

Resource Summary Report

Generated by [RRID](#) on Aug 26, 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: 20260815T081349+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 [RRID](#) .

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.