

Resource Summary Report

Generated by [kravitz2](#) on Aug 9, 2026

B6.129P2-Nos3^{tm1Unc}/J

RRID:IMSR_JAX:002684

Type: Organism

Proper Citation

RRID:IMSR_JAX:002684

Organism Information

URL: <https://www.jax.org/strain/002684>

Proper Citation: RRID:IMSR_JAX:002684

Description: Mus musculus with name B6.129P2-Nos3^{tm1Unc}/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: nitric oxide synthase 3; endothelial cell; mutant strain|congenic strain: Nos3

Affected Gene: nitric oxide synthase 3; endothelial cell

Genomic Alteration: targeted mutation 1; University of North Carolina

Catalog Number: JAX:002684

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6.129P2-Nos3^{tm1Unc}/J

Record Creation Time: 20250513T053634+0000

Record Last Update: 20260808T050835+0000

Ratings and Alerts

No rating or validation information has been found for B6.129P2-Nos3^{tm1Unc}/J.

No alerts have been found for B6.129P2-Nos3^{tm1Unc}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 30 mentions in open access literature.

Listed below are recent publications. The full list is available at [kravitz2](#) .

Wang HY, et al. (2024) Anoxia-induced hippocampal LTP is regeneratively produced by glutamate and nitric oxide from the neuro-glial-endothelial axis. *iScience*, 27(4), 109515.

Liu K, et al. (2022) ApoE/NOS3 Knockout Mice as a Novel Cardiovascular Disease Model of Hypertension and Atherosclerosis. *Genes*, 13(11).

Saxton SN, et al. (2022) Perivascular Adipose Tissue Anticontractile Function Is Mediated by Both Endothelial and Neuronal Nitric Oxide Synthase Isoforms. *Journal of vascular research*, 59(5), 288.

Kim TK, et al. (2022) 2'-5' oligoadenylate synthetase-like 1 (OASL1) protects against atherosclerosis by maintaining endothelial nitric oxide synthase mRNA stability. *Nature communications*, 13(1), 6647.

Fonseca FV, et al. (2022) S-nitrosylation is required for α 2AR desensitization and experimental asthma. *Molecular cell*, 82(16), 3089.

Lai H, et al. (2020) Podocyte and endothelial-specific elimination of BAMBI identifies differential transforming growth factor- β pathways contributing to diabetic glomerulopathy. *Kidney international*, 98(3), 601.

Peterson JC, et al. (2020) Disturbed nitric oxide signalling gives rise to congenital bicuspid aortic valve and aortopathy. *Disease models & mechanisms*, 13(9).

Saxton SN, et al. (2020) Interleukin-33 rescues perivascular adipose tissue anticontractile function in obesity. *American journal of physiology. Heart and circulatory physiology*, 319(6), H1387.

Coulombe P, et al. (2019) Endothelial Sash1 Is Required for Lung Maturation through Nitric Oxide Signaling. *Cell reports*, 27(6), 1769.

Peterson JC, et al. (2018) Bicuspid aortic valve formation: Nos3 mutation leads to abnormal lineage patterning of neural crest cells and the second heart field. *Disease models & mechanisms*, 11(10).

Kumar S, et al. (2017) Accelerated atherosclerosis development in C57Bl6 mice by overexpressing AAV-mediated PCSK9 and partial carotid ligation. *Laboratory investigation; a journal of technical methods and pathology*, 97(8), 935.

Passaro D, et al. (2017) Increased Vascular Permeability in the Bone Marrow Microenvironment Contributes to Disease Progression and Drug Response in Acute Myeloid Leukemia. *Cancer cell*, 32(3), 324.

Charnock JC, et al. (2016) The impact of a human IGF-II analog ([Leu27]IGF-II) on fetal growth in a mouse model of fetal growth restriction. *American journal of physiology. Endocrinology and metabolism*, 310(1), E24.

Perrien DS, et al. (2016) Novel methods for microCT-based analyses of vasculature in the renal cortex reveal a loss of perfusable arterioles and glomeruli in eNOS^{-/-} mice. *BMC nephrology*, 17, 24.

Ha JM, et al. (2016) Regulation of retinal angiogenesis by endothelial nitric oxide synthase signaling pathway. *The Korean journal of physiology & pharmacology : official journal of the Korean Physiological Society and the Korean Society of Pharmacology*, 20(5), 533.

Lu G, et al. (2015) Myeloid cell-derived inducible nitric oxide synthase suppresses M1 macrophage polarization. *Nature communications*, 6, 6676.

Morton JS, et al. (2015) The vascular effects of sodium tanshinone IIA sulphonate in rodent and human pregnancy. *PloS one*, 10(3), e0121897.

Lorenz M, et al. (2015) Endothelial NO Production Is Mandatory for Epigallocatechin-3-Gallate-induced Vasodilation: Results From eNOS Knockout (eNOS^{-/-}) Mice. *Journal of cardiovascular pharmacology*, 65(6), 607.

Gross CM, et al. (2015) Endothelial nitric oxide synthase deficient mice are protected from lipopolysaccharide induced acute lung injury. *PloS one*, 10(3), e0119918.

Kita T, et al. (2015) Plasma Kallikrein-Kinin System as a VEGF-Independent Mediator of Diabetic Macular Edema. *Diabetes*, 64(10), 3588.