

## Appendix

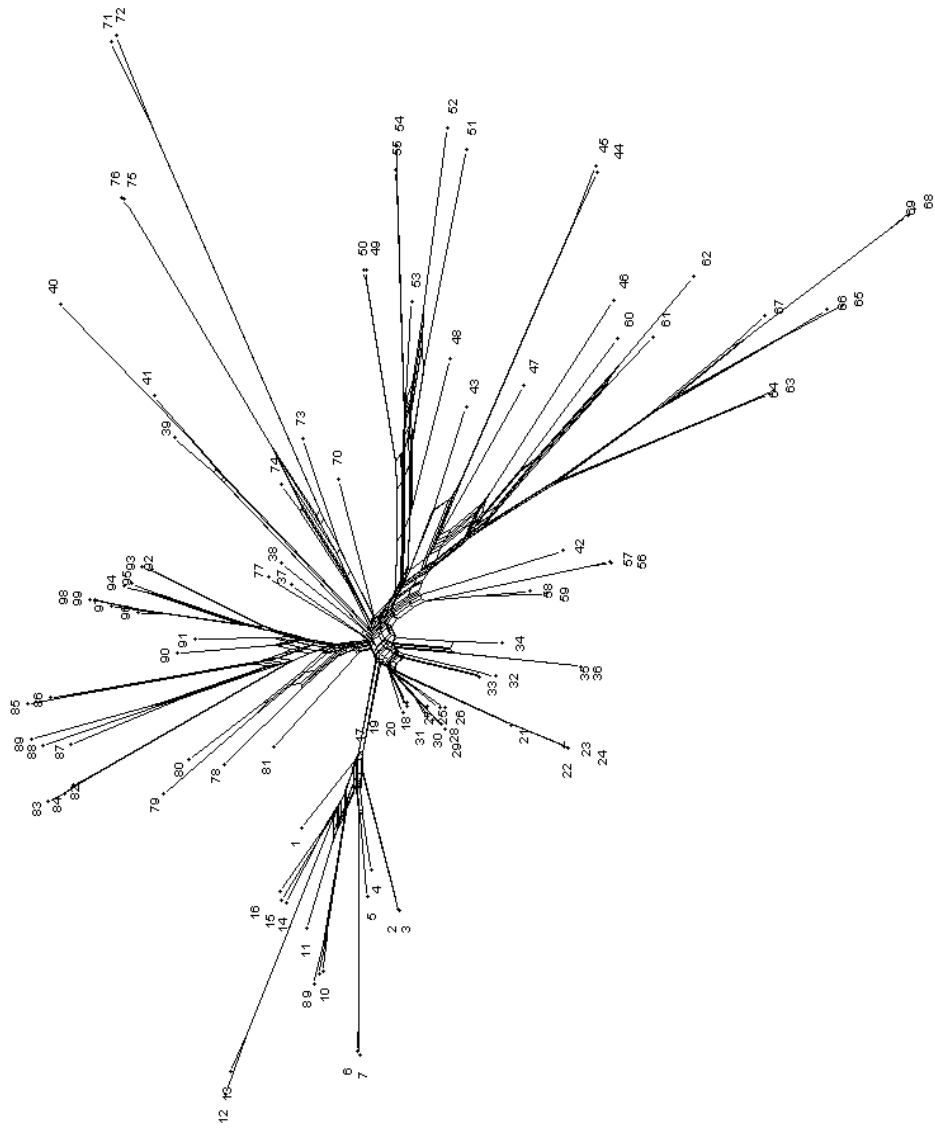
Genome sequences and accession numbers used in analyses:

1. *Halobacterium* sp. NC\_002607
2. *Thermoplasma acidophilum* NC\_002578
3. *Thermoplasma volcanicum* NC\_002689
4. *Aeropyrum pernix* NC\_000854
5. *Pyrobaculum aerophilum* NC\_003364
6. *Sulfolobus solfataricus* NC\_002754
7. *Sulfolobus tokadei* NC\_003106
8. *Pyrococcus furiosus* NC\_003413
9. *Pyrococcus abyssi* NC\_000868
10. *Pyrococcus horokoshii* NC\_000961
11. *Archaeoglobus fulgidus* NC\_000917
12. *Methanosarcina acetivorans* NC\_003552
13. *Methanosarcina mazei* NC\_003901
14. *Methanococcus jannaschii* NC\_000909
15. *Methanobacterium thermoautotrophicum* NC\_000916
16. *Methanopyrus kandleri* NC\_003551
17. *Tropheryma whipplei* NC\_004551
