

Resource Summary Report

Generated by [FDI Lab - SciCrunch.org](#) on Apr 18, 2025

C57BL/6-Il17a^{tm1Bcgen}/J

RRID:IMSR_JAX:018472

Type: Organism

Proper Citation

RRID:IMSR_JAX:018472

Organism Information

URL: <https://www.jax.org/strain/018472>

Proper Citation: RRID:IMSR_JAX:018472

Description: Mus musculus with name C57BL/6-Il17a^{tm1Bcgen}/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: |interleukin 17A|interleukin 17A; coisogenic strain: |Il17a|Il17a

Affected Gene: |interleukin 17A|interleukin 17A

Genomic Alteration: targeted mutation 1; Biocytogen LLC

Catalog Number: JAX:018472

Database: International Mouse Resource Center IMSR, JAX

Database Abbreviation: IMSR

Availability: live

Alternate IDs: IMSR_JAX:18472

Organism Name: C57BL/6-Il17a^{tm1Bcgen}/J

Record Creation Time: 20230509T193313+0000

Record Last Update: 20250412T090615+0000

Ratings and Alerts

No rating or validation information has been found for C57BL/6-Il17a^{tm1Bcgen}/J.

No alerts have been found for C57BL/6-Il17a^{tm1Bcgen}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: International Mouse Resource Center IMSR, JAX

Usage and Citation Metrics

We found 40 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Penninger P, et al. (2024) HDAC1 fine-tunes Th17 polarization in vivo to restrain tissue damage in fungal infections. Cell reports, 43(12), 114993.

Zhong X, et al. (2024) Distinct ROR γ t-dependent Th17 immune responses are required for autoimmune pathogenesis and protection against bacterial infection. Cell reports, 43(11), 114951.

Chen X, et al. (2023) The lactate dehydrogenase (LDH) isoenzyme spectrum enables optimally controlling T cell glycolysis and differentiation. Science advances, 9(12), eadd9554.

Dar HY, et al. (2023) Callus ?? T cells and microbe-induced intestinal Th17 cells improve fracture healing in mice. The Journal of clinical investigation, 133(8).

Sonomoto K, et al. (2023) High-fat-diet-associated intestinal microbiota exacerbates psoriasis-like inflammation by enhancing systemic ?? T cell IL-17 production. Cell reports, 42(7), 112713.

Laragione T, et al. (2023) Magnesium increases numbers of Foxp3+ Treg cells and reduces arthritis severity and joint damage in an IL-10-dependent manner mediated by the intestinal microbiome. EBioMedicine, 92, 104603.

Xiao Z, et al. (2023) METTL3-mediated m6A methylation orchestrates mRNA stability and dsRNA contents to equilibrate ?? T1 and ?? T17 cells. Cell reports, 42(7), 112684.

Huang Hl, et al. (2023) A binary module for microbiota-mediated regulation of ??17 cells, hallmarked by microbiota-driven expression of programmed cell death protein 1. Cell reports, 42(8), 112951.

Zeng S, et al. (2023) Candida albicans-specific Th17 cell-mediated response contributes to alcohol-associated liver disease. Cell host & microbe, 31(3), 389.

Duan J, et al. (2023) Endoplasmic reticulum stress in the intestinal epithelium initiates purine metabolite synthesis and promotes Th17 cell differentiation in the gut. *Immunity*, 56(5), 1115.

Liu Q, et al. (2022) IL-1 β -activated mTORC2 promotes accumulation of IFN- γ + γ T cells by upregulating CXCR3 to restrict hepatic fibrosis. *Cell death & disease*, 13(4), 289.

Mostafavi H, et al. (2022) Interleukin-17 contributes to Ross River virus-induced arthritis and myositis. *PLoS pathogens*, 18(2), e1010185.

Del Rio Oliva M, et al. (2022) Immunoproteasome inhibition attenuates experimental psoriasis. *Frontiers in immunology*, 13, 1075615.

Kang S, et al. (2022) GAB functions as a bioenergetic and signalling gatekeeper to control T cell inflammation. *Nature metabolism*, 4(10), 1322.

Elmore J, et al. (2022) ITK independent development of Th17 responses during hypersensitivity pneumonitis driven lung inflammation. *Communications biology*, 5(1), 162.

Hall JA, et al. (2022) Transcription factor ROR γ enforces stability of the Th17 cell effector program by binding to a Rorc cis-regulatory element. *Immunity*, 55(11), 2027.

Kim E, et al. (2022) Maternal gut bacteria drive intestinal inflammation in offspring with neurodevelopmental disorders by altering the chromatin landscape of CD4 $^{+}$ T cells. *Immunity*, 55(1), 145.

Alexander M, et al. (2022) Human gut bacterial metabolism drives Th17 activation and colitis. *Cell host & microbe*, 30(1), 17.

Nagao JI, et al. (2022) Pathobiont-responsive Th17 cells in gut-mouth axis provoke inflammatory oral disease and are modulated by intestinal microbiome. *Cell reports*, 40(10), 111314.

Mikami Y, et al. (2021) MicroRNA-221 and -222 modulate intestinal inflammatory Th17 cell response as negative feedback regulators downstream of interleukin-23. *Immunity*, 54(3), 514.