

Resource Summary Report

Generated by [NIF](#) on Sep 9, 2026

B6.129-Hif1a^{tm3Rsjo}/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^{tm3Rsjo}/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^{tm3Rsjo}/J

Record Creation Time: 20250513T053702+0000

Record Last Update: 20260905T044446+0000

Ratings and Alerts

No rating or validation information has been found for B6.129-Hif1a^{tm3Rsjo}/J.

No alerts have been found for B6.129-Hif1a^{tm3Rsjo}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 61 mentions in open access literature.

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

de Lima J, et al. (2026) HIF-1 α + CD4 $^{+}$ T cells coordinate a tissue-resident immune cell network in the lung. *Immunity*, 59(4), 1092.

Mishra AA, et al. (2026) Microbiota-derived short-chain fatty acids mediate *Candida albicans* gastrointestinal colonization resistance. *Cell host & microbe*, 34(7), 1302.

Schreiber T, et al. (2026) Dendritic cell-specific hypoxia-inducible factor-1 α deficiency protects mice from recurrent retroviral infection. *Experimental physiology*, 111(8), 3843.

Lu IL, et al. (2026) Hypoxia-inducible factor signaling regulates embryonic interneuron development, GRIN2B expression and adult cortical function. *Developmental cell*, 61(4), 773.

Karakousi T, et al. (2026) IFN γ -dependent metabolic reprogramming restrains an immature, pro-metastatic lymphatic state in melanoma. *Cancer cell*, 44(4), 792.

Davanzo GG, et al. (2026) Temporal control of macrophage pro-inflammatory phenotype by a biphasic HIF-1 α regulatory program. *Molecular cell*.

Ehrlich AM, et al. (2025) HIF1 α 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 α blockade and CHIR99021 treatment reverses pulmonary fibrosis via modulation endothelial-to-mesenchymal transition. *iScience*, 28(12), 114028.

de Lima J, et al. (2025) HIF-1 α + CD4 T cells coordinate a tissue resident immune cell network in the lung. *bioRxiv* : the preprint server for biology.

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

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

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

Horn CM, et al. (2024) Granulocytic myeloid-derived suppressor cell activity during biofilm infection is regulated by a glycolysis/HIF1a axis. *The Journal of clinical investigation*, 134(8).

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.

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

Grammer C, et al. (2024) Vhl safeguards thymic epithelial cell identity and thymopoietic capacity by constraining Hif1a activity during development. *iScience*, 27(7), 110258.

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*.

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.

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