

Resource Summary Report

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B6N.129S2-Casp1^{tm1Flv/J}

RRID:IMSR_JAX:016621

Type: Organism

Proper Citation

RRID:IMSR_JAX:016621

Organism Information

URL: <https://www.jax.org/strain/016621>

Proper Citation: RRID:IMSR_JAX:016621

Description: Mus musculus with name B6N.129S2-Casp1^{tm1Flv/J} from IMSR.

Species: Mus musculus

Synonyms: B6.129S2-Casp1/J

Notes: gene symbol note: caspase 1; mutant strain|congenic strain: Casp1

Affected Gene: caspase 1

Genomic Alteration: targeted mutation 1; Richard Flavell

Catalog Number: JAX:016621

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6N.129S2-Casp1^{tm1Flv/J}

Record Creation Time: 20250513T053730+0000

Record Last Update: 20260905T044513+0000

Ratings and Alerts

No rating or validation information has been found for B6N.129S2-Casp1^{tm1Flv/J}.

No alerts have been found for B6N.129S2-Casp1^{tm1Flv/J}.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 44 mentions in open access literature.

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

Huang MS, et al. (2026) Non-Targeting shRNA-Encoded Plasmid DNA Enhances Protective Immunity Through RIDD-RIG-I Signaling Pathway in the Zika Virus Animal Model. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(19), e17420.

Chan FHM, et al. (2025) Plasticity of cell death pathways ensures GSDMD activation during *Yersinia pseudotuberculosis* infection. *Cell reports*, 44(1), 115216.

Zengeler KE, et al. (2025) Inflammasome signaling in astrocytes modulates hippocampal plasticity. *Immunity*, 58(6), 1519.

Wang Y, et al. (2024) A pan-family screen of nuclear receptors in immunocytes reveals ligand-dependent inflammasome control. *Immunity*, 57(12), 2737.

Gerrick ER, et al. (2024) Metabolic diversity in commensal protists regulates intestinal immunity and trans-kingdom competition. *Cell*, 187(1), 62.

Hoffmann JP, et al. (2024) Vaccine-elicited IL-1R signaling results in Th17 TRM-mediated immunity. *Communications biology*, 7(1), 433.

Jena KK, et al. (2024) Type III interferons induce pyroptosis in gut epithelial cells and impair mucosal repair. *Cell*, 187(26), 7533.

Yang XM, et al. (2023) Lethal Caspase-1/4-Dependent Injury Occurs in the First Minutes of Coronary Reperfusion and Requires Calpain Activity. *International journal of molecular sciences*, 24(4).

Duhalde Vega M, et al. (2022) PD-1/PD-L1 blockade abrogates a dysfunctional innate-adaptive immune axis in critical γ -coronavirus disease. *Science advances*, 8(38), eabn6545.

Hettwer J, et al. (2022) Interleukin-1 γ suppression dampens inflammatory leucocyte production and uptake in atherosclerosis. *Cardiovascular research*, 118(13), 2778.

Wu YH, et al. (2022) Caspase-8 inactivation drives autophagy-dependent inflammasome activation in myeloid cells. *Science advances*, 8(45), eabn9912.

Wang W, et al. (2022) Mobilizing phospholipids on tumor plasma membrane implicates phosphatidylserine externalization blockade for cancer immunotherapy. *Cell reports*, 41(5), 111582.

Panicker N, et al. (2022) Neuronal NLRP3 is a parkin substrate that drives neurodegeneration in Parkinson's disease. *Neuron*, 110(15), 2422.

Carter JJ, et al. (2021) Atypical cytomegalovirus retinal disease in pyroptosis-deficient mice with murine acquired immunodeficiency syndrome. *Experimental eye research*, 209, 108651.

Thapa A, et al. (2021) Danger-associated molecular pattern molecules take unexpectedly a central stage in Nlrp3 inflammasome-caspase-1-mediated trafficking of hematopoietic stem/progenitor cells. *Leukemia*, 35(9), 2658.

Jain S, et al. (2021) The impact of Caspase-1 deletion on apoptosis and acute kidney injury in a murine transplant model. *Cellular signalling*, 85, 110039.

Wu J, et al. (2021) APOL1 risk variants in individuals of African genetic ancestry drive endothelial cell defects that exacerbate sepsis. *Immunity*, 54(11), 2632.

Lavagna A, et al. (2020) Recognition of Lipoproteins by Toll-like Receptor 2 and DNA by the AIM2 Inflammasome Is Responsible for Production of Interleukin-1? by Virulent Suilysin-negative *Streptococcus suis* Serotype 2. *Pathogens (Basel, Switzerland)*, 9(2).

Gao Y, et al. (2020) Through Reducing ROS Production, IL-10 Suppresses Caspase-1-Dependent IL-1 β Maturation, thereby Preventing Chronic Neuroinflammation and Neurodegeneration. *International journal of molecular sciences*, 21(2).

Yang G, et al. (2020) Repurposing Auranofin, an Anti-Rheumatic Gold Compound, to Treat Acne Vulgaris by Targeting the NLRP3 Inflammasome. *Biomolecules & therapeutics*, 28(5), 437.