

Resource Summary Report

Generated by [NIF](#) on Aug 21, 2026

B6.129P2-P2rx7^{tm1Gab}/J

RRID:IMSR_JAX:005576

Type: Organism

Proper Citation

RRID:IMSR_JAX:005576

Organism Information

URL: <https://www.jax.org/strain/005576>

Proper Citation: RRID:IMSR_JAX:005576

Description: Mus musculus with name B6.129P2-P2rx7^{tm1Gab}/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: purinergic receptor P2X; ligand-gated ion channel; 7; mutant strain|congenic strain: P2rx7

Affected Gene: purinergic receptor P2X; ligand-gated ion channel; 7

Genomic Alteration: targeted mutation 1; Christopher A Gabel

Catalog Number: JAX:005576

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: sperm

Organism Name: B6.129P2-P2rx7^{tm1Gab}/J

Record Creation Time: 20250513T053650+0000

Record Last Update: 20260815T050559+0000

Ratings and Alerts

No rating or validation information has been found for B6.129P2-P2rx7^{tm1Gab}/J.

No alerts have been found for B6.129P2-P2rx7^{tm1Gab}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 30 mentions in open access literature.

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

Göloncsér F, et al. (2024) P2X7 receptor inhibition alleviates mania-like behavior independently of interleukin-1?. *iScience*, 27(3), 109284.

Janho Dit Hreich S, et al. (2023) Protocol for Evaluating In Vivo the Activation of the P2RX7 Immunomodulator. *Biological procedures online*, 25(1), 1.

Huang LS, et al. (2023) Endosomal trafficking of two-pore K⁺ efflux channel TWIK2 to plasmalemma mediates NLRP3 inflammasome activation and inflammatory injury. *eLife*, 12.

Falco MV, et al. (2023) P2X7 receptor activation awakes a dormant stem cell niche in the adult spinal cord. *Frontiers in cellular neuroscience*, 17, 1288676.

Santiago-Carvalho I, et al. (2023) T cell-specific P2RX7 favors lung parenchymal CD4⁺ T cell accumulation in response to severe lung infections. *Cell reports*, 42(11), 113448.

Yang Y, et al. (2022) P2X7 Receptor Expression and Signaling on Dendritic Cells and CD4⁺ T Cells is Not Required but Can Enhance Th17 Differentiation. *Frontiers in cell and developmental biology*, 10, 687659.

Toledo C, et al. (2022) Medullary astrocytes mediate irregular breathing patterns generation in chronic heart failure through purinergic P2X7 receptor signalling. *EBioMedicine*, 80, 104044.

Douguet L, et al. (2021) A small-molecule P2RX7 activator promotes anti-tumor immune responses and sensitizes lung tumor to immunotherapy. *Nature communications*, 12(1), 653.

Palma C, et al. (2021) Caloric Restriction Promotes Immunometabolic Reprogramming Leading to Protection from Tuberculosis. *Cell metabolism*, 33(2), 300.

Barrera-Avalos C, et al. (2021) P2X7 receptor is essential for cross-dressing of bone marrow-derived dendritic cells. *iScience*, 24(12), 103520.

Borges da Silva H, et al. (2020) Sensing of ATP via the Purinergic Receptor P2RX7 Promotes CD8⁺ Trm Cell Generation by Enhancing Their Sensitivity to the Cytokine TGF-?. *Immunity*, 53(1), 158.

Alarcón-Vila C, et al. (2020) CD14 release induced by P2X7 receptor restricts inflammation and increases survival during sepsis. *eLife*, 9.

Proietti M, et al. (2019) ATP released by intestinal bacteria limits the generation of protective IgA against enteropathogens. *Nature communications*, 10(1), 250.

Faliti CE, et al. (2019) P2X7 receptor restrains pathogenic Tfh cell generation in systemic lupus erythematosus. *The Journal of experimental medicine*, 216(2), 317.

Perruzza L, et al. (2019) Enrichment of intestinal *Lactobacillus* by enhanced secretory IgA coating alters glucose homeostasis in P2rx7^{-/-} mice. *Scientific reports*, 9(1), 9315.

Safya H, et al. (2018) Variations in Cellular Responses of Mouse T Cells to Adenosine-5'-Triphosphate Stimulation Do Not Depend on P2X7 Receptor Expression Levels but on Their Activation and Differentiation Stage. *Frontiers in immunology*, 9, 360.

Adamiak M, et al. (2018) Novel evidence that extracellular nucleotides and purinergic signaling induce innate immunity-mediated mobilization of hematopoietic stem/progenitor cells. *Leukemia*, 32(9), 1920.

Di A, et al. (2018) The TWIK2 Potassium Efflux Channel in Macrophages Mediates NLRP3 Inflammasome-Induced Inflammation. *Immunity*, 49(1), 56.

Perruzza L, et al. (2017) T Follicular Helper Cells Promote a Beneficial Gut Ecosystem for Host Metabolic Homeostasis by Sensing Microbiota-Derived Extracellular ATP. *Cell reports*, 18(11), 2566.

Salles ÉM, et al. (2017) P2X7 receptor drives Th1 cell differentiation and controls the follicular helper T cell population to protect against *Plasmodium chabaudi* malaria. *PLoS pathogens*, 13(8), e1006595.