

Resource Summary Report

Generated by [NIF](#) on Sep 11, 2026

B6.129S1-Tlr5^{tm1Flv}/J

RRID:IMSR_JAX:008377

Type: Organism

Proper Citation

RRID:IMSR_JAX:008377

Organism Information

URL: <https://www.jax.org/strain/008377>

Proper Citation: RRID:IMSR_JAX:008377

Description: Mus musculus with name B6.129S1-Tlr5^{tm1Flv}/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: toll-like receptor 5; congenic strain: Tlr5

Affected Gene: toll-like receptor 5

Genomic Alteration: targeted mutation 1; Richard Flavell

Catalog Number: JAX:008377

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: sperm

Organism Name: B6.129S1-Tlr5^{tm1Flv}/J

Record Creation Time: 20250513T053708+0000

Record Last Update: 20260905T044452+0000

Ratings and Alerts

No rating or validation information has been found for B6.129S1-Tlr5^{tm1Flv}/J.

No alerts have been found for B6.129S1-Tlr5^{tm1Flv}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 52 mentions in open access literature.

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

Czauderna A, et al. (2025) Long-chain unsaturated fatty acids released during immune responses stimulate host-microbe trans-kingdom communication. *Cell host & microbe*.

Zhang Y, et al. (2025) Pyroptosis of pulmonary fibroblasts and macrophages through NLRC4 inflammasome leads to acute respiratory failure. *Cell reports*, 44(4), 115479.

Gonzalez C, et al. (2023) TLR5 agonists enhance anti-tumor immunity and overcome resistance to immune checkpoint therapy. *Communications biology*, 6(1), 31.

Puth S, et al. (2022) An all-in-one adjuvanted therapeutic cancer vaccine targeting dendritic cell cytosol induces long-lived tumor suppression through NLRC4 inflammasome activation. *Biomaterials*, 286, 121542.

Sun H, et al. (2022) Bacteria reduce flagellin synthesis to evade microglia-astrocyte-driven immunity in the brain. *Cell reports*, 40(1), 111033.

Yu X, et al. (2021) Immunologically programming the tumor microenvironment induces the pattern recognition receptor NLRC4-dependent antitumor immunity. *Journal for immunotherapy of cancer*, 9(1).

Lin YJ, et al. (2021) The Flagellin:Allergen Fusion Protein rFlaA:Betv1 Induces a MyD88- and MAPK-Dependent Activation of Glucose Metabolism in Macrophages. *Cells*, 10(10).

Mao C, et al. (2021) Cowpea mosaic virus stimulates antitumor immunity through recognition by multiple MYD88-dependent toll-like receptors. *Biomaterials*, 275, 120914.

Mu Q, et al. (2021) Regulation of neonatal IgA production by the maternal microbiota. *Proceedings of the National Academy of Sciences of the United States of America*, 118(9).

Zhang Y, et al. (2021) Role of TLR5 in the Translocation and Dissemination of Commensal Bacteria in the Intestine after Traumatic Hemorrhagic Shock. *Journal of immunology research*, 2021, 6417658.

Zhang W, et al. (2021) Toll-like receptor 5-mediated signaling enhances liver regeneration in mice. *Military Medical Research*, 8(1), 16.

Blake SJ, et al. (2021) The immunotoxicity, but not anti-tumor efficacy, of anti-CD40 and anti-CD137 immunotherapies is dependent on the gut microbiota. *Cell reports. Medicine*, 2(12), 100464.

Ifuku M, et al. (2020) Activation of Toll-like receptor 5 in microglia modulates their function and triggers neuronal injury. *Acta neuropathologica communications*, 8(1), 159.

Lim D, et al. (2020) Lipocalin2 Induced by Bacterial Flagellin Protects Mice against Cyclophosphamide Mediated Neutropenic Sepsis. *Microorganisms*, 8(5).

Reinke S, et al. (2020) Inflammasome-Mediated Immunogenicity of Clinical and Experimental Vaccine Adjuvants. *Vaccines*, 8(3).

Kolbe U, et al. (2020) Early Cytokine Induction Upon *Pseudomonas aeruginosa* Infection in Murine Precision Cut Lung Slices Depends on Sensing of Bacterial Viability. *Frontiers in immunology*, 11, 598636.

Hussain S, et al. (2020) TLR5 participates in the TLR4 receptor complex and promotes MyD88-dependent signaling in environmental lung injury. *eLife*, 9.

Mosquera MJ, et al. (2019) Immunomodulatory nanogels overcome restricted immunity in a murine model of gut microbiome-mediated metabolic syndrome. *Science advances*, 5(3), eaav9788.

Kuo PJ, et al. (2019) Metagenomic analysis of the effects of toll-like receptors on bacterial infection in the peritoneal cavity following cecum ligation and puncture in mice. *PloS one*, 14(7), e0220398.

Pan H, et al. (2019) Identification of a Spinal Circuit for Mechanical and Persistent Spontaneous Itch. *Neuron*, 103(6), 1135.