

Resource Summary Report

Generated by [NIF](#) on Aug 2, 2026

pGP-CMV-NES-jRGECO1a

RRID:Addgene_61563

Type: Plasmid

Proper Citation

RRID:Addgene_61563

Plasmid Information

URL: <http://www.addgene.org/61563>

Proper Citation: RRID:Addgene_61563

Insert Name: NES-jRGECO1a

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-jRGECO1a

Record Creation Time: 20220422T222353+0000

Record Last Update: 20260801T081553+0000

Ratings and Alerts

No rating or validation information has been found for pGP-CMV-NES-jRGECO1a.

No alerts have been found for pGP-CMV-NES-jRGECO1a.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 33 mentions in open access literature.

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

Wissing C, et al. (2025) A comparison of viral strategies and model systems to target norepinephrine neurons in the locus coeruleus reveals high variability in transgene expression patterns. *PLoS biology*, 23(7), e3003228.

Cho J, et al. (2025) Optogenetic calcium modulation in astrocytes enhances post-stroke recovery in chronic capsular infarct. *Science advances*, 11(5), eadn7577.

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

Krivi? D, et al. (2025) Photopharmacology reveals high-specificity linkage of Ca²⁺ entry at TRPC6 nanodomains to NFAT activation in mast cells. *Frontiers in immunology*, 16, 1595036.

Tao RK, et al. (2025) Designed optogenetic tool for bridging single-neuronal multimodal information in intact animals. *Nature communications*, 16(1), 7764.

Fernández de la Puebla M, et al. (2025) IP3R2-Mediated Astrocytic Ca²⁺ Transients Are Critical to Sustain Modulatory Effects of Locomotion on Neurons in Mouse Somatosensory Cortex. *Cells*, 14(14).

Pulupa JM, et al. (2024) DNA sequence-induced solid phase transition as a solution to the genome folding paradox. *Research square*.

Vierra NC, et al. (2023) Neuronal ER-plasma membrane junctions couple excitation to Ca²⁺-activated PKA signaling. *Nature communications*, 14(1), 5231.

Wang W, et al. (2023) Ultrasound-Triggered In Situ Photon Emission for Noninvasive Optogenetics. *Journal of the American Chemical Society*, 145(2), 1097.

Das S, et al. (2023) Maintenance of a short-lived protein required for long-term memory involves cycles of transcription and local translation. *Neuron*, 111(13), 2051.

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

Wang W, et al. (2023) Ultrasound-Induced Cascade Amplification in a Mechanoluminescent Nanotransducer for Enhanced Sono-Optogenetic Deep Brain Stimulation. *ACS nano*, 17(24), 24936.

Ino D, et al. (2022) A fluorescent sensor for real-time measurement of extracellular oxytocin dynamics in the brain. *Nature methods*, 19(10), 1286.

Guo J, et al. (2022) CamelliA-based simultaneous imaging of Ca²⁺ dynamics in subcellular compartments. *Plant physiology*, 188(4), 2253.

Shen Y, et al. (2022) CCR5 closes the temporal window for memory linking. *Nature*, 606(7912), 146.

Cheng P, et al. (2021) Direct control of store-operated calcium channels by ultrafast laser. *Cell research*, 31(7), 758.

Chua CJ, et al. (2021) Integration of Engineered "Spark-Cell" Spheroids for Optical Pacing of Cardiac Tissue. *Frontiers in bioengineering and biotechnology*, 9, 658594.

Ollivier M, et al. (2021) P2X-GCaMPs as Versatile Tools for Imaging Extracellular ATP Signaling. *eNeuro*, 8(1).

Bando Y, et al. (2021) Simultaneous two-photon imaging of action potentials and subthreshold inputs in vivo. *Nature communications*, 12(1), 7229.

Chen Z, et al. (2021) Deficiency of ER Ca²⁺ sensor STIM1 in AgRP neurons confers protection against dietary obesity. *Cell reports*, 37(3), 109868.