

# Resource Summary Report

Generated by [dkNET](#) on Aug 6, 2026

## C57BL/6-II4<sup>tm1Nnt</sup>/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<sup>tm1Nnt</sup>/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<sup>tm1Nnt</sup>/J

**Record Creation Time:** 20250513T053632+0000

**Record Last Update:** 20260801T050336+0000

### Ratings and Alerts

No rating or validation information has been found for C57BL/6-II4<sup>tm1Nnt</sup>/J.

No alerts have been found for C57BL/6-II4<sup>tm1Nnt</sup>/J.

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## Data and Source Information

**Source:** [Integrated Animals](#)

**Source Database:** JAX Mice and Services

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## Usage and Citation Metrics

We found 37 mentions in open access literature.

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

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.

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

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

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 p450E1 Epitope Found in Anesthetic Drug-Induced and Viral Hepatitis. mSphere, 3(5).

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.

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.

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- $\beta$ -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  $\alpha$ -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.