

# Resource Summary Report

Generated by [dkNET](#) on Aug 8, 2026

## B6J.129S2-*Ifnar1*<sup>tm1Agt</sup>/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](https://www.mmrrc.org/catalog/sds.php?mmrrc_id=32045)

**Proper Citation:** RRID:MMRRC\_032045-JAX

**Description:** Mus musculus with name B6J.129S2-*Ifnar1*<sup>tm1Agt</sup>/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](https://pubmed.ncbi.nlm.nih.gov/8009221/)

**Alternate IDs:** MMRRC\_32045-JAX, MMRRC\_032045, MMRRC\_3245

**Organism Name:** B6J.129S2-*Ifnar1*<sup>tm1Agt</sup>/Mmjax

**Record Creation Time:** 20230308T055126+0000

**Record Last Update:** 20260801T124233+0000

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## Ratings and Alerts

No rating or validation information has been found for B6J.129S2-*Ifnar1*<sup>tm1Agt</sup>/Mmjax.

No alerts have been found for B6J.129S2-*Ifnar1*<sup>tm1Agt</sup>/Mmjax.

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## Data and Source Information

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

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

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## Usage and Citation Metrics

We found 298 mentions in open access literature.

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

Steinbuck MP, et al. (2026) Lymph node-targeted DNA engages TBK1/IFN-I-driven innate immunity to induce potent T cell responses and durable memory in mice and NHPs. *Science advances*, 12(22), eaec1416.

Shaw SC, et al. (2026) Type I interferon signaling in hematopoietic cells impairs neutrophil antibacterial function in the middle ear during viral co-infection. *Cell reports. Medicine*, 7(6), 102846.

He J, et al. (2026) Genetically engineered ErbB2 overexpression sensitizes organoid-derived tumors to checkpoint inhibition in a syngeneic model of gastric cancer. *Journal for immunotherapy of cancer*, 14(2).

Zhu JR, et al. (2026) Plasmacytoid dendritic cells alleviate atopic dermatitis by suppressing Th2 inflammation via the IFN- $\gamma$ /IFNAR1 pathway. *Frontiers in immunology*, 17, 1762173.

Fattinger SA, et al. (2026) Strong sustained type I IFN signaling acts cell intrinsically to impair IFN $\gamma$  responses and cause tuberculosis susceptibility. *bioRxiv : the preprint server for biology*.

Sorvillo TE, et al. (2026) Distinct respiratory and neurological disease phenotypes in lethal Nipah virus Malaysia versus Bangladesh infection in IFNAR knockout mice. *Antiviral research*, 250, 106420.

Ren X, et al. (2026) Humanization and engineering of protective antibodies targeting severe fever with thrombocytopenia syndrome virus Gn protein. *Cell reports*, 45(2), 116936.

Yamada Y, et al. (2026) Lineage-matched Oropouche virus mRNA-LNP vaccines confer complete, cross-protective immunity in mice. *mBio*, 17(2), e0365525.

Kumar P, et al. (2026) Zika Virus-Induced Metabolic Reprogramming Drives Lipid Droplet Biogenesis, Promoting Viral Replication and Ocular Pathogenesis. *Cells*, 15(9).

Riera-Borrull M, et al. (2026) Poorly perfused tumor regions harbor T cells with a glucose-dependent effector phenotype. *EMBO reports*, 27(12), 3454.

Deshmukh N, et al. (2026) Short-chain fatty acids butyrate and acetate limit Zika virus replication and associated ocular manifestations via the G-protein coupled receptor 43/FFAR2. *Journal of virology*, 100(1), e0182625.

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.

Ko KH, et al. (2025) Intranasal vaccines adjuvanted with Nexavant demonstrate robust protective efficacy by inducing both mucosal and systemic immunity in a murine model. *Frontiers in immunology*, 16, 1745319.

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

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*.