

Resource Summary Report

Generated by [NIF](#) on Jul 29, 2026

pAAV-CAG-ArchT-GFP

RRID:Addgene_29777

Type: Plasmid

Proper Citation

RRID:Addgene_29777

Plasmid Information

URL: <http://www.addgene.org/29777>

Proper Citation: RRID:Addgene_29777

Insert Name: ArchT-GFP

Organism: H. strain TP009

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:21811444](#)

Vector Backbone Description: Backbone Marker:Scott Sternson; Backbone Size:5451; Vector Backbone:AAV with CAG promoter; Vector Types:Mammalian Expression, AAV, Adeno-associated virus; Bacterial Resistance:Ampicillin

Comments: PLEASE CONTACT ED BOYDEN (esb@media.mit.edu) FOR DETAILS ON THIS REAGENT AND FURTHER REAGENTS IN THIS LINE.

Plasmid Name: pAAV-CAG-ArchT-GFP

Relevant Mutation: N/A

Record Creation Time: 20220422T222131+0000

Record Last Update: 20260725T074535+0000

Ratings and Alerts

No rating or validation information has been found for pAAV-CAG-ArchT-GFP.

No alerts have been found for pAAV-CAG-ArchT-GFP.

Data and Source Information

Usage and Citation Metrics

We found 24 mentions in open access literature.

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

Osaki T, et al. (2024) Complex activity and short-term plasticity of human cerebral organoids reciprocally connected with axons. *Nature communications*, 15(1), 2945.

De Preter CC, et al. (2023) Direct and Indirect Nociceptive Input from the Trigeminal Dorsal Horn to Pain-Modulating Neurons in the Rostral Ventromedial Medulla. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 43(32), 5779.

Xiao C, et al. (2023) Glutamatergic and GABAergic neurons in pontine central gray mediate opposing valence-specific behaviors through a global network. *Neuron*, 111(9), 1486.

Tang Y, et al. (2023) Visual experience induces 4-8Hz synchrony between V1 and higher-order visual areas. *Cell reports*, 42(12), 113482.

Shen L, et al. (2022) A bottom-up reward pathway mediated by somatostatin neurons in the medial septum complex underlying appetitive learning. *Nature communications*, 13(1), 1194.

La Terra D, et al. (2022) The role of higher-order thalamus during learning and correct performance in goal-directed behavior. *eLife*, 11.

Godenzini L, et al. (2021) Auditory input enhances somatosensory encoding and tactile goal-directed behavior. *Nature communications*, 12(1), 4509.

Siemian JN, et al. (2021) An excitatory lateral hypothalamic circuit orchestrating pain behaviors in mice. *eLife*, 10.

Pak A, et al. (2020) Top-Down Feedback Controls the Cortical Representation of Illusory Contours in Mouse Primary Visual Cortex. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 40(3), 648.

Fang Q, et al. (2020) A Differential Circuit via Retino-Colliculo-Pulvinar Pathway Enhances Feature Selectivity in Visual Cortex through Surround Suppression. *Neuron*, 105(2), 355.

Sieveritz B, et al. (2020) Prelimbic cortical targets of ventromedial thalamic projections include inhibitory interneurons and corticostriatal pyramidal neurons in the rat. *Brain structure & function*, 225(7), 2057.

Chou XL, et al. (2020) Contextual and cross-modality modulation of auditory cortical processing through pulvinar mediated suppression. *eLife*, 9.

Bajo VM, et al. (2019) Silencing cortical activity during sound-localization training impairs auditory perceptual learning. *Nature communications*, 10(1), 3075.

Yamada M, et al. (2018) Light Control of the Tet Gene Expression System in Mammalian Cells. *Cell reports*, 25(2), 487.

Suzuki K, et al. (2018) Uninterrupted monitoring of drug effects in human-induced pluripotent stem cell-derived cardiomyocytes with bioluminescence Ca^{2+} microscopy. *BMC research notes*, 11(1), 313.

Quiquempoix M, et al. (2018) Layer 2/3 Pyramidal Neurons Control the Gain of Cortical Output. *Cell reports*, 24(11), 2799.

Yu J, et al. (2016) Inscribing Optical Excitability to Non-Excitable Cardiac Cells: Viral Delivery of Optogenetic Tools in Primary Cardiac Fibroblasts. *Methods in molecular biology* (Clifton, N.J.), 1408, 303.

Alfonsa H, et al. (2016) Cl-out is a novel cooperative optogenetic tool for extruding chloride from neurons. *Nature communications*, 7, 13495.

Suzuki K, et al. (2016) Five colour variants of bright luminescent protein for real-time multicolour bioimaging. *Nature communications*, 7, 13718.

Liao HK, et al. (2015) Use of the CRISPR/Cas9 system as an intracellular defense against HIV-1 infection in human cells. *Nature communications*, 6, 6413.