

Resource Summary Report

Generated by [kravitz2](#) on Aug 1, 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: 20260801T050353+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 58 mentions in open access literature.

Listed below are recent publications. The full list is available at [kravitz2](#).

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.

Yu D, et al. (2021) The adverse metabolic effects of branched-chain amino acids are mediated by isoleucine and valine. *Cell metabolism*, 33(5), 905.

Li K, et al. (2021) mTOR signaling regulates gastric epithelial progenitor homeostasis and gastric tumorigenesis via MEK1-ERKs and BMP-Smad1 pathways. *Cell reports*, 35(5), 109069.

Bai X, et al. (2021) Diurnal regulation of oxidative phosphorylation restricts hepatocyte proliferation and inflammation. *Cell reports*, 36(10), 109659.