

Resource Summary Report

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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: 20260808T050853+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 [nidm-terms](#) .

Gölöncsér 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.

Bomfim CCB, et al. (2017) P2X7 Receptor in Bone Marrow-Derived Cells Aggravates Tuberculosis Caused by Hypervirulent *Mycobacterium bovis*. *Frontiers in immunology*, 8, 435.