

Resource Summary Report

Generated by [ASWG](#) on Aug 10, 2026

C57BL/6-II4^{tm1Nnt}/J

RRID:IMSR_JAX:002518

Type: Organism

Proper Citation

RRID:IMSR_JAX:002518

Organism Information

URL: <https://www.jax.org/strain/002518>

Proper Citation: RRID:IMSR_JAX:002518

Description: Mus musculus with name C57BL/6-II4^{tm1Nnt}/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: interleukin 4; mutant strain: II4

Affected Gene: interleukin 4

Genomic Alteration: targeted mutation 1; Nancy Noben-Trauth

Catalog Number: JAX:002518

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: embryo

Organism Name: C57BL/6-II4^{tm1Nnt}/J

Record Creation Time: 20250513T053632+0000

Record Last Update: 20260808T050834+0000

Ratings and Alerts

No rating or validation information has been found for C57BL/6-II4^{tm1Nnt}/J.

No alerts have been found for C57BL/6-II4^{tm1Nnt}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 37 mentions in open access literature.

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

Hu Y, et al. (2022) IL-4 plays an essential role in DnaJ-?A146Ply-mediated immunoprotection against Streptococcus pneumoniae in mice. Molecular immunology, 143, 105.

Herz J, et al. (2021) GABAergic neuronal IL-4R mediates T cell effect on memory. Neuron, 109(22), 3609.

Freire MS, et al. (2021) IL-4 absence triggers distinct pathways in apical periodontitis development. Journal of proteomics, 233, 104080.

Baba T, et al. (2020) Role of IL-4 in bone marrow driven dysregulated angiogenesis and age-related macular degeneration. eLife, 9.

Phalke SP, et al. (2019) ?? T cells shape memory-phenotype ?? T cell populations in non-immunized mice. PloS one, 14(6), e0218827.

McCarthy EK, et al. (2018) Identification of a Shared Cytochrome p4502E1 Epitope Found in Anesthetic Drug-Induced and Viral Hepatitis. mSphere, 3(5).

Prout MS, et al. (2018) IL-4 Is a Key Requirement for IL-4- and IL-4/IL-13-Expressing CD4 Th2 Subsets in Lung and Skin. Frontiers in immunology, 9, 1211.

Lee SH, et al. (2018) Mannose receptor high, M2 dermal macrophages mediate nonhealing Leishmania major infection in a Th1 immune environment. The Journal of experimental medicine, 215(1), 357.

Gaya M, et al. (2018) Initiation of Antiviral B Cell Immunity Relies on Innate Signals from Spatially Positioned NKT Cells. Cell, 172(3), 517.

Laudenbach M, et al. (2018) Blocking interleukin-4 enhances efficacy of vaccines for treatment of opioid abuse and prevention of opioid overdose. Scientific reports, 8(1), 5508.

Layman AAK, et al. (2017) Ndfip1 restricts Th17 cell potency by limiting lineage stability and proinflammatory cytokine production. Scientific reports, 7, 39649.

Mayer JU, et al. (2017) Different populations of CD11b+ dendritic cells drive Th2 responses in the small intestine and colon. Nature communications, 8, 15820.

Hühner L, et al. (2017) Interleukin-4 Protects Dopaminergic Neurons In vitro but Is Dispensable for MPTP-Induced Neurodegeneration In vivo. *Frontiers in molecular neuroscience*, 10, 62.

Diny NL, et al. (2017) Eosinophil-derived IL-4 drives progression of myocarditis to inflammatory dilated cardiomyopathy. *The Journal of experimental medicine*, 214(4), 943.

Liew PX, et al. (2017) iNKT Cells Orchestrate a Switch from Inflammation to Resolution of Sterile Liver Injury. *Immunity*, 47(4), 752.

Kang BH, et al. (2016) PLZF(+) Innate T Cells Support the TGF- β -Dependent Generation of Activated/Memory-Like Regulatory T Cells. *Molecules and cells*, 39(6), 468.

Sakala IG, et al. (2015) Deficiency in Th2 cytokine responses exacerbate orthopoxvirus infection. *PloS one*, 10(3), e0118685.

Griewank KG, et al. (2014) Immune modulating effects of NKT cells in a physiologically low dose *Leishmania major* infection model after α -GalCer analog PBS57 stimulation. *PLoS neglected tropical diseases*, 8(6), e2917.

Thoene-Reineke C, et al. (2014) Composition of intestinal microbiota in immune-deficient mice kept in three different housing conditions. *PloS one*, 9(11), e113406.

Gao P, et al. (2014) Dynamic changes in E-protein activity regulate T reg cell development. *The Journal of experimental medicine*, 211(13), 2651.