Supplementary Table 2. Summary of genome sequence data from 81 prokaryotes.

Species	Estimated genome size (N, kb)	Estimated gene number (n)	Estimated ratio of coding sequence size (r)	Reference
Aeropyrum pernix	1670.00	1688	0.860	Kawarabayasi, Y. , et al. *DNA Res* 1999. 6 : 83-101, 145-52.
Agrobacterium tumefaciens C58	5674.06	5419	0.883	Wood, D.W. , et al. *Science* 2001. 294 : 2317-23.
Aquifex aeolicus	1551.00	1606	0.930	Deckert, G. , et al. *Nature* 1998. 392 : 353-8.
Archaeoglobus fulgidus	2178.40	2436	0.922	Klenk, H.P. , et al. *Nature* 1997. 390 : 364-70.
Auifex aeolicus	1551.34	1512	0.930	Deckert, G., et al. *Nature* 1998. 392: 353-8.
Bacillus halodurans	4202.35	4066	0.848	Takami, H. , et al. *Nucleic Acids Res* 2000. 28 : 4317-31.
Bacillus subtilis	4214.81	4100	0.870	Takami, H. , et al. *Nucleic Acids Res* 2000. 28 : 4317-31.
Borrelia burgdorferi	1443.73	1283	0.937	Fraser, C.M. , et al. *Nature* 1997. 390 : 580-6.
Brucella melitensis	3294.94	3197	0.870	DelVecchio, V.G. , et al. *Proc Natl Acad Sci U S A* 2002. 99 : 443-8.
Buchnera aphidicola (Ap)	640.00	618	0.867	Tamas, I., et al. *Science* 2002. 296 : 2376-9.
Buchnera aphidicola (Bp)	618.00	553	0.836	van Ham, R.C. , et al. *Proc Natl Acad Sci U S A* 2003. 100 : 581-6.
Buchnera aphidicola (Sg)	640.00	545	0.830	Tamas, I.,et al. *Science* 2002. 296 : 2376-9.
Campylobacter jejuni	1641.18	1654	0.943	Parkhill, J. , et al. *Nature* 2000. 404 : 502-6.
Caulobacter crescentus	4016.94	3767	0.906	Nierman, W.C. , et al. *Proc Natl Acad Sci U S A* 2001. 98 : 4136-41.
Chlamydia trachomatls	1043.00	935	0.910	T. D. Read, et al. *Nucleic Acids Research* 2003, 31: 2134-47.
Chlamydophila pneumoniae	1230.00	1094	0.890	Mutsunori Shirai, et al. *Nucleic Acids Research* 2000. 28: 2311-2314.
Chlorobium tepidum TLS	2154.95	2288	0.889	Eisen, J.A. , et al. *Proc Natl Acad Sci U S A* 2002. 99 : 9509-14.
Chromobacterium violaceum	4751.08	4431	0.890	Brazilian Nat. Genome Project Consort: *P N A S U S A* 2003. 100 : 11660-5.

