

Resource Summary Report

Generated by [NIF](#) on Aug 6, 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 [NIF](#) .

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.