

# Resource Summary Report

Generated by [nidm-terms](#) on Jul 29, 2026

## B6.129-Hif1a<sup>tm3Rsjo</sup>/J

RRID:IMSR\_JAX:007561

Type: Organism

### Proper Citation

RRID:IMSR\_JAX:007561

### Organism Information

**URL:** <https://www.jax.org/strain/007561>

**Proper Citation:** RRID:IMSR\_JAX:007561

**Description:** Mus musculus with name B6.129-Hif1a<sup>tm3Rsjo</sup>/J from IMSR.

**Species:** Mus musculus

**Notes:** gene symbol note: hypoxia inducible factor 1; alpha subunit; mutant strain|congenic strain: Hif1a

**Affected Gene:** hypoxia inducible factor 1; alpha subunit

**Genomic Alteration:** targeted mutation 3; Randall S Johnson

**Catalog Number:** JAX:007561

**Database:** JAX Mice and Services

**Database Abbreviation:** JAX

**Availability:** live

**Organism Name:** B6.129-Hif1a<sup>tm3Rsjo</sup>/J

**Record Creation Time:** 20250513T053702+0000

**Record Last Update:** 20260725T044415+0000

### Ratings and Alerts

No rating or validation information has been found for B6.129-Hif1a<sup>tm3Rsjo</sup>/J.

No alerts have been found for B6.129-Hif1a<sup>tm3Rsjo</sup>/J.

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## Data and Source Information

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

**Source Database:** JAX Mice and Services

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## Usage and Citation Metrics

We found 54 mentions in open access literature.

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

Ehrlich AM, et al. (2025) HIF1 $\alpha$  mediates circadian regulation of skeletal muscle metabolism and substrate preference in response to time-of-day exercise. *Proceedings of the National Academy of Sciences of the United States of America*, 122(28), e2504080122.

Wu Z, et al. (2025) Control of Inflammatory Response by Tissue Microenvironment. *bioRxiv* : the preprint server for biology.

Nam JK, et al. (2025) Combined HIF-1 $\alpha$  blockade and CHIR99021 treatment reverses pulmonary fibrosis via modulation endothelial-to-mesenchymal transition. *iScience*, 28(12), 114028.

Ruan W, et al. (2024) The BMAL1/HIF2A heterodimer modulates circadian variations of myocardial injury. *Research square*.

Horn CM, et al. (2024) Granulocytic myeloid-derived suppressor cell activity during biofilm infection is regulated by a glycolysis/HIF1 $\alpha$  axis. *The Journal of clinical investigation*, 134(8).

Lin X, et al. (2024) Augmentation of scleral glycolysis promotes myopia through histone lactylation. *Cell metabolism*, 36(3), 511.

Dandavate V, et al. (2024) Hepatic BMAL1 and HIF1 $\alpha$  regulate a time-dependent hypoxic response and prevent hepatopulmonary-like syndrome. *Cell metabolism*, 36(9), 2038.

Grammer C, et al. (2024) Vhl safeguards thymic epithelial cell identity and thymopoietic capacity by constraining Hif1 $\alpha$  activity during development. *iScience*, 27(7), 110258.

Subudhi I, et al. (2024) Metabolic coordination between skin epithelium and type 17 immunity sustains chronic skin inflammation. *Immunity*, 57(7), 1665.

Das A, et al. (2024) Transcription factor Tox2 is required for metabolic adaptation and tissue residency of ILC3 in the gut. *Immunity*, 57(5), 1019.

Prajapati M, et al. (2023) Hypoxia-inducible factor 2 is a key determinant of manganese excess and polycythemia in SLC30A10 deficiency. *bioRxiv* : the preprint server for biology.

Liu S, et al. (2023) A tissue injury sensing and repair pathway distinct from host pathogen defense. *Cell*, 186(10), 2127.

Roy RM, et al. (2023) Lactate produced by alveolar type II cells suppresses inflammatory alveolar macrophages in acute lung injury. *FASEB journal : official publication of the Federation of American Societies for Experimental Biology*, 37(12), e23316.

Bailey C, et al. (2023) Genetic and pharmaceutical targeting of HIF1 $\alpha$  allows combination immunotherapy to boost graft vs. leukemia without exacerbation graft vs. host disease. *Cell reports. Medicine*, 4(11), 101236.

Valle-Noguera A, et al. (2023) IL-18-induced HIF-1 $\alpha$  in ILC3s ameliorates the inflammation of *C. rodentium*-induced colitis. *Cell reports*, 42(12), 113508.

Vohwinkel CU, et al. (2022) HIF1A-dependent induction of alveolar epithelial PFKFB3 dampens acute lung injury. *JCI insight*, 7(24).

Bailey CM, et al. (2022) Targeting HIF-1 $\alpha$  abrogates PD-L1-mediated immune evasion in tumor microenvironment but promotes tolerance in normal tissues. *The Journal of clinical investigation*, 132(9).

Van Dis E, et al. (2022) IFN- $\gamma$ -independent control of *M. tuberculosis* requires CD4 T cell-derived GM-CSF and activation of HIF-1 $\alpha$ . *PLoS pathogens*, 18(7), e1010721.

Janbandhu V, et al. (2022) Hif-1 $\alpha$  suppresses ROS-induced proliferation of cardiac fibroblasts following myocardial infarction. *Cell stem cell*, 29(2), 281.

Gong Z, et al. (2022) Lipid-laden lung mesenchymal cells foster breast cancer metastasis via metabolic reprogramming of tumor cells and natural killer cells. *Cell metabolism*, 34(12), 1960.