

# Resource Summary Report

Generated by [RRID](#) on Aug 18, 2026

## pAAV-CaMKIIa-eArch 3.0-EYFP

RRID:Addgene\_35516

Type: Plasmid

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### Proper Citation

RRID:Addgene\_35516

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### Plasmid Information

**URL:** <http://www.addgene.org/35516>

**Proper Citation:** RRID:Addgene\_35516

**Insert Name:** Arch3.0-EYFP

**Organism:** H. sodomense

**Bacterial Resistance:** Ampicillin

**Defining Citation:** [PMID:22179551](#)

**Vector Backbone Description:** Backbone Size:5379; Vector Backbone:pAAV; Vector Types:Mammalian Expression, AAV; Bacterial Resistance:Ampicillin

**Comments:** The enhanced trafficking signals allow for better membrane targeting in mammalian cells resulting in 3-5 fold increase in currents.

**Plasmid Name:** pAAV-CaMKIIa-eArch 3.0-EYFP

**Relevant Mutation:** Enhanced trafficking signal and ER export signal added

**Record Creation Time:** 20220422T222151+0000

**Record Last Update:** 20260815T081401+0000

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### Ratings and Alerts

No rating or validation information has been found for pAAV-CaMKIIa-eArch 3.0-EYFP.

No alerts have been found for pAAV-CaMKIIa-eArch 3.0-EYFP.

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### Data and Source Information

Source: [Addgene](#)

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## Usage and Citation Metrics

We found 7 mentions in open access literature.

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

Xue S, et al. (2025) Implantable Light-Powered Human Designer Cells for Electrical Energy Generation. *Advanced materials* (Deerfield Beach, Fla.), 37(45), e02618.

Proskurina EY, et al. (2022) Optogenetic Low-Frequency Stimulation of Principal Neurons, but Not Parvalbumin-Positive Interneurons, Prevents Generation of Ictal Discharges in Rodent Entorhinal Cortex in an In Vitro 4-Aminopyridine Model. *International journal of molecular sciences*, 24(1).

Muroi Y, et al. (2022) Glutamatergic neurons from the medial prefrontal cortex to the dorsal raphe nucleus regulate maternal aggression in lactating mice. *Neuroscience research*, 183, 50.

Funken M, et al. (2020) Selective optogenetic stimulation of fibroblasts enables quantification of hetero-cellular coupling to cardiomyocytes in a three-dimensional model of heart tissue. *Europace : European pacing, arrhythmias, and cardiac electrophysiology : journal of the working groups on cardiac pacing, arrhythmias, and cardiac cellular electrophysiology of the European Society of Cardiology*, 22(10), 1590.

Antinucci P, et al. (2020) A calibrated optogenetic toolbox of stable zebrafish opsin lines. *eLife*, 9.

Zhu J, et al. (2020) Transient Delay-Period Activity of Agranular Insular Cortex Controls Working Memory Maintenance in Learning Novel Tasks. *Neuron*, 105(5), 934.

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