18. *Buchnera aphidicola* Bp NC\_004545
19. *Buchnera aphidicola* Sg NC\_004061
20. *Buchnera* sp. APS NC\_002528
21. *Chlamydia trachomatis* NC\_000117
22. *Chlamydia pneumoniae* NC\_002620
23. *Chlamydophila pneumoniae* CWL029 NC\_000922
24. *Chlamydophila pneumoniae* J138 NC\_002491
25. *Borrelia burgdorferi* NC\_001318
26. *Treponema pallidum* NC\_000919
27. *Mycoplasma pulmonis* NC\_002771
28. *Mycoplasma genitalium* NC\_000908
29. *Mycoplasma pneumoniae* NC\_000912
30. *Mycoplasma penetrans* NC\_004432
31. *Ureaplasma urealyticum* NC\_002162
32. *Rickettsia conorii* NC\_003103
33. *Rickettsia prowazekii* NC\_000963
34. *Campylobacter jejuni* NC\_002163
35. *Helicobacter pylori* 26695 NC\_000915
36. *Helicobacter pylori* J99 NC\_000921
37. *Aquifex aeolicus* NC\_000918
38. *Chlorobium tepidum* NC\_002932
39. *Thermosynechococcus elongatus* NC\_004113
40. *Nostoc* sp. NC\_003272
41. *Synechocystis* sp. BA000022
42. *Nitrosomonas europaea* NC\_004757
43. *Xylella fastidiosa* NC\_002488
44. *Xanthomonas campestris* NC\_003902
45. *Xanthomonas axonopodis* NC\_003919
46. *Pseudomonas aeruginosa* NC\_002516
47. *Ralstonia solanacearum* NC\_003295
48. *Caulobacter crescentus* NC\_002696
49. *Brucella melitensis* NC\_003317
50. *Brucella suis* NC\_004310
51. *Bradyrhizobium japonicum* NC\_004463
52. *Mesorhizobium loti* NC\_002678

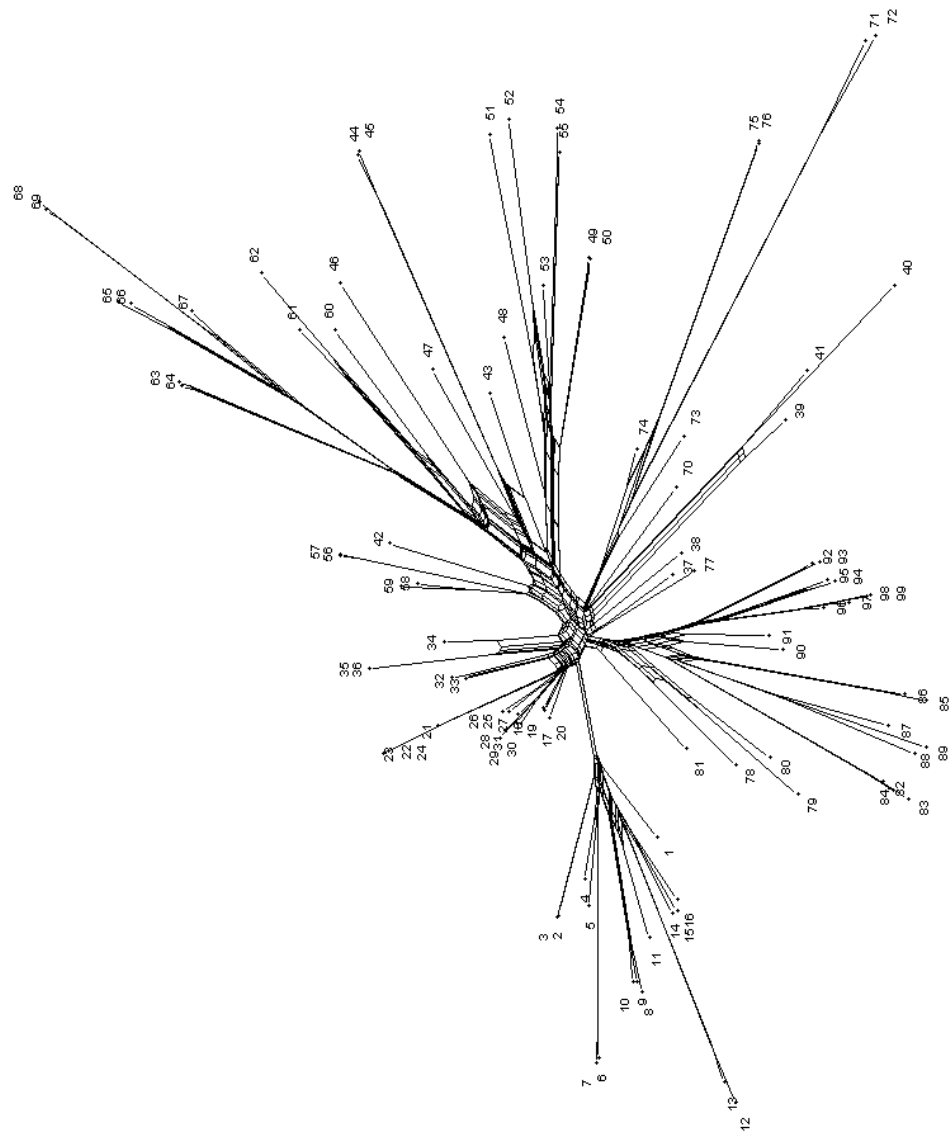
53. *Sinorhizobium meliloti* NC\_003047
54. *Agrobacterium tumefaciens* C58 NC\_003062
55. *Agrobacterium tumefaciens* C58 UW NC\_003304
