

Resource Summary Report

Generated by [RRID](#) on Aug 1, 2026

C57BL/6-Tnfrsf1a^{tm1Imx/J}

RRID:IMSR_JAX:003242

Type: Organism

Proper Citation

RRID:IMSR_JAX:003242

Organism Information

URL: <https://www.jax.org/strain/003242>

Proper Citation: RRID:IMSR_JAX:003242

Description: Mus musculus with name C57BL/6-Tnfrsf1a^{tm1Imx/J} from IMSR.

Species: Mus musculus

Synonyms: Tnfr1

Notes: gene symbol note: tumor necrosis factor receptor superfamily; member 1a; mutant strain: Tnfrsf1a

Affected Gene: tumor necrosis factor receptor superfamily; member 1a

Genomic Alteration: targeted mutation 1; Immunex Research and Development Corporation

Catalog Number: JAX:003242

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: C57BL/6-Tnfrsf1a^{tm1Imx/J}

Record Creation Time: 20250513T053638+0000

Record Last Update: 20260801T050341+0000

Ratings and Alerts

No rating or validation information has been found for C57BL/6-Tnfrsf1a^{tm1Imx/J}.

No alerts have been found for C57BL/6-Tnfrsf1a^{tm1Imx/J}.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 26 mentions in open access literature.

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

Yeap HW, et al. (2025) A bacterial network of T3SS effectors counteracts host pro-inflammatory responses and cell death to promote infection. The EMBO journal, 44(9), 2424.

Wu Z, et al. (2025) Targeting necroptosis protects against astrocyte death and hippocampal sclerosis in experimental temporal lobe epilepsy. The Journal of physiology.

Zheng M, et al. (2024) TNF compromises intestinal bile-acid tolerance dictating colitis progression and limited infliximab response. Cell metabolism, 36(9), 2086.

Van Roy Z, et al. (2024) Tumor necrosis factor regulates leukocyte recruitment but not bacterial persistence during Staphylococcus aureus craniotomy infection. Journal of neuroinflammation, 21(1), 179.

Woods C, et al. (2024) Tumor necrosis factor alpha induces NOX2-dependent reactive oxygen species production in hypothalamic paraventricular nucleus neurons following angiotensin II infusion. Neurochemistry international, 179, 105825.

Rößler N, et al. (2024) Maintenance of Lognormal-Like Skewed Dendritic Spine Size Distributions in Dentate Granule Cells of TNF, TNF-R1, TNF-R2, and TNF-R1/2-Deficient Mice. The Journal of comparative neurology, 532(7), e25645.

Chambon J, et al. (2023) Early TNF-Dependent Regulation of Excitatory and Inhibitory Synapses on Striatal Direct Pathway Medium Spiny Neurons in the YAC128 Mouse Model of Huntington's Disease. The Journal of neuroscience : the official journal of the Society for Neuroscience, 43(4), 672.

Smilovic D, et al. (2023) Loss of tumor necrosis factor (TNF)-receptor 1 and TNF-receptor 2 partially replicate effects of TNF deficiency on dendritic spines of granule cells in mouse dentate gyrus. The Journal of comparative neurology, 531(2), 281.

Liang Y, et al. (2022) Distinct Role of TNFR1 and TNFR2 in Protective Immunity Against Orientia tsutsugamushi Infection in Mice. Frontiers in immunology, 13, 867924.

Hines IN, et al. (2022) Ablation of Tumor Necrosis Factor Alpha Receptor 1 Signaling Blunts Steatohepatitis in Peroxisome Proliferator Activated Receptor γ -Deficient Mice. *Medical research archives*, 10(9).

Chakraborty R, et al. (2022) Selective Targeting of Tumour Necrosis Factor Receptor 1 Induces Stable Protection from Crohn's-Like Ileitis in TNF α ARE Mice. *Journal of Crohn's & colitis*, 16(6), 978.

Barker KH, et al. (2022) Sensitization of colonic nociceptors by TNF α is dependent on TNFR1 expression and p38 MAPK activity. *The Journal of physiology*, 600(16), 3819.

Simpson DS, et al. (2022) Interferon- γ primes macrophages for pathogen ligand-induced killing via a caspase-8 and mitochondrial cell death pathway. *Immunity*, 55(3), 423.

Iberg CA, et al. (2022) TNF- α sculpts a maturation process in vivo by pruning tolerogenic dendritic cells. *Cell reports*, 39(2), 110657.

Jeong SH, et al. (2021) Refractoriness of STING therapy is relieved by AKT inhibitor through effective vascular disruption in tumour. *Nature communications*, 12(1), 4405.

Ferreira França FB, et al. (2021) TNF-TNFR1 Signaling Enhances the Protection Against *Neospora caninum* Infection. *Frontiers in cellular and infection microbiology*, 11, 789398.

Kuhn KD, et al. (2020) Molecular dissection of TNFR-TNF α bidirectional signaling reveals both cooperative and antagonistic interactions with p75 neurotrophic factor receptor in axon patterning. *Molecular and cellular neurosciences*, 103, 103467.

Dos Santos RS, et al. (2020) Involvement of the Hsp70/TLR4/IL-6 and TNF- α pathways in delayed-onset muscle soreness. *Journal of neurochemistry*, 155(1), 29.

Berkhout L, et al. (2019) Deletion of tumour necrosis factor α receptor 1 elicits an increased TH17 immune response in the chronically inflamed liver. *Scientific reports*, 9(1), 4232.

Oldenhove G, et al. (2018) PD-1 Is Involved in the Dysregulation of Type 2 Innate Lymphoid Cells in a Murine Model of Obesity. *Cell reports*, 25(8), 2053.