

Resource Summary Report

Generated by [dkNET](#) on Aug 3, 2026

DRH296: FCK-Optopatch2

RRID:Addgene_51694

Type: Plasmid

Proper Citation

RRID:Addgene_51694

Plasmid Information

URL: <http://www.addgene.org/51694>

Proper Citation: RRID:Addgene_51694

Insert Name: Optopatch2

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:24952910](#)

Vector Backbone Description: Backbone Marker:Pavel Osten; Backbone Size:9236; Vector Backbone:FCK(1.3); Vector Types:Mammalian Expression, Lentiviral; Bacterial Resistance:Ampicillin

Plasmid Name: DRH296: FCK-Optopatch2

Record Creation Time: 20220422T222304+0000

Record Last Update: 20260801T081427+0000

Ratings and Alerts

No rating or validation information has been found for DRH296: FCK-Optopatch2.

No alerts have been found for DRH296: FCK-Optopatch2.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 8 mentions in open access literature.

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

Delgadillo-Silva LF, et al. (2024) Optogenetic ?? cell interrogation in vivo reveals a functional hierarchy directing the Ca²⁺ response to glucose supported by vitamin B6. Science advances, 10(26), eado4513.

Nagai Y, et al. (2023) Dorsal raphe serotonergic neurons preferentially reactivate dorsal dentate gyrus cell ensembles associated with positive experience. Cell reports, 42(3), 112149.

Kawai H, et al. (2022) Median raphe serotonergic neurons projecting to the interpeduncular nucleus control preference and aversion. Nature communications, 13(1), 7708.

Santos AC, et al. (2021) Secreted Reporter Assay Enables Quantitative and Longitudinal Monitoring of Neuronal Activity. eNeuro, 8(5).

Nagai Y, et al. (2020) The Role of Dorsal Raphe Serotonin Neurons in the Balance between Reward and Aversion. International journal of molecular sciences, 21(6).

Afshar Saber W, et al. (2018) All-Optical Assay to Study Biological Neural Networks. Frontiers in neuroscience, 12, 451.

Fan LZ, et al. (2018) All-optical synaptic electrophysiology probes mechanism of ketamine-induced disinhibition. Nature methods, 15(10), 823.

Walsh AJ, et al. (2016) Action potential block in neurons by infrared light. Neurophotonics, 3(4), 040501.