

Resource Summary Report

Generated by [NIF](#) on Aug 22, 2026

STOCK Rac1^{tm1Djk/J}

RRID:IMSR_JAX:005550

Type: Organism

Proper Citation

RRID:IMSR_JAX:005550

Organism Information

URL: <https://www.jax.org/strain/005550>

Proper Citation: RRID:IMSR_JAX:005550

Description: Mus musculus with name STOCK Rac1^{tm1Djk/J} from IMSR.

Species: Mus musculus

Synonyms: STOCK Rac1/J

Notes: gene symbol note: Rac family small GTPase 1; mutant stock: Rac1

Affected Gene: Rac family small GTPase 1

Genomic Alteration: targeted mutation 1; David J Kwiatkowski

Catalog Number: JAX:005550

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: sperm

Organism Name: STOCK Rac1^{tm1Djk/J}

Record Creation Time: 20250513T053650+0000

Record Last Update: 20260815T050559+0000

Ratings and Alerts

No rating or validation information has been found for STOCK Rac1^{tm1Djk/J}.

No alerts have been found for STOCK Rac1^{tm1Djk/J}.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 7 mentions in open access literature.

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

Weaver MR, et al. (2025) The STRIPAK complex is required for radial sorting and laminin receptor expression in Schwann cells. Cell reports, 44(3), 115401.

Kann AP, et al. (2022) An injury-responsive Rac-to-Rho GTPase switch drives activation of muscle stem cells through rapid cytoskeletal remodeling. Cell stem cell, 29(6), 933.

Keine C, et al. (2022) Presynaptic Rac1 controls synaptic strength through the regulation of synaptic vesicle priming. eLife, 11.

Kinsella S, et al. (2021) Attenuation of apoptotic cell detection triggers thymic regeneration after damage. Cell reports, 37(1), 109789.

Su W, et al. (2020) Protein Prenylation Drives Discrete Signaling Programs for the Differentiation and Maintenance of Effector Treg Cells. Cell metabolism, 32(6), 996.

Heinrich A, et al. (2020) Distinct Roles for Rac1 in Sertoli Cell Function during Testicular Development and Spermatogenesis. Cell reports, 31(2), 107513.

Hu JK, et al. (2017) An FAK-YAP-mTOR Signaling Axis Regulates Stem Cell-Based Tissue Renewal in Mice. Cell stem cell, 21(1), 91.