Resource Summary Report

Generated by SPARC SAWG on Aug 11, 2026

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: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

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

Record Creation Time: 20250513T053644+0000

Record Last Update: 20260808T050845+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: JAX Mice and Services

Usage and Citation Metrics

We found 45 mentions in open access literature.

Listed below are recent publications. The full list is available at SPARC SAWG .

Magalhães CF, et al. (2026) Photoreceptor preservation by FAAH inhibition in a murine model of retinitis pigmentosa. Molecular neurobiology, 63(1).

Spirig SE, et al. (2026) Cell-type-focused compound screen in human organoids reveals CK1 inhibition protects cone photoreceptors from death. Neuron, 114(13), 2347.

Vainionpää K, et al. (2026) Female sex is a risk factor for exacerbated lipid peroxidation and disease in murine retinitis pigmentosa. Redox biology, 90, 103987.

Qiu R, et al. (2025) AAV2-PDE6B restores retinal structure and function in the retinal degeneration 10 mouse model of retinitis pigmentosa by promoting phototransduction and inhibiting apoptosis. Neural regeneration research, 20(8), 2408.

Grimes WN, et al. (2025) Layer-specific anatomical and physiological features of the retina's neurovascular unit. Current biology : CB, 35(1), 109.

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.

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

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

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.

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.

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.