56. *Neisseria meningitidis* MC58 NC\_003112
57. *Neisseria meningitidis* Z2491 NC\_003116
58. *Haemophilus influenzae* NC\_000907
59. *Pasteurella multilocida* NC\_002663
60. *Shewanella oneidensis* NC\_004347
61. *Vibrio cholerae* NC\_002505
62. *Vibrio parahaemolyticus* NC\_004603
63. *Yersinia pestis* C092 NC\_003143
64. *Yersinia pestis* KIM NC\_004088
65. *Salmonella enterica* NC\_003198
66. *Salmonella typhimurium* NC\_003197
67. *Escherichia coli* K12 NC\_000913
68. *Escherichia coli* O157H7 NC\_002695
69. *Escherichia coli* O157H7 EDL933 NC\_002655
70. *Deinococcus radiodurans* NC\_001263
71. *Streptomyces avertimilis* NC\_003155
72. *Streptomyces coelicolor* NC\_003888
73. *Corynebacterium efficiens* NC\_004369
74. *Mycobacterium leprae* NC\_002677
75. *Mycobacterium tuberculosis* CDC1551 NC\_002755
76. *Mycobacterium tuberculosis* H37Rv NC\_000962
77. *Thermotoga maritima* NC\_000853
78. *Thermoanaerobacter tencongensis* NC\_003869
79. *Clostridium acetobutylicum* NC\_003030
80. *Clostridium perfringens* NC\_003366
81. *Fusobacterium nucleatum* NC\_003454
82. *Staphylococcus aureus* MW2 NC\_003923
83. *Staphylococcus aureus* Mu50 NC\_002758
84. *Staphylococcus aureus* N315 NC\_002745
85. *Listeria innocua* NC\_003212
86. *Listeria monocytogenes* NC\_003210
87. *Oceanobacillus iheyensis* NC\_004193
88. *Bacillus halodurans* NC\_002570
89. *Bacillus subtilis* NC\_000964
90. *Lactobacillus plantarum* NC\_004567
91. *Lactococcus lactis* NC\_002662
92. *Streptococcus pneumoniae* R6 NC\_003098
93. *Streptococcus pneumoniae* NC\_003028
