Resource Summary Report

Generated by RRID on Aug 3, 2026

B6J.129S2-*Ifnar1*^{tm1Agt}/Mmjax

RRID:MMRRC_032045-JAX
Type: Organism

Proper Citation

RRID:MMRRC_032045-JAX

Organism Information

URL: https://www.mmrrc.org/catalog/sds.php?mmrrc_id=32045

Proper Citation: RRID:MMRRC_032045-JAX

Description: Mus musculus with name B6J.129S2-*Ifnar1*^{tm1Agt}/Mmjax from MMRRC.

Species: Mus musculus

Notes: Research areas: ; Mutation Type: Targeted Mutation ; Collection:

Phenotype: decreased bone mineral density [MP:0000063]| abnormal spleen morphology [MP:0000689]| enlarged spleen [MP:0000691]| enlarged lymph nodes [MP:0000702]| abnormal skin condition [MP:0001191]| anemia [MP:0001577]| postnatal growth retardation [MP:0001732]| altered susceptibility to infection [MP:0001793]| decreased IgG level [MP:0001805]| abnormal inflammatory response [MP:0001845]| salivary gland inflammation [MP:0001870]| small lymph nodes [MP:0002217]| abnormal dendritic cell physiology [MP:0002376]| abnormal lymphopoiesis [MP:0002401]| decreased susceptibility to viral infection [MP:0002410]| increased susceptibility to viral infection [MP:0002418]| abnormal macrophage morphology [MP:0002446]| abnormal immunoglobulin level [MP:0002490]| increased IgG level [MP:0002493]| increased IgM level [MP:0002494]| increased IgA level [MP:0002495]| glomerulonephritis [MP:0002743]| joint inflammation [MP:0002933]| increased urine protein level [MP:0002962]| abnormal cytokine secretion [MP:0003009]| abnormal leukocyte migration [MP:0003156]| rheumatoid arthritis [MP:0003561]| increased tumor growth/size [MP:0003721]| increased autoantibody level [MP:0003725]| decreased autoantibody level [MP:0003726]| decreased fetal size [MP:0004200]| abnormal CD8-positive [MP:0004392]| alpha-beta T cell physiology [MP:0004762]| increased anti-double stranded DNA antibody level [MP:0004794]| increased anti-nuclear antigen antibody level [MP:0004795]| decreased anti-nuclear antigen antibody level [MP:0004801]| increased susceptibility to systemic lupus erythematosus [MP:0004802]| decreased susceptibility to systemic lupus erythematosus [MP:0004952]| increased spleen weight [MP:0004982]| abnormal osteoclast morphology [MP:0005025]| abnormal response to infection [MP:0005027]|

increased susceptibility to parasitic infection [MP:0005070]| impaired natural killer cell mediated cytotoxicity [MP:0005542]| corneal vascularization [MP:0008476]| increased spleen red pulp amount [MP:0008501]| increased IgG2b level [MP:0008502]| increased IgG3 level [MP:0008553]| increased circulating tumor necrosis factor level [MP:0008559]| abnormal interferon-gamma secretion [MP:0008561]| decreased tumor necrosis factor secretion [MP:0008563]| decreased interferon-alpha secretion [MP:0008565]| decreased interferon-beta secretion [MP:0008593]| increased circulating interleukin-10 level [MP:0008617]| increased circulating interleukin-12 level [MP:0008635]| increased circulating interleukin-18 level [MP:0008706]| decreased interleukin-6 secretion [MP:0008713]| abnormal cytokine level [MP:0009642]| abnormal blood homeostasis [MP:0009788]| increased susceptibility to bacterial infection induced morbidity/mortality [MP:0009790]| decreased susceptibility to viral infection induced morbidity/mortality [MP:0009791]| increased susceptibility to viral infection induced morbidity/mortality [MP:0010750]| increased susceptibility to parasitic infection induced morbidity/mortality [MP:0010766]| abnormal NK cell physiology [MP:0011089]

Affected Gene: Ifnar1

Catalog Number: 032045-JAX

Background: Targeted Mutation

Database: Mutant Mouse Resource and Research Center (MMRRC)

Database Abbreviation: MMRRC

Source References: PMID:8009221

Alternate IDs: MMRRC_32045-JAX, MMRRC_032045, MMRRC_3245

Organism Name: B6J.129S2-*Ifnar1*^{tm1Agt}/Mmjax

Record Creation Time: 20230308T055126+0000

Record Last Update: 20260801T124233+0000

Ratings and Alerts

No rating or validation information has been found for B6J.129S2-*Ifnar1*^{tm1Agt}/Mmjax.

