

Resource Summary Report

Generated by [NIF](#) on Aug 3, 2026

pGP-CMV-GCaMP6m

RRID:Addgene_40754

Type: Plasmid

Proper Citation

RRID:Addgene_40754

Plasmid Information

URL: <http://www.addgene.org/40754>

Proper Citation: RRID:Addgene_40754

Insert Name: GCaMP6m

Organism: Rattus norvegicus

Bacterial Resistance: Kanamycin

Defining Citation: [PMID:23868258](#)

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

Plasmid Name: pGP-CMV-GCaMP6m

Record Creation Time: 20220422T222211+0000

Record Last Update: 20260801T081244+0000

Ratings and Alerts

No rating or validation information has been found for pGP-CMV-GCaMP6m.

No alerts have been found for pGP-CMV-GCaMP6m.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 60 mentions in open access literature.

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

Peinado P, et al. (2025) Intrinsic electrical activity drives small-cell lung cancer progression. *Nature*, 639(8055), 765.

Köhler I, et al. (2025) Chemogenetic activation of Gq signaling modulates dendritic development of cortical neurons in a time- and layer-specific manner. *Frontiers in cellular neuroscience*, 19, 1524470.

So CL, et al. (2024) Cellular geometry and epithelial-mesenchymal plasticity intersect with PIEZO1 in breast cancer cells. *Communications biology*, 7(1), 467.

Ciceri G, et al. (2024) An epigenetic barrier sets the timing of human neuronal maturation. *Nature*, 626(8000), 881.

Walsh RM, et al. (2024) Generation of human cerebral organoids with a structured outer subventricular zone. *Cell reports*, 43(4), 114031.

Gunaratne GS, et al. (2023) Progesterone receptor membrane component 1 facilitates Ca²⁺ signal amplification between endosomes and the endoplasmic reticulum. *The Journal of biological chemistry*, 299(12), 105378.

Chambers AR, et al. (2023) A stable sensory map emerges from a dynamic equilibrium of neurons with unstable tuning properties. *Cerebral cortex (New York, N.Y. : 1991)*, 33(9), 5597.

Gunaratne GS, et al. (2023) Convergent activation of two-pore channels mediated by the NAADP-binding proteins JPT2 and LSM12. *Science signaling*, 16(799), eadg0485.

Surdin T, et al. (2023) Optogenetic activation of mGluR1 signaling in the cerebellum induces synaptic plasticity. *iScience*, 26(1), 105828.

Balderas E, et al. (2022) Mitochondrial calcium uniporter stabilization preserves energetic homeostasis during Complex I impairment. *Nature communications*, 13(1), 2769.

Varadarajan S, et al. (2022) Mechanosensitive calcium flashes promote sustained RhoA activation during tight junction remodeling. *The Journal of cell biology*, 221(4).

Ren Y, et al. (2022) KCTD8 and KCTD12 Facilitate Axonal Expression of GABAB Receptors in Habenula Cholinergic Neurons. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 42(9), 1648.

Maity D, et al. (2022) Extracellular Hydraulic Resistance Enhances Cell Migration. *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*, 9(29), e2200927.

Aschauer DF, et al. (2022) Learning-induced biases in the ongoing dynamics of sensory representations predict stimulus generalization. *Cell reports*, 38(6), 110340.

Gunaratne GS, et al. (2022) Identification of a dihydropyridine scaffold that blocks ryanodine receptors. *iScience*, 25(1), 103706.

So CL, et al. (2022) Increased matrix stiffness suppresses ATP-induced sustained Ca^{2+} influx in MDA-MB-231 breast cancer cells. *Cell calcium*, 104, 102569.

Zhang YL, et al. (2022) Novel Fluorescence-Based High-Throughput FLIPR Assay Utilizing Membrane-Tethered Genetic Calcium Sensors to Identify T-Type Calcium Channel Modulators. *ACS pharmacology & translational science*, 5(3), 156.

Chamberlain NB, et al. (2022) *Chlamydia trachomatis* suppresses host cell store-operated Ca^{2+} entry and inhibits NFAT/calcineurin signaling. *Scientific reports*, 12(1), 21406.

Gasterstädt I, et al. (2022) Chemogenetic Silencing of Differentiating Cortical Neurons Impairs Dendritic and Axonal Growth. *Frontiers in cellular neuroscience*, 16, 941620.

Geng J, et al. (2022) Chronic Ca^{2+} imaging of cortical neurons with long-term expression of GCaMP-X. *eLife*, 11.