Resource Summary Report

Generated by FDI Lab - SciCrunch.org on Apr 3, 2025

B6.CXB1-Pde6b^{rd10}/J

RRID:IMSR_JAX:004297
Type: Organism

Proper Citation

RRID:IMSR_JAX:004297

Organism Information

URL: https://www.jax.org/strain/004297

Proper Citation: RRID:IMSR_JAX:004297

Description: Mus musculus with name B6.CXB1-Pde6b^{rd10}/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: phosphodiesterase 6B; cGMP; rod receptor; beta polypeptide; mutant strain|congenic strain: Pde6b

Affected Gene: phosphodiesterase 6B; cGMP; rod receptor; beta polypeptide

Genomic Alteration: retinal degeneration 10

Catalog Number: JAX:004297

Database: International Mouse Resource Center IMSR, JAX

Database Abbreviation: IMSR

Availability: live

Alternate IDs: IMSR_JAX:4297

Organism Name: B6.CXB1-Pde6b^{rd10}/J

Record Creation Time: 20230509T193243+0000

Record Last Update: 20240104T174810+0000

Ratings and Alerts

No rating or validation information has been found for B6.CXB1-Pde6b^{rd10}/J.

No alerts have been found for B6.CXB1-Pde6b^{rd10}/J.

Data and Source Information

Source: Integrated Animals

Source Database: International Mouse Resource Center IMSR, JAX

Usage and Citation Metrics

We found 42 mentions in open access literature.

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

Leinonen H, et al. (2024) A combination treatment based on drug repurposing demonstrates mutation-agnostic efficacy in pre-clinical retinopathy models. Nature communications, 15(1), 5943.

Yanardag S, et al. (2024) Prominin 1 is crucial for the early development of photoreceptor outer segments. Scientific reports, 14(1), 10498.

Roh H, et al. (2023) Electrically-evoked responses for retinal prostheses are differentially altered depending on ganglion cell types in outer retinal neurodegeneration caused by Crb1 gene mutation. Frontiers in cellular neuroscience, 17, 1115703.

Guo CJ, et al. (2023) Exosome-mediated inhibition of microRNA-449a promotes the amplification of mouse retinal progenitor cells and enhances their transplantation in retinal degeneration mouse models. Molecular therapy. Nucleic acids, 31, 763.

Ahn J, et al. (2022) Correlated Activity in the Degenerate Retina Inhibits Focal Response to Electrical Stimulation. Frontiers in cellular neuroscience, 16, 889663.

Marra KV, et al. (2022) Bioactive extracellular vesicles from a subset of endothelial progenitor cells rescue retinal ischemia and neurodegeneration. JCI insight, 7(12).

Steins H, et al. (2022) A flexible protruding microelectrode array for neural interfacing in bioelectronic medicine. Microsystems & nanoengineering, 8, 131.

Karademir D, et al. (2022) Single-cell RNA sequencing of the retina in a model of retinitis pigmentosa reveals early responses to degeneration in rods and cones. BMC biology, 20(1), 86.

Liu F, et al. (2022) Trans-Sclera Electrical Stimulation Improves Retinal Function in a Mouse

Model of Retinitis Pigmentosa. Life (Basel, Switzerland), 12(11).

Zhang L, et al. (2021) Large-scale phenotypic drug screen identifies neuroprotectants in zebrafish and mouse models of retinitis pigmentosa. eLife, 10.

Pietra G, et al. (2021) Visual Cortex Engagement in Retinitis Pigmentosa. International journal of molecular sciences, 22(17).

Liu F, et al. (2021) Wolfberry-derived zeaxanthin dipalmitate delays retinal degeneration in a mouse model of retinitis pigmentosa through modulating STAT3, CCL2 and MAPK pathways. Journal of neurochemistry, 158(5), 1131.

Xue Y, et al. (2021) AAV-Txnip prolongs cone survival and vision in mouse models of retinitis pigmentosa. eLife, 10.

Ryals RC, et al. (2020) A Ketogenic & Low-Protein Diet Slows Retinal Degeneration in rd10 Mice. Translational vision science & technology, 9(11), 18.

Oesterle J, et al. (2020) Bayesian inference for biophysical neuron models enables stimulus optimization for retinal neuroprosthetics. eLife, 9.

Batabyal S, et al. (2020) Near-Infrared Laser-Based Spatially Targeted Nano-enhanced Optical Delivery of Therapeutic Genes to Degenerated Retina. Molecular therapy. Methods & clinical development, 17, 758.

Gehlen J, et al. (2020) Blockade of Retinal Oscillations by Benzodiazepines Improves Efficiency of Electrical Stimulation in the Mouse Model of RP, rd10. Investigative ophthalmology & visual science, 61(13), 37.

Sundaramurthi H, et al. (2020) Selective Histone Deacetylase 6 Inhibitors Restore Cone Photoreceptor Vision or Outer Segment Morphology in Zebrafish and Mouse Models of Retinal Blindness. Frontiers in cell and developmental biology, 8, 689.

Höfling L, et al. (2020) Probing and predicting ganglion cell responses to smooth electrical stimulation in healthy and blind mouse retina. Scientific reports, 10(1), 5248.

Begenisic T, et al. (2020) Preservation of Visual Cortex Plasticity in Retinitis Pigmentosa. Neuroscience, 424, 205.