Resource Summary Report

Generated by FDI Lab - SciCrunch.org on May 14, 2025

B6.129S4-Ndufs4$^{tm1.1Rpa}$/J

RRID:IMSR_JAX:027058
Type: Organism

Proper Citation

RRID:IMSR_JAX:027058

Organism Information

URL: https://www.jax.org/strain/027058

Proper Citation: RRID:IMSR_JAX:027058

Description: Mus musculus with name B6.129S4-Ndufs4$^{tm1.1Rpa}$/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: NADH:ubiquinone oxidoreductase core subunit S4; mutant strain|congenic strain: Ndufs4

Affected Gene: NADH:ubiquinone oxidoreductase core subunit S4

Genomic Alteration: targeted mutation 1.1; Richard D Palmiter

Catalog Number: JAX:027058

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6.129S4-Ndufs4$^{tm1.1Rpa}$/J

Record Creation Time: 20250513T053759+0000

Record Last Update: 20250513T054030+0000

Ratings and Alerts

No rating or validation information has been found for B6.129S4-Ndufs4$^{tm1.1Rpa}$/J.

No alerts have been found for B6.129S4-Ndufs4$^{tm1.1Rpa}$/J.

Data and Source Information

Source: Integrated Animals

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 14 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

Meisel JD, et al. (2024) Hypoxia and intra-complex genetic suppressors rescue complex I mutants by a shared mechanism. Cell, 187(3), 659.

Hernansanz-Agustín P, et al. (2024) A transmitochondrial sodium gradient controls membrane potential in mammalian mitochondria. Cell.

Willemse L, et al. (2023) A ketogenic diet alters mTOR activity, systemic metabolism and potentially prevents collagen degradation associated with chronic alcohol consumption in mice. Metabolomics : Official journal of the Metabolomic Society, 19(5), 43.

Baik AH, et al. (2023) Oxygen toxicity causes cyclic damage by destabilizing specific Fe-S cluster-containing protein complexes. Molecular cell, 83(6), 942.

Avrutsky MI, et al. (2022) Noninvasive Ophthalmic Imaging Measures Retinal Degeneration and Vision Deficits in Ndufs4-/- Mouse Model of Mitochondrial Complex I Deficiency. Translational vision science & technology, 11(8), 5.

van der Walt G, et al. (2021) Sub-Cellular Metabolomics Contributes Mitochondria-Specific Metabolic Insights to a Mouse Model of Leigh Syndrome. Metabolites, 11(10).

Bertan F, et al. (2021) Comparative analysis of CI- and CIV-containing respiratory supercomplexes at single-cell resolution. Cell reports methods, 1(1), 100002.

Shil SK, et al. (2021) Ndufs4 ablation decreases synaptophysin expression in hippocampus. Scientific reports, 11(1), 10969.

Liu S, et al. (2021) Glycerol-3-phosphate biosynthesis regenerates cytosolic NAD+ to alleviate mitochondrial disease. Cell metabolism, 33(10), 1974.

Perry EA, et al. (2021) Tetracyclines promote survival and fitness in mitochondrial disease models. Nature metabolism, 3(1), 33.

Kagawa Y, et al. (2020) Mitochondrial dysfunction in GnRH neurons impaired GnRH production. Biochemical and biophysical research communications, 530(1), 329.

Bisbach CM, et al. (2020) Succinate Can Shuttle Reducing Power from the Hypoxic Retina to the O2-Rich Pigment Epithelium. Cell reports, 31(5), 107606.

Yang L, et al. (2020) Serine Catabolism Feeds NADH when Respiration Is Impaired. Cell metabolism, 31(4), 809.

Bolea I, et al. (2019) Defined neuronal populations drive fatal phenotype in a mouse model of Leigh syndrome. eLife, 8.