Resource Summary Report

Generated by NIF on Jul 30, 2026

pCMV-GCaMP5G

RRID:Addgene_31788
Type: Plasmid

Proper Citation

RRID:Addgene_31788

Plasmid Information

URL: http://www.addgene.org/31788

Proper Citation: RRID:Addgene_31788

Insert Name: GCaMP5G

Organism: Rattus norvegicus

Bacterial Resistance: Kanamycin

Defining Citation: PMID:23035093

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

Plasmid Name: pCMV-GCaMP5G

Record Creation Time: 20220422T222138+0000

Record Last Update: 20260725T074545+0000

Ratings and Alerts

No rating or validation information has been found for pCMV-GCaMP5G.

No alerts have been found for pCMV-GCaMP5G.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 45 mentions in open access literature.

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

Belloir C, et al. (2025) TAS1R2/TAS1R3 Single-Nucleotide Polymorphisms Affect Sweet Taste Receptor Activation by Sweeteners: The SWEET Project. Nutrients, 17(6).

Rakovskaya A, et al. (2025) Hippocampal dendritic spines store-operated calcium entry and endoplasmic reticulum content is dynamic microtubule dependent. Scientific reports, 15(1), 1314.

Kang RB, et al. (2025) Human pancreatic ?-cell heterogeneity and trajectory inference analyses reveal SMOC1 as a ?-cell dedifferentiation gene. Nature communications, 16(1), 8434.

Shi X, et al. (2025) Ceftriaxone attenuates Poly I:C-induced neuroinflammation in vitro by modulating glutamate transport, synaptic integrity, and immunometabolic reprogramming. Frontiers in cellular neuroscience, 19, 1684398.

Chen X, et al. (2024) A PACAP-activated network for secretion requires coordination of Ca2+ influx and Ca2+ mobilization. Molecular biology of the cell, 35(7), ar92.

Katsuta E, et al. (2022) Mechano-Sensing Channel PIEZO2 Enhances Invasive Phenotype in Triple-Negative Breast Cancer. International journal of molecular sciences, 23(17).

Lee SH, et al. (2022) A molecular clock controls periodically driven cell migration in confined spaces. Cell systems, 13(7), 514.

Dischler AM, et al. (2022) Development and Characterization of a Red Fluorescent Protein-Based Sensor RZnP1 for the Detection of Cytosolic Zn2. ACS sensors, 7(12), 3838.

Lavik AR, et al. (2022) A non-canonical role for pyruvate kinase M2 as a functional modulator of Ca2+ signalling through IP3 receptors. Biochimica et biophysica acta. Molecular cell research, 1869(4), 119206.

Mazzaferro S, et al. (2021) NACHO and 14-3-3 promote expression of distinct subunit stoichiometries of the ?4?2 acetylcholine receptor. Cellular and molecular life sciences : CMLS, 78(4), 1565.

Neiers F, et al. (2021) Comparison of Different Signal Peptides for the Efficient Secretion of the Sweet-Tasting Plant Protein Brazzein in Pichia pastoris. Life (Basel, Switzerland), 11(1).

Chang-Graham AL, et al. (2020) Rotavirus induces intercellular calcium waves through ADP signaling. Science (New York, N.Y.), 370(6519).

Housley DM, et al. (2020) Australian Scorpion Hormurus waigiensis Venom Fractions Show Broad Bioactivity Through Modulation of Bio-Impedance and Cytosolic Calcium. Biomolecules, 10(4).

Jiang M, et al. (2020) BCL9 provides multi-cellular communication properties in colorectal cancer by interacting with paraspeckle proteins. Nature communications, 11(1), 19.

Foreman R, et al. (2020) Mammalian gene expression variability is explained by underlying cell state. Molecular systems biology, 16(2), e9146.

Fricke S, et al. (2019) Fast Regulation of GABAAR Diffusion Dynamics by Nogo-A Signaling. Cell reports, 29(3), 671.

MacDougall MS, et al. (2019) Intracellular Ca2+ Homeostasis and Nuclear Export Mediate Exit from Naive Pluripotency. Cell stem cell, 25(2), 210.

Heck J, et al. (2019) Transient Confinement of CaV2.1 Ca2+-Channel Splice Variants Shapes Synaptic Short-Term Plasticity. Neuron, 103(1), 66.

Sun JL, et al. (2019) Co-activation of selective nicotinic acetylcholine receptors is required to reverse beta amyloid-induced Ca2+ hyperexcitation. Neurobiology of aging, 84, 166.

Chang-Graham AL, et al. (2019) Rotavirus Calcium Dysregulation Manifests as Dynamic Calcium Signaling in the Cytoplasm and Endoplasmic Reticulum. Scientific reports, 9(1), 10822.