ai | R | I | . | E | S | . | I | G | . | N | . |
| 62. <i>Helicobacter pylori</i> GAM114Ai | R | I | . | E | S | . | I | G | . | N | . |
| 63. <i>Helicobacter pylori</i> HP116Bi | R | I | . | E | S | . | I | G | . | N | . |
| 64. <i>Helicobacter pylori</i> SouthAfrica7 | K | I | . | E | S | . | I | E | . | N | . |
| 65. <i>Helicobacter pylori</i> Hp A-6 | R | I | . | E | S | . | I | G | . | N | . |
| 66. <i>Helicobacter pylori</i> Hp H-36 | R | I | . | E | S | . | V | G | . | N | . |
| 67. <i>Helicobacter pylori</i> 98-10 | K | I | . | E | S | . | I | G | . | N | . |
| 68. <i>Helicobacter pylori</i> GAM260BSi | K | I | . | E | S | . | I | G | . | N | . |
| 69. <i>Helicobacter pylori</i> NQ4044 | K | I | . | E | S | . | I | E | . | N | . |
| 70. <i>Helicobacter pylori</i> Hp H-28 | K | I | . | E | S | . | I | E | . | N | . |
| 71. <i>Helicobacter pylori</i> J99 | R | I | . | E | S | . | I | G | . | N | . |
| 72. <i>Helicobacter pylori</i> PeCan18 | K | I | . | E | S | . | I | G | . | N | . |
| 73. <i>Helicobacter pylori</i> GAM71Ai | R | I | . | E | S | . | I | G | . | N | . |
| 74. <i>Helicobacter pylori</i> NQ392 | K | I | . | E | S | . | I | G | . | N | . |
| 75. <i>Helicobacter acinonychis</i> str. Sheeba | K | I | . | E | S | . | I | E | . | N | . |
| 76. <i>Helicobacter pylori</i> 2018 | K | I | . | E | S | . | I | G | . | N | . |
| 77. <i>Wolinella succinogenes</i> DSM 1740 | R | I | . | Q | . | . | V | D | F | . | . |
| 78. <i>Helicobacter pylori</i> Hp A-4 | R | I | . | E | S | . | I | G | . | N | . |
| 79. <i>Helicobacter pylori</i> Hp A-8 | K | I | . | E | S | . | I | G | . | N | . |
| 80. <i>Helicobacter pylori</i> SNT49 | K | I | . | Q | S | . | I | G | . | N | . |
| 81. <i>Helicobacter pylori</i> GAM201Ai | R | I | . | E | S | . | I | G | . | N | . |
| 82. <i>Helicobacter pylori</i> R030b | K | I | . | E | S | . | I | G | . | N | . |
| 83. <i>Sulfurimonas autotrophica</i> DSM 16294 | K | V | . | H | Q | . | I | S | Y | D | . |
| 84. <i>Helicobacter pylori</i> 26695 | K | I | . | E | S | . | I | G | . | N | . |
| 85. <i>Helicobacter pylori</i> B128 | K | I | . | E | S | . | I | G | . | N | . |
| 86. <i>Helicobacter pylori</i> Hp A-17 | R | I | . | E | S | . | I | G | . | N | . |
| 87. <i>Helicobacter pylori</i> Gambia94/24 | R | I | . | E | S | . | I | G | . | N | . |
| 88. <i>Helicobacter pylori</i> Hp P-3 | K | I | . | E | S | . | I | G | . | N | . |
| 89. <i>Helicobacter pylori</i> India7 | R | I | . | E | S | . | I | G | . | N | . |
| 90. <i>Helicobacter pylori</i> HUP-B14 | K | I | . | E | S | . | I | G | . | N | . |
| 91. <i>Nitratifactor salsuginis</i> DSM 16511 | A | I | . | R | Q | . | R | D | . | D | . |
| 92. <i>Helicobacter pylori</i> HPKX_438_AG0C1 | K | I | . | E | S | . | I | G | . | N | . |
| 93. <i>Helicobacter pullorum</i> MIT 98-5489 | N | I | . | . | K | . | L | K | F | N | . |
| 94. <i>Helicobacter pylori</i> Hp H-41 | K | I | . | E | S | . | I | G | . | N | . |
| 95. <i>Helicobacter pylori</i> NQ4053 | K | I | . | E | S | . | I | G | . | N | . |
| 96. <i>Sulfurovum</i> sp. NBC37-1 | N | I | . | R | Q | . | V | E | . | D | M |
| 97. <i>Caminibacter mediatlanticus</i> TB-2 | D | . | . | L | . | . | S | N | O | N | . |
| 98. <i>Nautilia profundicola</i> AmH | H | . | V | E | L | . | A | K | E | N | . |
| 99. <i>Helicobacter canadensis</i> MIT 98-5491 | N | I | . | . | K | . | L | K | F | . | . |
| 100. <i>Thiovulum</i> sp. ES | Q | V | . | Q | . | . | E | M | N | . | . |
| 101. <i>Helicobacter pylori</i> Hp P-13 | K | I | . | E | S | . | I | G | . | N | . |