

Resource Summary Report

Generated by [FDI Lab - SciCrunch.org](https://fdi-lab.sci-crunch.org) on May 14, 2025

rRNDB

RRID:SCR_007905

Type: Tool

Proper Citation

rRNDB (RRID:SCR_007905)

Resource Information

URL: <https://rrndb.umms.med.umich.edu>

Proper Citation: rRNDB (RRID:SCR_007905)

Description: THIS RESOURCE IS NO LONGER IN SERVICE, documented August 19, 2016. It is a curated database that catalogs the numbers of genes that encode for 16S, 23S and 5S ribosomal RNAs in Bacteria and Archaea. Typically, a single copy of each of these genes is clustered into a rRNA operon, with as many as 15 rRNA operons present per genome. The genomic locus for any of the rRNA encoding genes is ?rrn? ? hence the name of this database. Because the number of genes encoding tRNAs is positively correlated with the number of rRNA-encoding genes (1), tRNA gene copy number is also cataloged in the rrnDB. Data are gathered both from sequenced genomes and from published articles that include estimates of the number of rRNA encoding genes.

Synonyms: rRNDB

Resource Type: data or information resource, database

Funding:

Availability: THIS RESOURCE IS NO LONGER IN SERVICE

Resource Name: rRNDB

Resource ID: SCR_007905

Old URLs: <http://ribosome.mmg.msu.edu/rrndb/index.php>

Record Creation Time: 20220129T080244+0000

Record Last Update: 20250507T060532+0000

Ratings and Alerts

No rating or validation information has been found for rRNDB.

No alerts have been found for rRNDB.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 80 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Srinivas M, et al. (2025) Evaluating the efficiency of 16S-ITS-23S operon sequencing for species level resolution in microbial communities. Scientific reports, 15(1), 2822.

Sampson HR, et al. (2025) Air pollution modifies colonisation factors in beneficial symbiont *Snodgrassella* and disrupts the bumblebee gut microbiome. NPJ biofilms and microbiomes, 11(1), 2.

Zhuang Y, et al. (2025) Core microbe *Bifidobacterium* in the hindgut of calves improves the growth phenotype of young hosts by regulating microbial functions and host metabolism. Microbiome, 13(1), 13.

Vályi P, et al. (2024) The oral microbiome of a family including Papillon-Lefèvre-syndrome patients and clinically healthy members. BMC oral health, 24(1), 158.

Dommann J, et al. (2024) A novel barcoded nanopore sequencing workflow of high-quality, full-length bacterial 16S amplicons for taxonomic annotation of bacterial isolates and complex microbial communities. mSystems, 9(10), e0085924.

Wang H, et al. (2024) Activated sympathetic nerve post stroke downregulates Toll-like receptor 5 and disrupts the gut mucosal barrier. Cell reports. Medicine, 5(10), 101754.

Lee SJ, et al. (2024) Therapeutic Potential of *Lactiplantibacillus plantarum* FB091 in Alleviating Alcohol-Induced Liver Disease through Gut-Liver Axis. Journal of microbiology and biotechnology, 34(10), 2100.

Miao J, et al. (2024) Deep learning for predicting 16S rRNA gene copy number. Scientific reports, 14(1), 14282.

- Mondal N, et al. (2024) Aquificae overcomes competition by archaeal thermophiles, and crowding by bacterial mesophiles, to dominate the boiling vent-water of a Trans-Himalayan sulfur-borax spring. *PloS one*, 19(10), e0310595.
- Ma Z, et al. (2024) Quinolone-mediated metabolic cross-feeding develops aluminium tolerance in soil microbial consortia. *Nature communications*, 15(1), 10148.
- Erlandson SR, et al. (2024) Sterile sentinels and MinION sequencing capture active soil microbial communities that differentiate crop rotations. *Environmental microbiome*, 19(1), 30.
- Murvai KP, et al. (2024) The bacterial and yeast microbiota in livestock forages in Hungary. *BMC microbiology*, 24(1), 340.
- Zhuang Y, et al. (2024) The Bifidobacterium-dominated fecal microbiome in dairy calves shapes the characteristic growth phenotype of host. *NPJ biofilms and microbiomes*, 10(1), 59.
- Chen Y, et al. (2024) Cycling and persistence of iron-bound organic carbon in subseafloor sediments. *Nature communications*, 15(1), 6370.
- Zhao Y, et al. (2023) Inter-bacterial mutualism promoted by public goods in a system characterized by deterministic temperature variation. *Nature communications*, 14(1), 5394.
- Peterson CT, et al. (2023) Personalized Response of Parkinson's Disease Gut Microbiota to Nootropic Medicinal Herbs In Vitro: A Proof of Concept. *Microorganisms*, 11(8).
- Sun Y, et al. (2023) Organic fertilization enhances the resistance and resilience of soil microbial communities under extreme drought. *Journal of advanced research*, 47, 1.
- Ivankovi? M, et al. (2023) Top-down structuring of freshwater bacterial communities by mixotrophic flagellates. *ISME communications*, 3(1), 93.
- Peterson CT, et al. (2023) Alteration of Community Metabolism by Prebiotics and Medicinal Herbs. *Microorganisms*, 11(4).
- Nakatsuji T, et al. (2023) Competition between skin antimicrobial peptides and commensal bacteria in type 2 inflammation enables survival of *S. aureus*. *Cell reports*, 42(5), 112494.