No alerts have been found for B6J.129S2-*Ifnar1*^{tm1Agt}/Mmjax.

Data and Source Information

Source: Integrated Animals

Source Database: Mutant Mouse Resource and Research Center (MMRRC)

Usage and Citation Metrics

We found 286 mentions in open access literature.

Listed below are recent publications. The full list is available at RRID .

Onufer AP, et al. (2025) Influenza virus-induced type I interferons disrupt alveolar epithelial repair and tight junction integrity in the developing lung. Mucosal immunology, 18(3), 607.

Kumar A, et al. (2025) Myeloid cell-specific type I interferon signaling mediates age-dependent inflammation and protection in Bordetella pertussis infection. Infection and immunity, 93(10), e0030625.

Gu R, et al. (2025) Expression of NEAT1 induced by influenza virus infection is regulated by activated STAT3 and contributes to STAT3-mediated antiviral immunity. Frontiers in immunology, 16, 1693884.

Witt KC, et al. (2025) The SP140-RESIST pathway regulates interferon mRNA stability and antiviral immunity. bioRxiv : the preprint server for biology.

Rosa RB, et al. (2025) A comprehensive murine clinical model for development of countermeasures and studying Mayaro virus infection. PLoS neglected tropical diseases, 19(7), e0013333.

Ahmad F, et al. (2025) Zika virus impairs autophagic flux in trabecular meshwork, and inhibition of autophagy restricts ocular viral transmission and associated pathology. Microbiology spectrum, 13(10), e0103425.

Deshmukh N, et al. (2025) Gut microbial metabolites butyrate and acetate limit Zika virus replication and associated ocular manifestations via the G-protein coupled receptor 43/FFAR2. bioRxiv : the preprint server for biology.

Ramirez Reyes B, et al. (2025) Homeostatic antiviral protection of the neonatal gut epithelium by interferon lambda. Cell reports, 44(2), 115243.

Li E, et al. (2025) A single-chain mRNA vaccine co-expressing GPC and NP provides complete protection against lethal Dabie bandavirus challenge in mice. Molecular therapy. Nucleic acids, 36(4), 102755.

Cha I, et al. (2025) A viral codon usage strategy enhances antigen production and protection in SFTSV mRNA vaccination. NPJ vaccines, 10(1), 248.

Morrey JD, et al. (2025) Identification of candidate genes involved in Zika virus-induced reversible paralysis of mice. Scientific reports, 15(1), 2926.

Elsharkawy A, et al. (2025) Interferon-alpha/beta receptor deficiency enhances susceptibility to Powassan virus infection in mice. Frontiers in microbiology, 16, 1678861.

Cho HS, et al. (2025) Structure of gut microbial glycolipid modulates host inflammatory response. Cell.

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.

Vanmeerbeek I, et al. (2024) Targeting conserved TIM3+VISTA+ tumor-associated macrophages overcomes resistance to cancer immunotherapy. Science advances, 10(29), eadm8660.

Ko KH, et al. (2024) A vaccine platform targeting lung-resident memory CD4+ T-cells provides protection against heterosubtypic influenza infections in mice and ferrets. Nature communications, 15(1), 10368.

Patel H, et al. (2024) Malaria blood stage infection suppresses liver stage infection via host-induced interferons but not hepcidin. Nature communications, 15(1), 2104.

Sanford SAI, et al. (2024) The type-I interferon response potentiates seeded tau aggregation and exacerbates tau pathology. Alzheimer's & dementia : the journal of the Alzheimer's Association, 20(2), 1013.

Porier DL, et al. (2024) Humoral and T-cell-mediated responses to an insect-specific flavivirus-based Zika virus vaccine candidate. PLoS pathogens, 20(10), e1012566.

Sorvillo TE, et al. (2024) Replicon particle vaccination induces non-neutralizing anti-nucleoprotein antibody-mediated control of Crimean-Congo hemorrhagic fever virus. NPJ vaccines, 9(1), 88.