

Resource Summary Report

Generated by [NIF](#) on Aug 21, 2026

STOCK Tsc1^{tm1Djk/J}

RRID:IMSR_JAX:005680

Type: Organism

Proper Citation

RRID:IMSR_JAX:005680

Organism Information

URL: <https://www.jax.org/strain/005680>

Proper Citation: RRID:IMSR_JAX:005680

Description: Mus musculus with name STOCK Tsc1^{tm1Djk/J} from IMSR.

Species: Mus musculus

Notes: gene symbol note: TSC complex subunit 1; mutant stock: Tsc1

Affected Gene: TSC complex subunit 1

Genomic Alteration: targeted mutation 1; David J Kwiatkowski

Catalog Number: JAX:005680

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: STOCK Tsc1^{tm1Djk/J}

Record Creation Time: 20250513T053651+0000

Record Last Update: 20260815T050600+0000

Ratings and Alerts

No rating or validation information has been found for STOCK Tsc1^{tm1Djk/J}.

No alerts have been found for STOCK Tsc1^{tm1Djk/J}.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 61 mentions in open access literature.

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

Fukasawa K, et al. (2026) Regulatory role of mTORC1 signaling in osteoblasts in acute myeloid leukemia progression and steady-state hematopoiesis. *iScience*, 29(1), 114533.

Kamijo S, et al. (2026) AAV-Based Bright and Sparse Labeling of Versatile Neurons Adaptable in Cre-Dependent Genetic Backgrounds. *eNeuro*, 13(3).

Oostland M, et al. (2026) Cerebellar acceleration of learning in an evidence-accumulation task. *Cell reports*, 45(4), 117262.

Bankolé A, et al. (2025) mTOR controls ependymal cell differentiation by targeting the alternative cell cycle and centrosomal proteins. *EMBO reports*, 26(12), 3075.

Jiang M, et al. (2025) Microglial MS4A4A Protects against Epileptic Seizures in Alzheimer's Disease. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 12(22), e2417733.

Huang S, et al. (2024) Osteocytes/Osteoblasts Produce SAA3 to Regulate Hepatic Metabolism of Cholesterol. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 11(24), e2307818.

Lobel GP, et al. (2024) Glutamine is critical for the maintenance of type 1 conventional dendritic cells in normal tissue and the tumor microenvironment. *Proceedings of the National Academy of Sciences of the United States of America*, 121(50), e2412157121.

Li Q, et al. (2024) Metabolic rewiring during bone development underlies tRNA m7G-associated primordial dwarfism. *The Journal of clinical investigation*, 134(20).

Cousineau CM, et al. (2024) Reduced beta-hydroxybutyrate disposal after ketogenic diet feeding in mice. *bioRxiv : the preprint server for biology*.

Du H, et al. (2023) Bi-steric mTORC1 inhibitors induce apoptotic cell death in tumor models with hyperactivated mTORC1. *The Journal of clinical investigation*, 133(21).

Herron RS, et al. (2023) A twin UGUA motif directs the balance between gene isoforms through CFIm and the mTORC1 signaling pathway. *eLife*, 12.

Park G, et al. (2023) I-Type amino acid transporter 1 in hypothalamic neurons in mice maintains energy and bone homeostasis. *JCI insight*, 8(7).

Luo YD, et al. (2022) Mutant Kras and mTOR crosstalk drives hepatocellular carcinoma development via PEG3/STAT3/BEX2 signaling. *Theranostics*, 12(18), 7903.

Yin N, et al. (2022) SZT2 maintains hematopoietic stem cell homeostasis via nutrient-mediated mTORC1 regulation. *The Journal of clinical investigation*, 132(20).

Greene CJ, et al. (2022) Macrophages disseminate pathogen associated molecular patterns through the direct extracellular release of the soluble content of their phagolysosomes. *Nature communications*, 13(1), 3072.

Asrani K, et al. (2022) An mTORC1-mediated negative feedback loop constrains amino acid-induced FLCN-Rag activation in renal cells with TSC2 loss. *Nature communications*, 13(1), 6808.

Luo YD, et al. (2021) p53 haploinsufficiency and increased mTOR signalling define a subset of aggressive hepatocellular carcinoma. *Journal of hepatology*, 74(1), 96.

Lu Q, et al. (2021) Complement factor B in high glucose-induced podocyte injury and diabetic kidney disease. *JCI insight*, 6(19).

Deng Y, et al. (2021) Conditional knockout of Tsc1 in ROR α -expressing cells induces brain damage and early death in mice. *Journal of neuroinflammation*, 18(1), 107.

Benthall KN, et al. (2021) Loss of Tsc1 from striatal direct pathway neurons impairs endocannabinoid-LTD and enhances motor routine learning. *Cell reports*, 36(6), 109511.