94. *Streptococcus agalactiae* 2603VR NC\_004116
95. *Streptococcus agalactiae* NEM316 NC\_004368
96. *Streptococcus pyogenes* NC\_002737
97. *Streptococcus pyogenes* MGAS8232 NC\_003485
98. *Streptococcus pyogenes* MGAS315 NC\_004070
99. *Streptococcus pyogenes* SSI1 NC\_004606

**Overleaf.** NeighborNet output for data sets derived from the homology criteria 10/30, 20/40, 30/50, 40/60, 50/70, and 60/80. Genomes are indicated by numbers, which correspond to sequences indicated above.

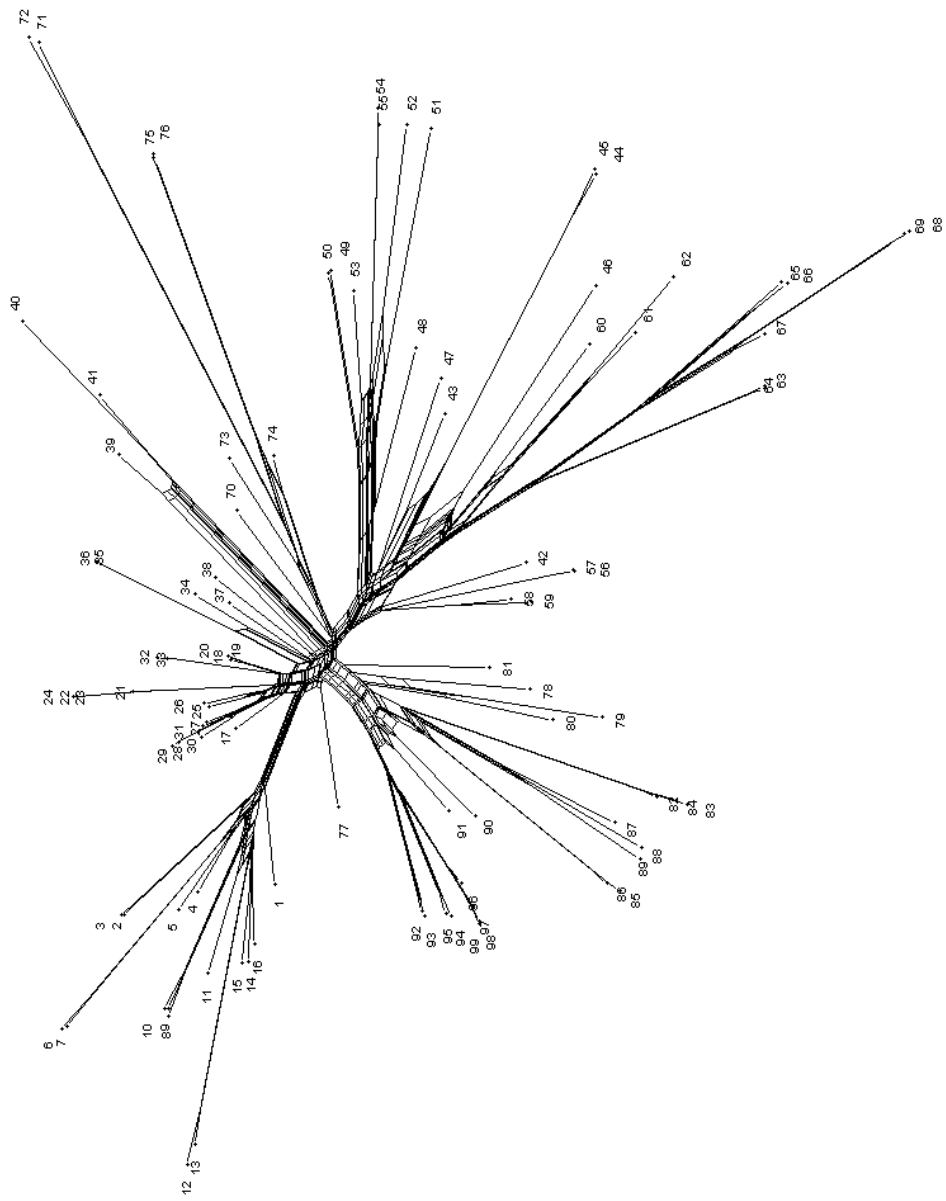
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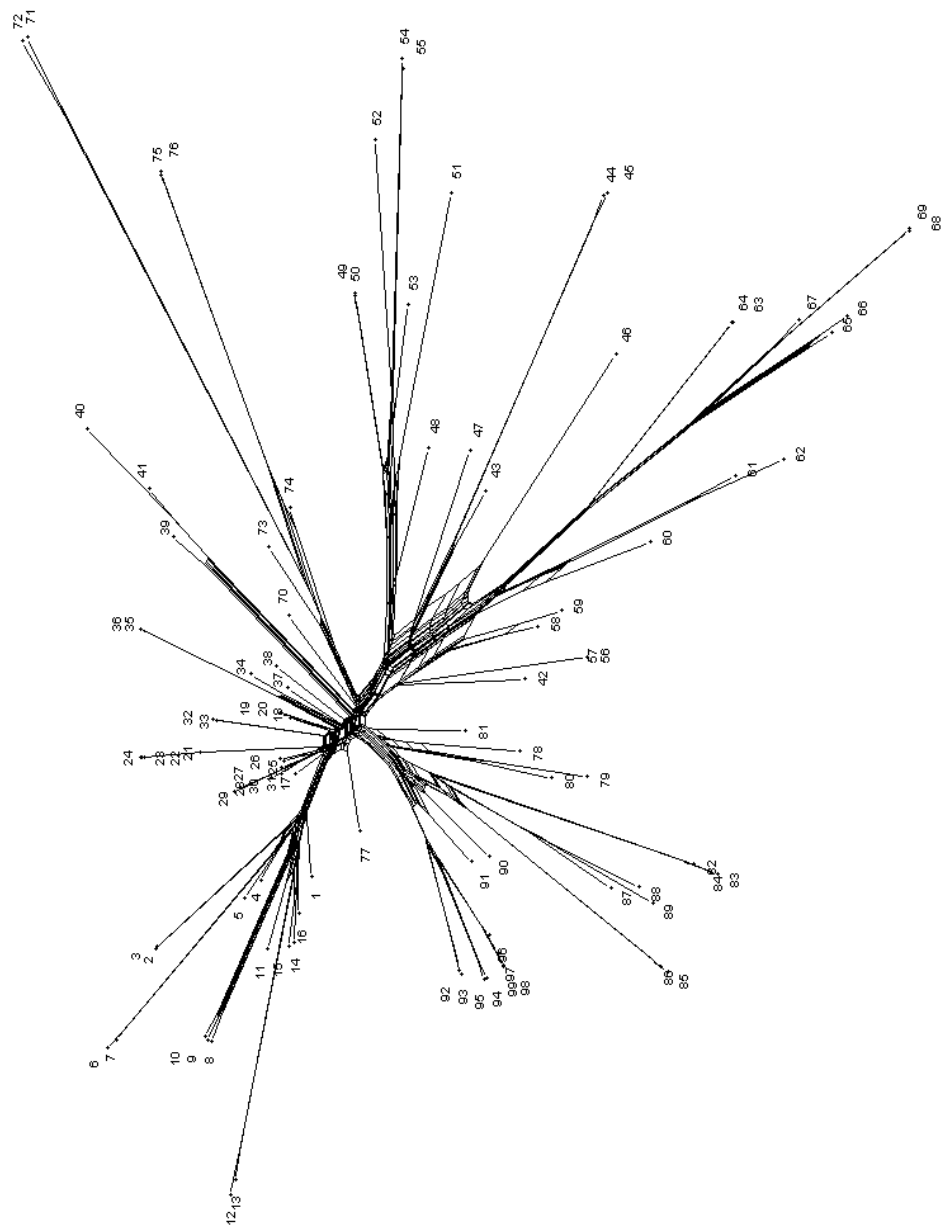
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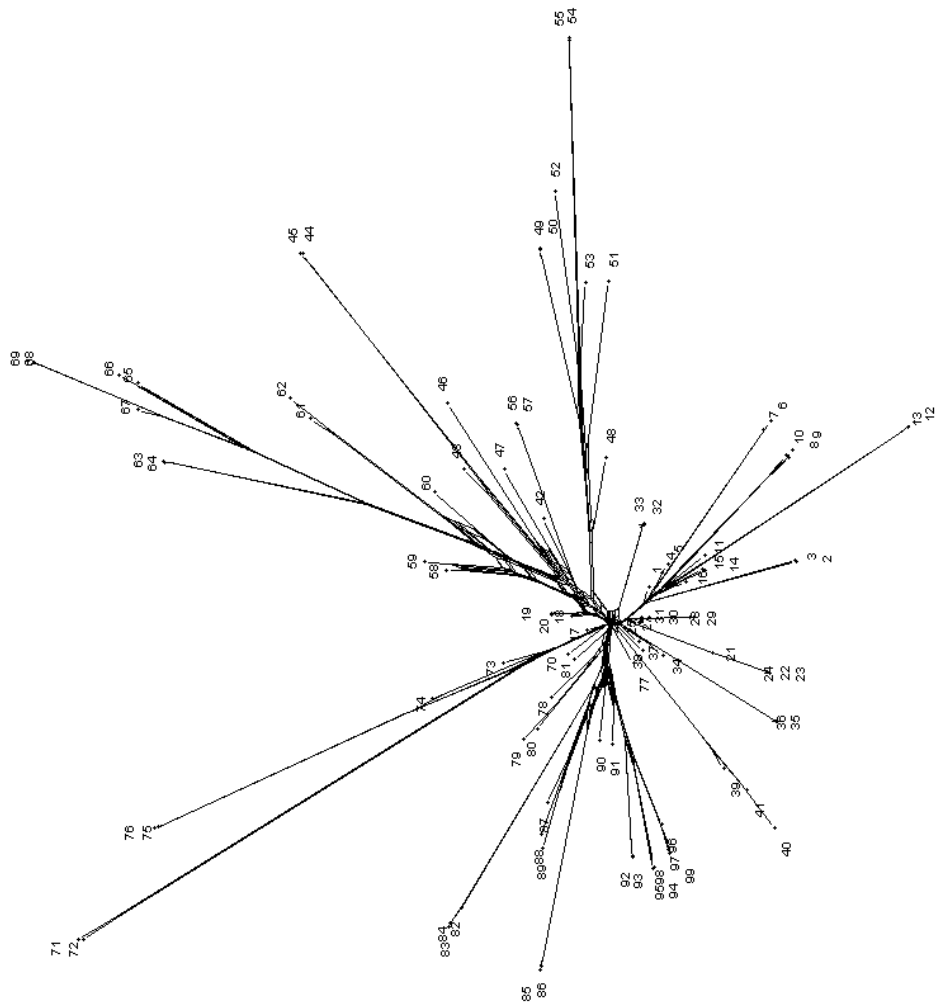
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