

Supplementary Table S2. List of genera with the conservation of rRNA operon disruption.

Genus	Unlinked genomes*	Genome size (average, bp)	rRNA copy number		Characteristics	Habitat (host)	Reference
			16S	23S			
<i>Anaplasma</i>	8	1349657.5	1	1	Pathogen (humans, mammals; anaplasmosis)	Ticks	[1-3]
<i>Borrelia</i>	20	1192776.1	1	1	Pathogen (humans, mammals; relapsing fever)	Ticks, lice	[4-6]
<i>Borrelia</i>	16	1265183.6	1	1~2	Pathogen (humans; lyme disease)	Ticks, lice	[4,5,7-9]
<i>Brachyspira</i>	9	2976921.6	1	1	Pathogen (humans, mammals)	Various animals	[10-14]
<i>Buchnera</i>	24	592061.1	1	1	Symbiont (aphids)	Aphids	[15]
<i>Dehalococcoides</i>	25	1403003.4	1	1	Organohalide respiration	Environmental sediments	[16]
<i>Ehrlichia</i>	15	1260075.1	1	1	Pathogen (humans, mammals; ehrlichiosis)	Ticks	[17-20]
<i>Eperythrozoon A</i>	6	687613.3	1	1	Pathogen (mammals)	Arthropods	[21]
<i>Gimesia</i>	6	7922255.7	2	1	Isolated from ocean (not characterized)	Ocean	[22]
<i>Helicobacter</i>	175	1638038.3	1~2	1~2	Pathogen (humans, mammals)	Humans, mammals	[23-25]
<i>Leptospira</i>	29	4452983.9	2	2	Pathogen (humans, mammals; leptospirosis)	Stagnant water, mammals	[26]
<i>Orientia</i>	8	2171624.8	1	1	Pathogen (humans; typhus, Tsutsugamushi disease)	Mites	[27,28]
<i>Rickettsia</i>	68	1270779.6	1	1	Pathogen (humans; typhus)	Arthropods, nematodes	[28]
<i>Thermus</i>	15	2253012.2	2	2	High temperature tolerance	Hot water	[29]
<i>TM7x</i>	4	770656.0	1	1	Pathogen (bacteria)	Bacteria	[30]
<i>Wolbachia</i>	23	1308337.4	1	1	Symbiont (insects)	Nematodes	[31,32]

* Genera with only unlinked rRNA operons and with four or more genomes were included.

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