

Resource Summary Report

Generated by T1D on Sep 6, 2026

STOCK Nox4^{tm1.2Hwsc} Tg(Tek-cre)1Ywa/Orl

RRID:IMSR_EM:11552

Type: Organism

Proper Citation

RRID:IMSR_EM:11552

Organism Information

URL: <https://www.infrafrontier.eu/emma/strain-details/?q=11552>

Proper Citation: RRID:IMSR_EM:11552

Description: Mus musculus with name STOCK Nox4^{tm1.2Hwsc} Tg(Tek-cre)1Ywa/Orl from IMSR.

Species: Mus musculus

Synonyms: C57BL/6-Tg(Tie2-Cre)(Nox4-FF)

Notes: gene symbol note: NADPH oxidase 4|transgene insertion 1; Masashi Yanagisawa; mutant strain: Nox4|Tg(Tek-cre)1Ywa

Affected Gene: NADPH oxidase 4|transgene insertion 1; Masashi Yanagisawa

Genomic Alteration: targeted mutation 1.2; Harald H H W Schmidt|transgene insertion 1; Masashi Yanagisawa

Catalog Number: EM:11552

Database: European Mouse Mutant Archive

Database Abbreviation: EMMA

Availability: embryo

Organism Name: STOCK Nox4^{tm1.2Hwsc} Tg(Tek-cre)1Ywa/Orl

Record Creation Time: 20250513T062306+0000

Record Last Update: 20260905T053353+0000

Ratings and Alerts

No rating or validation information has been found for STOCK Nox4^{tm1.2Hwsc} Tg(Tek-cre)1Ywa/Orl.

Warning: Warning. Researchers have noted that this genotype does not sufficiently model human cerebral cavernous malformation 2.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: European Mouse Mutant Archive

Usage and Citation Metrics

We found 43 mentions in open access literature.

Listed below are recent publications. The full list is available at [T1D](#) .

Wen Y, et al. (2022) Endothelial p130cas confers resistance to anti-angiogenesis therapy. Cell reports, 38(4), 110301.

Zhang Y, et al. (2020) Sirt6-Mediated Endothelial-to-Mesenchymal Transition Contributes Toward Diabetic Cardiomyopathy via the Notch1 Signaling Pathway. Diabetes, metabolic syndrome and obesity : targets and therapy, 13, 4801.

Oulghazi S, et al. (2020) Adaptive Immunity and Pathogenesis of Diabetes: Insights Provided by the α 4-Integrin Deficient NOD Mouse. Cells, 9(12).

De Ieso ML, et al. (2020) Physiologic Consequences of Caveolin-1 Ablation in Conventional Outflow Endothelia. Investigative ophthalmology & visual science, 61(11), 32.

Bailey JD, et al. (2020) Isolation and culture of murine bone marrow-derived macrophages for nitric oxide and redox biology. Nitric oxide : biology and chemistry, 100-101, 17.

Lee OH, et al. (2020) Sirtuin 6 deficiency induces endothelial cell senescence via downregulation of forkhead box M1 expression. Aging, 12(21), 20946.

Xu L, et al. (2019) Endothelial-specific deletion of Ets-1 attenuates Angiotensin II-induced cardiac fibrosis via suppression of endothelial-to-mesenchymal transition. BMB reports, 52(10), 595.

Luo Y, et al. (2019) CD146-HIF-1 α hypoxic reprogramming drives vascular remodeling and pulmonary arterial hypertension. Nature communications, 10(1), 3551.

Bailey JD, et al. (2019) Nitric Oxide Modulates Metabolic Remodeling in Inflammatory Macrophages through TCA Cycle Regulation and Itaconate Accumulation. Cell reports, 28(1), 218.

Crawley JTB, et al. (2019) Defective fibrin deposition and thrombus stability in Bambi^{-/-} mice are mediated by elevated anticoagulant function. *Journal of thrombosis and haemostasis* : JTH, 17(11), 1935.

Murakami Y, et al. (2019) Reconstitution of the embryonic kidney identifies a donor cell contribution to the renal vasculature upon transplantation. *Scientific reports*, 9(1), 1172.

Winstel V, et al. (2019) *Staphylococcus aureus* Exploits the Host Apoptotic Pathway To Persist during Infection. *mBio*, 10(6).

McNeill E, et al. (2018) Regulation of mycobacterial infection by macrophage Gch1 and tetrahydrobiopterin. *Nature communications*, 9(1), 5409.

Chuaiphichai S, et al. (2018) Endothelial Cell Tetrahydrobiopterin Modulates Sensitivity to Ang (Angiotensin) II-Induced Vascular Remodeling, Blood Pressure, and Abdominal Aortic Aneurysm. *Hypertension (Dallas, Tex. : 1979)*, 72(1), 128.

Kiyozumi D, et al. (2018) Laminin α 1 C-terminal Glu to Gln mutation induces early postimplantation lethality. *Life science alliance*, 1(5), e201800064.

Chang C, et al. (2017) Hematopoietic Id Deletion Triggers Endomyocardial Fibrotic and Vascular Defects in the Adult Heart. *Scientific reports*, 7(1), 3079.

Mao H, et al. (2017) Endothelial LRP1 regulates metabolic responses by acting as a co-activator of PPAR γ . *Nature communications*, 8, 14960.

Reif R, et al. (2017) In vivo imaging of systemic transport and elimination of xenobiotics and endogenous molecules in mice. *Archives of toxicology*, 91(3), 1335.

Chuaiphichai S, et al. (2017) A key role for tetrahydrobiopterin-dependent endothelial NOS regulation in resistance arteries: studies in endothelial cell tetrahydrobiopterin-deficient mice. *British journal of pharmacology*, 174(8), 657.

Tian L, et al. (2017) Mutual regulation of tumour vessel normalization and immunostimulatory reprogramming. *Nature*, 544(7649), 250.