Cloistridium acetobutylicum	3940.88	3740	0.880	Nolling, J. , et al. *J Bacteriol* 2001. 183 : 4823-38.
Clostridium perfringens	3031.43	2660	0.831	Shimizu, T. , et al. *Proc Natl Acad Sci U S A* 2002. 99 : 996-1001.
Coxiella burnetii	1995.28	2094	0.890	Seshadri, R. , et al. *Proc Natl Acad Sci U S A* 2003. 100 : 5455-60.
Dienococcus radiodurans	3284.16	3187	0.909	White, O. , et al. *Science* 1999. 286 : 1571-7.
Encephalitozoon cuniculi	2507.52	1997	0.740	Katinka, M.D. , et al. *Nature* 2001. 414 : 450-3.
Enterococcus faecalis	3218.03	3182	0.880	Paulsen, I.T. , et al. *Science* 2003. 299 : 2071-4.
Eschelichia coli 0157:H7	5500.00	5447	0.880	Hayashi, T. , et al. *DNA Res* 2001. 8 : 11-22.
Eschelichia coli K-12	4641.00	4288	0.878	Hayashi, T. , et al. *DNA Res* 2001. 8 : 11-22.
Fusobacterium nucleatum	2714.50	2067	0.898	Kapatral, V. , et al. *J Bacteriol* 2002. 184 : 2005-18.
Haemophilus influenzae Rd	4524.89	4553	0.850	Fleischmann, R.D. , et al. *Science* 1995. 269 : 496-512.
Halobacterium sp.	2570.00	2640	0.860	Wailap Victor Ng, et al. *Proc Natl Acad Sci U S A* 2000. 97: 12176–12181.
Helicobacter helaticus	1799.15	1875	0.930	Suerbaum, S. , et al. *Proc Natl Acad Sci U S A* 2003. 100 : 7901-6.
Helicobacter pylori 26695	1667.87	1590	0.910	Alm, R.A. , et al. *Nature* 1999. 397 : 176-80.
Helicobacter pylori J99	1643.83	1495	0.908	Alm, R.A. , et al. *Nature* 1999. 397 : 176-80.
Lactococcus lactis sp. Lactis IL 1403	2365.59	2310	0.874	Bolotin, A., et al. *Genome Res* 2001. 11 : 731-53.
Listeria innocua	3011.21	2973	0.903	Glaser, P. , et al. *Science* 2001. 294 : 849-52.
Listeria monocytogenes	2944.53	2853	0.903	Glaser, P. , et al. *Science* 2001. 294 : 849-52.
Mesorhizobium loti b	7036.07	6752	0.858	Kaneko, T. , et al. *DNA Res* 2000. 7 : 331-8.
Methanobacterium thermoautotrophicum	1751.38	1855	0.920	Smith, D.R. , et al. *J Bacteriol* 1997. 179 : 7135-55.
Methanococcus jannaschii	1734.00	1738	0.860	Bult, C.J. , et al. *Science* 1996. 273 : 1058-73.

Mycobacterium bovis	4345.49	3951	0.910	Garnier, T. , et al. *Proc Natl Acad Sci U S A* 2003. 100 : 7877-82.
Mycobacterium leprae	3288.00	1653	0.500	Douglas R. Smith, et al. *Genome Research* 1997.7: 802-819.
Mycobacterium tuberculosis	4411.53	3924	0.910	Cole, S.T. , et al. *Nature* 1998. 393 : 537-44.
Mycoplasma genitalium	580.07	470	0.860	Fraser, C.M. , et al. *Science* 1995. 270 : 397-403.
Mycoplasma pneumoniae	816.00	721	0.920	Thomas Dandekar, , et al. *Nucleic Acids Research* 2000. 28: 3278-88.
Mycoplasma pulmonis	963.88	782	0.914	Chambaud, I. , et al. *Nucleic Acids Res* 2001. 29 : 2145-53.
Nanoarchaeum equitans	490.89	552	0.950	Waters, E. , et al. *Proc Natl Acad Sci U S A* 2003. 100 : 12984-8.
Neisseria meningitidis MC58	2272.00	2150	0.800	Herve´ Tettelin, et al. *Science* 2000. 287: 1809-15.
Neisseria meningitidis Z2491	2184.41	2121	0.829	Parkhill, J. , et al. *Nature* 2000. 404 : 502-6.
Pasteurella multocida	2257.49	2014	0.889	May, B.J., et al. *Proc Natl Acad Sci U S A* 2001. 98 : 3460-5.
Prochlorococcus marinus	1751.08	1884	0.885	Dufresne, A. , et al. *Proc Natl Acad Sci U S A* 2003. 100 : 10020-5.
Prochlorococcus MIT9313	2410.87	2275	0.820	Rocap, G. , et al. *Nature* 2003. 424 : 1042-7.
Procholorococcus MED 4	1657.99	1716	0.880	Rocap, G. , et al. *Nature* 2003. 424 : 1042-7.
Pseudomonas aeruginosa	6264.40	5570	0.894	Stover, C.K. , et al. *Nature* 2000. 406 : 959-64.
Pseudomonas syringe pv. Tomato DC300	6397.13	5615	0.868	Buell, C.R. , et al. *Proc Natl Acad Sci U S A* 2003. 100 : 10181-6.
Pyrobaculum aerophilum	2200.00	2587	0.880	Fitz-Gibbon, S.T., et al. *Proc Natl Acad Sci U S A* 2002. 99 : 984-9.
Pyrococcus abyssi	1765.00	1802	0.920	Chinen, A., et al. *Gene* 2000. 259:109–121.
Pyrococcus horikoshii	1738.51	2061	0.913	Kawarabayasi, Y. , et al. *DNA Res* 1998. 5 : 55-76.
Ralstonia solanacearum	5810.92	5129	0.873	Salanoubat, M. , et al. *Nature* 2002. 415 : 497-502.

