

Resource Summary Report

Generated by [NIF](#) on Aug 12, 2026

Sim:SD

RRID:RGD_10395233

Type: Organism

Proper Citation

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Organism Information

URL: <https://rgd.mcw.edu/rgdweb/report/strain/main.html?id=10395233>

Proper Citation: RRID:RGD_10395233

Description: Rattus norvegicus with name Sim:SD from RGD.

Species: Rattus norvegicus

Notes: Received Sprague-Dawley derived breeding stock from Charles River Laboratory in 1958 and crossed with Sprague-Dawley rats received from ARS/Sprague-Dawley in 1975. Caesarean rederived in 1997. [Simonsen Laboratories](#)

Catalog Number: 10395233

Background: outbred

Database: Rat Genome Database (RGD)

Database Abbreviation: RGD

Availability: Unknown

Alternate IDs: 10395233

Organism Name: Sim:SD

Record Creation Time: 20230509T191946+0000

Record Last Update: 20260808T193741+0000

Ratings and Alerts

No rating or validation information has been found for Sim:SD.

No alerts have been found for Sim:SD.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: Rat Genome Database (RGD)

Usage and Citation Metrics

We found 67 mentions in open access literature.

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

Salgado-Puga K, et al. (2026) Exposure to broadband noise during non-REM sleep impairs hippocampal sharp-wave ripples and memory consolidation. *Current biology : CB*, 36(15), 3753.

Yu W, et al. (2026) FTO-dependent m6A methylation mediates gestational diabetes mellitus-induced offspring cardiac senescent hypertrophy and dysfunction. *iScience*, 29(1), 114311.

Das A, et al. (2025) Oxymatrine impedes Alzheimer's progression via the attenuation of hypercholesterolemia and fibrosis. *Metabolic brain disease*, 40(5), 187.

Bosworth AP, et al. (2025) Astrocyte glypican 5 regulates synapse maturation and stabilization. *Cell reports*, 44(3), 115374.

Thompson JM, et al. (2023) Development of a 5-HT7 receptor antibody for the rat: the good, the bad, and the ugly. *Naunyn-Schmiedeberg's archives of pharmacology*.

Liu S, et al. (2023) Astrocytic purinergic signalling contributes to the development and maintenance of neuropathic pain via modulation of glutamate release. *Journal of neurochemistry*.

Ayon-Olivas M, et al. (2023) Dopaminergic Input Regulates the Sensitivity of Indirect Pathway Striatal Spiny Neurons to Brain-Derived Neurotrophic Factor. *Biology*, 12(10).

Andreska T, et al. (2023) DRD1 signaling modulates TrkB turnover and BDNF sensitivity in direct pathway striatal medium spiny neurons. *Cell reports*, 42(6), 112575.

Hasan M, et al. (2023) Chemogenetic activation of astrocytes promotes remyelination and restores cognitive deficits in visceral hypersensitive rats. *iScience*, 26(1), 105840.

Fu J, et al. (2023) JAG-1/Notch signaling axis in the spinal cord contributes to bone cancer pain in rats. *Journal of neurochemistry*, 166(4), 747.

Hayashi MK, et al. (2022) Neurons Induce Tiled Astrocytes with Branches That Avoid Each Other. *International journal of molecular sciences*, 23(8).

Singh A, et al. (2022) Resveratrol attenuates behavioural impairment associated with learning and memory in rats with diabetes induced by a high-fat diet and streptozotocin. *British journal of pharmacology*, 179(19), 4673.

Bhimani RV, et al. (2022) Distinct limbic dopamine regulation across olfactory-tubercle subregions through integration of in vivo fast-scan cyclic voltammetry and optogenetics. *Journal of neurochemistry*, 161(1), 53.

Chivers SB, et al. (2022) Raf kinase inhibitory protein reduces bradykinin receptor desensitization. *Journal of neurochemistry*, 162(2), 156.

Breton JM, et al. (2022) Neural activation associated with outgroup helping in adolescent rats. *iScience*, 25(6), 104412.

Velagic A, et al. (2022) Cardioprotective actions of nitroxyl donor Angeli's salt are preserved in the diabetic heart and vasculature in the face of nitric oxide resistance. *British journal of pharmacology*, 179(16), 4117.

Chen Z, et al. (2022) Single-nucleus chromatin accessibility and RNA sequencing reveal impaired brain development in prenatally e-cigarette exposed neonatal rats. *iScience*, 25(8), 104686.

Pan SM, et al. (2022) Thioredoxin interacting protein drives astrocytic glucose hypometabolism in corticosterone-induced depressive state. *Journal of neurochemistry*, 161(1), 84.

Liu GJ, et al. (2021) Resolvin D1 Attenuates Innate Immune Reactions in Experimental Subarachnoid Hemorrhage Rat Model. *Molecular neurobiology*, 58(5), 1963.

Healey KL, et al. (2021) Effects of adolescent intermittent ethanol on hippocampal expression of glutamate homeostasis and astrocyte-neuronal tethering proteins in male and female rats. *Journal of neuroscience research*, 99(8), 1908.