

Resource Summary Report

Generated by [RRID](#) on Aug 17, 2026

pGP-CMV-NES-jRCaMP1a

RRID:Addgene_61562

Type: Plasmid

Proper Citation

RRID:Addgene_61562

Plasmid Information

URL: <http://www.addgene.org/61562>

Proper Citation: RRID:Addgene_61562

Insert Name: NES-jRCaMP1a

Organism: Rattus norvegicus

Bacterial Resistance: Kanamycin

Defining Citation: [PMID:27011354](#)

Vector Backbone Description: Backbone Marker:Clontech; Backbone Size:3955; Vector Backbone:pEGFP-N1; Vector Types:Mammalian Expression; Bacterial Resistance:Kanamycin

Plasmid Name: pGP-CMV-NES-jRCaMP1a

Record Creation Time: 20220422T222353+0000

Record Last Update: 20260815T081743+0000

Ratings and Alerts

No rating or validation information has been found for pGP-CMV-NES-jRCaMP1a.

No alerts have been found for pGP-CMV-NES-jRCaMP1a.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 14 mentions in open access literature.

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

Fink R, et al. (2026) PinkyCaMP: an mScarlet-based calcium sensor with enhanced brightness, photostability and multiplexing capabilities. *Nature methods*, 23(5), 998.

Arnold D, et al. (2025) Rotation Kinetics of Molecular Motors Influence Their Ability to Kill Cancer Cells and Induce Cellular Calcium Signaling. *Journal of the American Chemical Society*, 147(26), 22387.

Fink R, et al. (2025) PinkyCaMP a mScarlet-based calcium sensor with exceptional brightness, photostability, and multiplexing capabilities. *bioRxiv : the preprint server for biology*.

Tong L, et al. (2023) Single cell in vivo optogenetic stimulation by two-photon excitation fluorescence transfer. *iScience*, 26(10), 107857.

Seidman RA, et al. (2022) Oscillatory calcium release and sustained store-operated oscillatory calcium signaling prevents differentiation of human oligodendrocyte progenitor cells. *Scientific reports*, 12(1), 6160.

Pavlou M, et al. (2022) A Bioengineered In Vitro Model to Assess AAV-Based Gene Therapies for Cyclic GMP-Related Disorders. *International journal of molecular sciences*, 23(9).

Forli A, et al. (2021) Optogenetic strategies for high-efficiency all-optical interrogation using blue-light-sensitive opsins. *eLife*, 10.

Vella SA, et al. (2020) Genetic Indicators for Calcium Signaling Studies in *Toxoplasma gondii*. *Methods in molecular biology* (Clifton, N.J.), 2071, 187.

Farhi SL, et al. (2019) Wide-Area All-Optical Neurophysiology in Acute Brain Slices. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 39(25), 4889.

Kerruth S, et al. (2019) The kinetic mechanisms of fast-decay red-fluorescent genetically encoded calcium indicators. *The Journal of biological chemistry*, 294(11), 3934.

Maneshi MM, et al. (2018) Heterogeneous Cytoskeletal Force Distribution Delineates the Onset Ca²⁺ Influx Under Fluid Shear Stress in Astrocytes. *Frontiers in cellular neuroscience*, 12, 69.

Gaub BM, et al. (2017) Mechanical Stimulation of Piezo1 Receptors Depends on Extracellular Matrix Proteins and Directionality of Force. *Nano letters*, 17(3), 2064.

Huang CY, et al. (2017) K⁺ Channel Kv3.4 Is Essential for Axon Growth by Limiting the Influx of Ca²⁺ into Growth Cones. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 37(17), 4433.

Qudrat A, et al. (2017) Autonomous Cell Migration to CSF1 Sources via a Synthetic Protein-Based System. *ACS synthetic biology*, 6(8), 1563.