Resource Summary Report

Generated by FDI Lab - SciCrunch.org on May 16, 2025

C57BL/6N-Gsdmd^{em4Fcw}/J

RRID:IMSR_JAX:032410
Type: Organism

Proper Citation

RRID:IMSR_JAX:032410

Organism Information

URL: https://www.jax.org/strain/032410

Proper Citation: RRID:IMSR_JAX:032410

Description: Mus musculus with name C57BL/6N-Gsdmd^{em4Fcw}/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: gasdermin D; coisogenic strain|mutant strain: Gsdmd

Affected Gene: gasdermin D

Genomic Alteration: endonuclease-mediated mutation 4; Fengchao Wang

Catalog Number: JAX:032410

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: C57BL/6N-Gsdmd^{em4Fcw}/J

Record Creation Time: 20250513T053828+0000

Record Last Update: 20250513T054121+0000

Ratings and Alerts

No rating or validation information has been found for C57BL/6N-Gsdmd^{em4Fcw}/J.

No alerts have been found for C57BL/6N-Gsdmd^{em4Fcw}/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 FDI Lab - SciCrunch.org.

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

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

Traughber CA, et al. (2023) Myeloid-cell-specific role of Gasdermin D in promoting lung cancer progression in mice. iScience, 26(2), 106076.

Su W, et al. (2023) The Absence of Gasdermin D Reduces Nuclear Autophagy in a Cecal Ligation and Puncture-Induced Sepsis-Associated Encephalopathy Mouse Model. Brain sciences, 13(3).

Fang Z, et al. (2023) Gasdermin D affects aortic vascular smooth muscle cell pyroptosis and Ang II-induced vascular remodeling. Heliyon, 9(6), e16619.

Liao Y, et al. (2023) The Ras GTPase-activating-like protein IQGAP1 bridges Gasdermin D to the ESCRT system to promote IL-1? release via exosomes. The EMBO journal, 42(1), e110780.

Miao N, et al. (2023) Oxidized mitochondrial DNA induces gasdermin D oligomerization in systemic lupus erythematosus. Nature communications, 14(1), 872.

den Hartigh AB, et al. (2023) Muscimol inhibits plasma membrane rupture and ninjurin-1 oligomerization during pyroptosis. Communications biology, 6(1), 1010.

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

Wang K, et al. (2022) Multi-Omics Analysis Reveals the Protection of Gasdermin D in

Concanavalin A-Induced Autoimmune Hepatitis. Microbiology spectrum, 10(5), e0171722.

Zhang ZH, et al. (2022) Inhibition of GSDMD Activates Poly(ADP-ribosyl)ation and Promotes Myocardial Ischemia-Reperfusion Injury. Oxidative medicine and cellular longevity, 2022, 1115749.

Zhang Y, et al. (2022) Inhibition of PFKFB Preserves Intestinal Barrier Function in Sepsis by Inhibiting NLRP3/GSDMD. Oxidative medicine and cellular longevity, 2022, 8704016.

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

Xiao J, et al. (2022) Compound loss of GSDMD and GSDME function is necessary to achieve maximal therapeutic effect in colitis. Journal of translational autoimmunity, 5, 100162.

Oh C, et al. (2022) Neutrophil inflammasomes sense the subcellular delivery route of translocated bacterial effectors and toxins. Cell reports, 41(8), 111688.

Zhao J, et al. (2022) Disulfiram alleviates acute lung injury and related intestinal mucosal barrier impairment by targeting GSDMD-dependent pyroptosis. Journal of inflammation (London, England), 19(1), 17.

Eltobgy MM, et al. (2022) Caspase-4/11 exacerbates disease severity in SARS-CoV-2 infection by promoting inflammation and immunothrombosis. Proceedings of the National Academy of Sciences of the United States of America, 119(21), e2202012119.

Feng S, et al. (2022) Intracellular bacteriolysis contributes to pathogenicity of Staphylococcus aureus by exacerbating AIM2-mediated inflammation and necroptosis. Virulence, 13(1), 1684.

Wang Y, et al. (2022) GSDMD-dependent neutrophil extracellular traps promote macrophage-to-myofibroblast transition and renal fibrosis in obstructive nephropathy. Cell death & disease, 13(8), 693.

Simpson DS, et al. (2022) Interferon-? primes macrophages for pathogen ligand-induced killing via a caspase-8 and mitochondrial cell death pathway. Immunity, 55(3), 423.