

Resource Summary Report

Generated by [SPARC SAWG](#) on Aug 9, 2026

Visual Physiology Opsin Database

RRID:SCR_025668

Type: Tool

Proper Citation

Visual Physiology Opsin Database (RRID:SCR_025668)

Resource Information

URL: <https://github.com/VisualPhysiologyDB/visual-physiology-opsin-db>

Proper Citation: Visual Physiology Opsin Database (RRID:SCR_025668)

Description: Database of opsin genotype-phenotype data and machine-learning models trained to predict opsin phenotypes. Database of all heterologously expressed opsin genes with ?max phenotypes.

Abbreviations: VPOD

Synonyms: The Visual Physiology Opsin Database

Resource Type: database, data or information resource, software resource, source code

Defining Citation: [DOI:10.1101/2024.02.12.579993](https://doi.org/10.1101/2024.02.12.579993)

Keywords: opsin genotype-phenotype data, heterologously expressed opsin genes with ? max phenotypes, database of all heterologously expressed opsin genes, ?max phenotypes,

Availability: Free, Available for download, Freely available

Resource Name: Visual Physiology Opsin Database

Resource ID: SCR_025668

Alternate IDs: DOI:10.5281/zenodo.10667839

License: GNU GPL v3.0

Record Creation Time: 20240828T053243+0000

Record Last Update: 20260808T190728+0000

Ratings and Alerts

No rating or validation information has been found for Visual Physiology Opsin Database.

No alerts have been found for Visual Physiology Opsin Database.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 4 mentions in open access literature.

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

Frazer SA, et al. (2026) Accessible and robust machine learning approaches to improve the opsin genotype-phenotype map. *Molecular biology and evolution*, 43(6).

Navarrete Méndez MJ, et al. (2025) Caecilians maintain a functional long-wavelength-sensitive cone opsin gene despite signatures of relaxed selection and more than 200 million years of fossoriality. *Evolution; international journal of organic evolution*, 79(12), 2756.

Méndez MJN, et al. (2025) Caecilians maintain a functional long-wavelength-sensitive cone opsin gene despite signatures of relaxed selection and more than 200 million years of fossoriality. *bioRxiv : the preprint server for biology*.

Frazer SA, et al. (2024) Discovering genotype-phenotype relationships with machine learning and the Visual Physiology Opsin Database (VPOD). *GigaScience*, 13.