

Resource Summary Report

Generated by [NIF](#) on Sep 8, 2026

STOCK Cav1^{tm1Mls/J}

RRID:IMSR_JAX:004585

Type: Organism

Proper Citation

RRID:IMSR_JAX:004585

Organism Information

URL: <https://www.jax.org/strain/004585>

Proper Citation: RRID:IMSR_JAX:004585

Description: Mus musculus with name STOCK Cav1^{tm1Mls/J} from IMSR.

Species: Mus musculus

Synonyms: STOCK Cav/J

Notes: gene symbol note: caveolin 1; caveolae protein; mutant stock: Cav1

Affected Gene: caveolin 1; caveolae protein

Genomic Alteration: targeted mutation 1; Michael P Lisanti

Catalog Number: JAX:004585

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: embryo

Organism Name: STOCK Cav1^{tm1Mls/J}

Record Creation Time: 20250513T053645+0000

Record Last Update: 20260905T044427+0000

Ratings and Alerts

No rating or validation information has been found for STOCK Cav1^{tm1Mls/J}.

No alerts have been found for STOCK Cav1^{tm1Mls/J}.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 17 mentions in open access literature.

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

Yu S, et al. (2025) Caveolin-1/PPAR γ axis suppresses T follicular helper cell response in primary Sjögren disease. *Cell reports*, 44(8), 116156.

Hansen D, et al. (2025) Hepatic stellate cells regulate liver fatty acid utilization via plasmalemma vesicle-associated protein. *Cell metabolism*, 37(4), 971.

Zhao Y, et al. (2022) Vascular endothelium deploys caveolin-1 to regulate oligodendrogenesis after chronic cerebral ischemia in mice. *Nature communications*, 13(1), 6813.

Zhang X, et al. (2022) Endothelial caveolin-1 regulates cerebral thrombo-inflammation in acute ischemia/reperfusion injury. *EBioMedicine*, 84, 104275.

Yang Z, et al. (2021) Caveolin-1 Deficiency Protects Mice Against Carbon Tetrachloride-Induced Acute Liver Injury Through Regulating Polarization of Hepatic Macrophages. *Frontiers in immunology*, 12, 713808.

Wang L, et al. (2021) Inhibition of miR-103-3p Preserves Neurovascular Integrity Through Caveolin-1 in Experimental Subarachnoid Hemorrhage. *Neuroscience*, 461, 91.

Ramírez CM, et al. (2021) Crosstalk Between LXR and Caveolin-1 Signaling Supports Cholesterol Efflux and Anti-Inflammatory Pathways in Macrophages. *Frontiers in endocrinology*, 12, 635923.

Wang S, et al. (2020) Caveolin-1 inhibits breast cancer stem cells via c-Myc-mediated metabolic reprogramming. *Cell death & disease*, 11(6), 450.

Sheen MR, et al. (2019) Replication Study: Biomechanical remodeling of the microenvironment by stromal caveolin-1 favors tumor invasion and metastasis. *eLife*, 8.

Lu J, et al. (2018) Caveolin-1 Scaffolding Domain Peptides Alleviate Liver Fibrosis by Inhibiting TGF- β 1/Smad Signaling in Mice. *International journal of molecular sciences*, 19(6).

Crewe C, et al. (2018) An Endothelial-to-Adipocyte Extracellular Vesicle Axis Governed by Metabolic State. *Cell*, 175(3), 695.

Park MH, et al. (2018) Vascular and Neurogenic Rejuvenation in Aging Mice by Modulation of ASM. *Neuron*, 100(1), 167.

Predescu SA, et al. (2017) Mouse Lung Fibroblast Resistance to Fas-Mediated Apoptosis Is Dependent on the Baculoviral Inhibitor of Apoptosis Protein 4 and the Cellular FLICE-Inhibitory Protein. *Frontiers in physiology*, 8, 128.

Andreone BJ, et al. (2017) Blood-Brain Barrier Permeability Is Regulated by Lipid Transport-Dependent Suppression of Caveolae-Mediated Transcytosis. *Neuron*, 94(3), 581.

Fiering S, et al. (2015) Registered report: Biomechanical remodeling of the microenvironment by stromal caveolin-1 favors tumor invasion and metastasis. *eLife*, 4, e04796.

Hitkova I, et al. (2013) Caveolin-1 protects B6129 mice against *Helicobacter pylori* gastritis. *PLoS pathogens*, 9(4), e1003251.

Grande-García A, et al. (2007) Caveolin-1 regulates cell polarization and directional migration through Src kinase and Rho GTPases. *The Journal of cell biology*, 177(4), 683.