

Resource Summary Report

Generated by [ASWG](#) on Aug 10, 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: 20260808T050847+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 [ASWG](#) .

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.