

Resource Summary Report

Generated by [PRECISE-TBI](#) on Jul 31, 2026

B6.129S6(Cg)-Rho^{tm1.1Kpal/J}

RRID:IMSR_JAX:017628

Type: Organism

Proper Citation

RRID:IMSR_JAX:017628

Organism Information

URL: <https://www.jax.org/strain/017628>

Proper Citation: RRID:IMSR_JAX:017628

Description: Mus musculus with name B6.129S6(Cg)-Rho^{tm1.1Kpal/J} from IMSR.

Species: Mus musculus

Synonyms: B6.Cg-Rho/J

Notes: gene symbol note: rhodopsin; mutant strain|congenic strain: Rho

Affected Gene: rhodopsin

Genomic Alteration: targeted mutation 1.1; Krzysztof Palczewski

Catalog Number: JAX:017628

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6.129S6(Cg)-Rho^{tm1.1Kpal/J}

Record Creation Time: 20250513T053733+0000

Record Last Update: 20260725T044442+0000

Ratings and Alerts

No rating or validation information has been found for B6.129S6(Cg)-Rho^{tm1.1Kpal/J}.

No alerts have been found for B6.129S6(Cg)-Rho^{tm1.1Kpal/J}.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 19 mentions in open access literature.

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

Ortega JT, et al. (2025) Discovery of non-retinoid compounds that suppress the pathogenic effects of misfolded rhodopsin in a mouse model of retinitis pigmentosa. PLoS biology, 23(1), e3002932.

Rowe AA, et al. (2025) Female sex hormones exacerbate retinal neurodegeneration. Science advances, 11(15), eadr6211.

Shekhar S, et al. (2025) Sensory quiescence induces a cell-non-autonomous integrated stress response curbed by condensate formation of the ATF4 and XRP1 effectors. Nature communications, 16(1), 252.

Shen N, et al. (2025) A genome-wide in vivo CRISPR screen identifies neuroprotective strategies in the mouse and human retina. bioRxiv : the preprint server for biology.

Attaway CA, et al. (2025) Enhancing experience-dependent plasticity accelerates vision loss in a murine model of retinitis pigmentosa. bioRxiv : the preprint server for biology.

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.

Rowe AA, et al. (2024) Female sex hormones exacerbate retinal neurodegeneration. bioRxiv : the preprint server for biology.

Ortega JT, et al. (2023) Galanin receptor 3 - A new pharmacological target in retina degeneration. Pharmacological research, 188, 106675.

Riedmayr LM, et al. (2023) mRNA trans-splicing dual AAV vectors for (epi)genome editing and gene therapy. Nature communications, 14(1), 6578.

Katada Y, et al. (2023) Highly sensitive visual restoration and protection via ectopic expression of chimeric rhodopsin in mice. iScience, 26(10), 107716.

Shekhar S, et al. (2023) Visual impairment cell non-autonomously dysregulates brain-wide proteostasis. bioRxiv : the preprint server for biology.

Ortega JT, et al. (2022) Flavonoids improve the stability and function of P23H rhodopsin slowing down the progression of retinitis pigmentosa in mice. Journal of neuroscience research, 100(4), 1063.

Ortega JT, et al. (2022) Chromenone derivatives as novel pharmacological chaperones for retinitis pigmentosa-linked rod opsin mutants. *Human molecular genetics*, 31(20), 3439.

Li S, et al. (2021) Nr2e3 is a genetic modifier that rescues retinal degeneration and promotes homeostasis in multiple models of retinitis pigmentosa. *Gene therapy*, 28(5), 223.

Orlans HO, et al. (2020) Dynamic in vivo quantification of rod photoreceptor degeneration using fluorescent reporter mouse models of retinitis pigmentosa. *Experimental eye research*, 190, 107895.

Liu X, et al. (2020) Paracrine effects of intraocularly implanted cells on degenerating retinas in mice. *Stem cell research & therapy*, 11(1), 142.

Leinonen H, et al. (2020) Homeostatic plasticity in the retina is associated with maintenance of night vision during retinal degenerative disease. *eLife*, 9.

Nayak G, et al. (2020) Adaptive Thermogenesis in Mice Is Enhanced by Opsin 3-Dependent Adipocyte Light Sensing. *Cell reports*, 30(3), 672.

Nakamura PA, et al. (2017) Small molecule Photoregulin3 prevents retinal degeneration in the RhoP23H mouse model of retinitis pigmentosa. *eLife*, 6.