

Resource Summary Report

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Rat Genome Database (RGD)

RRID:SCR_006444

Type: Tool

Proper Citation

Rat Genome Database (RGD) (RRID:SCR_006444)

Resource Information

URL: <http://rgd.mcw.edu>

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Description: Database for genetic, genomic, phenotype, and disease data generated from rat research. Centralized database that collects, manages, and distributes data generated from rat genetic and genomic research and makes these data available to scientific community. Curation of mapped positions for quantitative trait loci, known mutations and other phenotypic data is provided. Facilitates investigators research efforts by providing tools to search, mine, and analyze this data. Strain reports include description of strain origin, disease, phenotype, genetics, immunology, behavior with links to related genes, QTLs, sub-strains, and strain sources.

Abbreviations: RGD

Synonyms: , Rat Genome Database, RGD

Resource Type: data or information resource, data repository, database, service resource, storage service resource

Defining Citation: [PMID:23434633](#), [PMID:18996890](#), [PMID:17151068](#)

Keywords: RIN, Resource Information Network, mouse, rat, human, gene, qtl, marker, map, strain, sequence, est, genome, ontology, pathway, comparative genomics, physiology, phenotype, disease, model organism, proteomics, function, genetic, genomic, variation, immunology, behavior, knockout, inbred rat strain, mutant, congenic rat, recombinant inbred rat, data analysis service, organism supplier, genotype, gold standard, FASEB list, RRID Community Authority

Funding: NHLBI

Availability: Free, Freely available

Resource Name: Rat Genome Database (RGD)

Resource ID: SCR_006444

Alternate IDs: nif-0000-00134, r3d100010417, OMICS_01660

Alternate URLs: <https://doi.org/10.17616/R3WK60>

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License URLs: <https://rgd.mcw.edu/wg/general-search/>, <http://rgd.mcw.edu/registration-entry.shtml>, <https://rgd.mcw.edu/wg/about-us/>

Record Creation Time: 20220129T080236+0000

Record Last Update: 20260811T043250+0000

Ratings and Alerts

No rating or validation information has been found for Rat Genome Database (RGD).

No alerts have been found for Rat Genome Database (RGD).

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 280 mentions in open access literature.

Listed below are recent publications. The full list is available at [NIF](#) .

Orgil BO, et al. (2025) Unraveling the genetic blueprint of doxorubicin-induced cardiotoxicity through systems genetics approaches. Cardio-oncology (London, England), 11(1), 53.

Wang J, et al. (2025) Spatial lipidomics reveals altered lipid profiles in TMEM63A mutant rats with hypomyelination. Scientific reports, 15(1), 41398.

Dwinell MR, et al. (2025) Establishing the hybrid rat diversity program: a resource for dissecting complex traits. Mammalian genome : official journal of the International Mammalian Genome Society, 36(1), 25.

Lewandowska MA, et al. (2025) Expression of Neuronal Nicotinic Acetylcholine Receptor and Early Oxidative DNA Damage in Aging Rat Brain-The Effects of Memantine. International journal of molecular sciences, 26(4).

Kumar RR, et al. (2025) In vivo and in vitro experimental models for urolithiasis pathophysiology research. Asian journal of urology, 12(4), 486.

- Lu M, et al. (2024) Identification of the genetic background of laboratory rats through amplicon-based next-generation sequencing for single-nucleotide polymorphism genotyping. *BMC genomic data*, 25(1), 84.
- Dong W, et al. (2024) Deficiency of interleukin-1 receptor antagonist in mice differentially affects bone properties under different genomic backgrounds. *Scientific reports*, 14(1), 19889.
- Li ZA, et al. (2024) Systems genetics of influenza A virus-infected mice identifies TRIM21 as a critical regulator of pulmonary innate immune response. *Virus research*, 342, 199335.
- Hagenauer MH, et al. (2024) Resource: A Curated Database of Brain-Related Functional Gene Sets (Brain.GMT). *bioRxiv : the preprint server for biology*.
- Vedi M, et al. (2023) 2022 updates to the Rat Genome Database: a Findable, Accessible, Interoperable, and Reusable (FAIR) resource. *Genetics*, 224(1).
- Kuramoto T, et al. (2023) Positional cloning of rat mutant genes reveals new functions of these genes. *Experimental animals*, 72(1), 1.
- Duderstadt EL, et al. (2023) Rat Mammary carcinoma susceptibility 3 (Mcs3) pleiotropy, socioenvironmental interaction, and comparative genomics with orthologous human 15q25.1-25.2. *G3 (Bethesda, Md.)*, 13(1).
- Hu Y, et al. (2023) Omic horizon expression: a database of gene expression based on RNA sequencing data. *BMC genomics*, 24(1), 674.
- Barratt KS, et al. (2023) 35th International Mammalian Genome Conference: meeting overview. *Mammalian genome : official journal of the International Mammalian Genome Society*, 1.
- Hu Y, et al. (2023) PANGEA: a new gene set enrichment tool for Drosophila and common research organisms. *Nucleic acids research*, 51(W1), W419.
- Stefanova NA, et al. (2023) The Rat Brain Transcriptome: From Infancy to Aging and Sporadic Alzheimer's Disease-like Pathology. *International journal of molecular sciences*, 24(2).
- Eriskens S, et al. (2022) Time and age dependent regulation of neuroinflammation in a rat model of mesial temporal lobe epilepsy: Correlation with human data. *Frontiers in cell and developmental biology*, 10, 969364.
- Gokula V, et al. (2022) Six Decades of History of Hypertension Research at the University of Toledo: Highlighting Pioneering Contributions in Biochemistry, Genetics, and Host-Microbiota Interactions. *Current hypertension reports*, 24(12), 669.
- Wu SF, et al. (2022) Mitochondrial Transplantation Moderately Ameliorates Retinal Degeneration in Royal College of Surgeons Rats. *Biomedicine*, 10(11).
- Koganti PP, et al. (2022) Functional metabolite reserves and lipid homeostasis revealed by the MA-10 Leydig cell metabolome. *PNAS nexus*, 1(4), pgac215.