Rickettsia conorii	1268.76	1374	0.810	Ogata, H. , et al. *Science* 2001. 293 : 2093-8.
Rickettsia prowazekii	1111.52	834	0.760	Ogata, H. , et al. *Science* 2001. 293 : 2093-8.
Salmonella enterica serovar Typhi CT18	4809.04	4599	0.876	Parkhill, J. , et al. *Nature* 2001. 413 : 848-52.
Sinorhizobium meliloti	6691.00	6258	0.870	Francis Galibert, et al. *Science* 2001. 293: 668-672.
Staphylococcus aureus Mu50	2878.08	2687	0.831	Kuroda, M. , et al. *Lancet* 2001. 357 : 1225-40.
Staphylococcus aureus N315	2813.64	2595	0.835	Kuroda, M. , et al. *Lancet* 2001. 357 : 1225-40.
Streptococcus MGAS315	1900.52	1865	0.872	Beres, S.B. , et al. *Proc Natl Acad Sci U S A* 2002. 99 : 10078-83.
Streptococcus pneumoniae	2039.00	2113	0.830	Herve´ Tettelin, et al. *Science* 2001. 293: 498-506.
Streptococcus pyogenes	1852.00	1768	0.840	Joseph J. Ferretti, et al. *Proc Natl Acad Sci U S A* 2001. 98: 4658-63.
Streptomyces coelicolor	8670.00	7825	0.889	Bentley, S.D. , et al. *Nature* 2002. 417 : 141-7.
Sulfolobus solfataricus	2592.00	3012	0.850	She Q, et al. *Proc Natl Acad Sci U S A* 2001. 98: 7835-40.
Sulfolobus tokodaii	2695.00	2965	0.850	Kawarabayasi Y,et al. *DNA Res.* 2001. 8(4):123-40.
Synechocystis PCC6803	3574.00	3203	0.880	Kaneko, T. et al. *DNA Res.*1996. 3:109-36.
Thermoanerobacter tengcogensis	2689.45	2588	0.871	Bao, Q., et al. *Genome Res*. 2002. 12 : 689-700.
Thermoplasma acidophilum	1564.91	1509	0.870	Ruepp, A. , et al. *Nature* 2000. 407 : 508-13.
Thermoplasma volcanium	1585.00	1548	0.860	Tsuyoshi Kawashima, et al. *Proc Natl Acad Sci U S A* 2000. 97: 14257-62.
Thermotoga martima	1860.73	1877	0.950	Nelson, K.E. , et al. *Nature* 1999. 399 : 323-9.
Treponma pallidum	1138.01	1041	0.929	Fraser, C.M. , et al. *Science* 1998. 281 : 375-88.
Ureaplasma urealyticum	752.00	650	0.920	Glass, J.I.,et al. *Nature* 2000. 407 : 757-62.

Vibrio cholerae	4034.07	3885	0.875	Heidelberg, J.F. , et al. *Nature* 2000. 406 : 477-83.
Wolinella succinogenes	2110.36	2046	0.940	Baar, C. , et al. *Proc Natl Acad Sci U S A* 2003. 100 : 11690-5.
Xanthomonas axonopodis	5175.55	4313	0.856	da Silva, A.C. , et al. *Nature* 2002. 417 : 459-63.
Xanthomonas campestris	5076.19	4182	0.843	da Silva, A.C. , et al. *Nature* 2002. 417 : 459-63.
Xylella fastidosa	2679.31	2782	0.880	Simpson, A.J. , et al. *Nature* 2000. 406 : 151-7.