

# Resource Summary Report

Generated by [kravitz2](#) on Aug 23, 2026

## pJMK001

RRID:Addgene\_33780

Type: Plasmid

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### Proper Citation

RRID:Addgene\_33780

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### Plasmid Information

**URL:** <http://www.addgene.org/33780>

**Proper Citation:** RRID:Addgene\_33780

**Insert Name:** Proteorhodopsin Optical Proton Sensor

**Organism:** uncultured proteobacterium EBAC31A08

**Bacterial Resistance:** Ampicillin

**Defining Citation:** [PMID:21764748](#)

**Vector Backbone Description:** Backbone Marker:Invitrogen; Backbone Size:4127; Vector Backbone:pBAD TOPO; Vector Types:Bacterial Expression; Bacterial Resistance:Ampicillin

**Plasmid Name:** pJMK001

**Relevant Mutation:** D97N

**Record Creation Time:** 20220422T222145+0000

**Record Last Update:** 20260815T081349+0000

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### Ratings and Alerts

No rating or validation information has been found for pJMK001.

No alerts have been found for pJMK001.

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### Data and Source Information

**Source:** [Addgene](#)

## Usage and Citation Metrics

We found 3 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [kravitz2](#) .

Yang RZ, et al. (2025) Ambient light alleviates retinal neurodegeneration in mice by powering mitochondria via the engineered optoenergetic rhodopsin. Signal transduction and targeted therapy, 10(1), 355.

Bruni GN, et al. (2017) Voltage-gated calcium flux mediates Escherichia coli mechanosensation. Proceedings of the National Academy of Sciences of the United States of America, 114(35), 9445.

Cohen AE, et al. (2014) Measuring membrane voltage with microbial rhodopsins. Methods in molecular biology (Clifton, N.J.), 1071, 97.