Resource Summary Report

Generated by RRID on Aug 17, 2026

pcDNA3.1/Puro-CAG-ASAP1

RRID:Addgene_52519
Type: Plasmid

Proper Citation

RRID:Addgene_52519

Plasmid Information

URL: http://www.addgene.org/52519

Proper Citation: RRID:Addgene_52519

Insert Name: Accelerated Sensor of Action Potentials 1

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: PMID:24755780

Vector Backbone Description: Backbone Marker:Invitrogen/Dr. Paulmurugan Ramasamy; Backbone Size:6107; Vector Backbone:pcDNA3.1/Puro-CAG; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Plasmid Name: pcDNA3.1/Puro-CAG-ASAP1

Record Creation Time: 20220422T222308+0000

Record Last Update: 20260815T081624+0000

Ratings and Alerts

No rating or validation information has been found for pcDNA3.1/Puro-CAG-ASAP1.

No alerts have been found for pcDNA3.1/Puro-CAG-ASAP1.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 17 mentions in open access literature.

Listed below are recent publications. The full list is available at RRID .

Rühl P, et al. (2024) An Ultrasensitive Genetically Encoded Voltage Indicator Uncovers the Electrical Activity of Non-Excitable Cells. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 11(20), e2307938.

Higashi R, et al. (2024) Cl--dependent amplification of excitatory synaptic potentials at distal dendrites revealed by voltage imaging. Science advances, 10(35), eadj2547.

Lu X, et al. (2023) Widefield imaging of rapid pan-cortical voltage dynamics with an indicator evolved for one-photon microscopy. Nature communications, 14(1), 6423.

Petratou D, et al. (2023) A proton-inhibited DEG/ENaC ion channel maintains neuronal ionstasis and promotes neuronal survival under stress. iScience, 26(7), 107117.

Espinosa-Medina I, et al. (2023) TEMPO enables sequential genetic labeling and manipulation of vertebrate cell lineages. Neuron, 111(3), 345.

Ozkan AD, et al. (2023) Force-induced motions of the PIEZO1 blade probed with fluorimetry. Cell reports, 42(8), 112837.

Liu Z, et al. (2022) Sustained deep-tissue voltage recording using a fast indicator evolved for two-photon microscopy. Cell, 185(18), 3408.

Bloxham B, et al. (2021) Linearly polarized excitation enhances signals from fluorescent voltage indicators. Biophysical journal, 120(23), 5333.

Limapichat W, et al. (2020) Real-time detection of changes in yeast plasma membrane potential using genetically encoded voltage indicator proteins. FEMS yeast research, 20(5).

Li B, et al. (2020) Neuronal Inactivity Co-opts LTP Machinery to Drive Potassium Channel Splicing and Homeostatic Spike Widening. Cell, 181(7), 1547.

Lee EEL, et al. (2019) Methodological improvements for fluorescence recordings in Xenopus laevis oocytes. The Journal of general physiology, 151(2), 264.

Wu L, et al. (2019) PARIS, an optogenetic method for functionally mapping gap junctions. eLife, 8.

Xu F, et al. (2018) Excitation wavelength optimization improves photostability of ASAP-family GEVIs. Molecular brain, 11(1), 32.

Silic MR, et al. (2018) Visualization of Cellular Electrical Activity in Zebrafish Early Embryos and Tumors. Journal of visualized experiments : JoVE(134).

Chamberland S, et al. (2017) Fast two-photon imaging of subcellular voltage dynamics in neuronal tissue with genetically encoded indicators. eLife, 6.

Kibat C, et al. (2016) Imaging voltage in zebrafish as a route to characterizing a vertebrate functional connectome: promises and pitfalls of genetically encoded indicators. Journal of neurogenetics, 30(2), 80.

Long X, et al. (2015) Magnetogenetics: remote non-invasive magnetic activation of neuronal activity with a magnetoreceptor. Science bulletin, 60, 2107.