

Resource Summary Report

Generated by [kravitz2](#) on Jul 31, 2026

pJMK001

RRID:Addgene_33780

Type: Plasmid

Proper Citation

RRID:Addgene_33780

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: 20260725T074559+0000

Ratings and Alerts

No rating or validation information has been found for pJMK001.

No alerts have been found for pJMK001.

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.