

Resource Summary Report

Generated by [FDI Lab - SciCrunch.org](#) on Apr 28, 2025

HotHsd:SD

RRID:RGD_5508397

Type: Organism

Proper Citation

RRID:RGD_5508397

Organism Information

URL: <https://rgd.mcw.edu/rgdweb/report/strain/main.html?id=5508397>

Proper Citation: RRID:RGD_5508397

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

Species: Rattus norvegicus

Notes: Originally developed by the Holtzman Company in Madison, Wisconsin, from Sprague Dawley stock in 1947; to Harlan through acquisition in 1986. [Envigo](#)

Catalog Number: 5508397

Background: outbred

Database: Rat Genome Database (RGD)

Database Abbreviation: RGD

Availability: Unknown

Organism Name: HotHsd:SD

Record Creation Time: 20230509T191942+0000

Record Last Update: 20250420T053230+0000

Ratings and Alerts

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

No alerts have been found for HotHsd:SD.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: Rat Genome Database (RGD)

Usage and Citation Metrics

We found 60 mentions in open access literature.

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

Polishchuk A, et al. (2024) BDNF/TrkB signalling, in cooperation with muscarinic signalling, retrogradely regulates PKA pathway to phosphorylate SNAP-25 and Synapsin-1 at the neuromuscular junction. Cell communication and signaling : CCS, 22(1), 371.

Hall AM, et al. (2024) Inhibition of Neuron-Restrictive Silencing Factor (REST/NRSF) Chromatin Binding Attenuates Epileptogenesis. eNeuro, 11(5).

Lv J, et al. (2024) S100A9 Induces Macrophage M2 Polarization and Immunomodulatory Role in the Lesion Site After Spinal Cord Injury in Rats. Molecular neurobiology.

Sandouka S, et al. (2023) Nrf2 is expressed more extensively in neurons than in astrocytes following an acute epileptic seizure in rats. Journal of neurochemistry, 165(4), 550.

Polishchuk A, et al. (2023) Synaptic retrograde regulation of the PKA-induced SNAP-25 and Synapsin-1 phosphorylation. Cellular & molecular biology letters, 28(1), 17.

Hamilton K, et al. (2023) Leptin prevents aberrant targeting of tau to hippocampal synapses via PI 3 kinase driven inhibition of GSK3?. Journal of neurochemistry, 167(4), 520.

Just-Borràs L, et al. (2022) TrkB signaling is correlated with muscular fatigue resistance and less vulnerability to neurodegeneration. Frontiers in molecular neuroscience, 15, 1069940.

Zhang H, et al. (2022) Signaling pathways involved in NMDA-induced suppression of M-channels in corticotropin-releasing hormone neurons in central amygdala. Journal of neurochemistry, 161(6), 478.

de Almeida-Filho DG, et al. (2021) Hippocampus-retrosplenial cortex interaction is increased during phasic REM and contributes to memory consolidation. Scientific reports, 11(1), 13078.

Mitchell DR, et al. (2021) More Challenging Diets Sustain Feeding Performance: Applications Toward the Captive Rearing of Wildlife. Integrative organismal biology (Oxford, England),

3(1), obab030.

Clements L, et al. (2020) Activation of oestrogen receptor α induces a novel form of LTP at hippocampal temporoammonic-CA1 synapses. *British journal of pharmacology*, 177(3), 642.

Park SY, et al. (2020) Novel luciferase-opsin combinations for improved luminopsins. *Journal of neuroscience research*, 98(3), 410.

Cilleros-Mañé V, et al. (2020) The M2 muscarinic receptor, in association to M1, regulates the neuromuscular PKA molecular dynamics. *FASEB journal : official publication of the Federation of American Societies for Experimental Biology*, 34(4), 4934.

Prakash M, et al. (2020) Defining parameters of specificity for bioluminescent optogenetic activation of neurons using in vitro multi electrode arrays (MEA). *Journal of neuroscience research*, 98(3), 437.

Hone AJ, et al. (2020) Expression of $\alpha 3 \beta 4$ nicotinic acetylcholine receptors by rat adrenal chromaffin cells determined using novel conopeptide antagonists. *Journal of neurochemistry*, 154(2), 158.

Garcia-Curran MM, et al. (2019) Dexamethasone Attenuates Hyperexcitability Provoked by Experimental Febrile Status Epilepticus. *eNeuro*, 6(6).

Stephens KE, et al. (2019) Sex differences in gene regulation in the dorsal root ganglion after nerve injury. *BMC genomics*, 20(1), 147.

Chen Y, et al. (2019) Increased $\alpha 2 \delta -1$ -NMDA receptor coupling potentiates glutamatergic input to spinal dorsal horn neurons in chemotherapy-induced neuropathic pain. *Journal of neurochemistry*, 148(2), 252.

Simó A, et al. (2019) nPKC ϵ Mediates SNAP-25 Phosphorylation of Ser-187 in Basal Conditions and After Synaptic Activity at the Neuromuscular Junction. *Molecular neurobiology*, 56(8), 5346.

Pousinha PA, et al. (2019) The Amyloid Precursor Protein C-Terminal Domain Alters CA1 Neuron Firing, Modifying Hippocampus Oscillations and Impairing Spatial Memory Encoding. *Cell reports*, 29(2), 317.