

Resource Summary Report

Generated by [dkNET](#) on Jul 31, 2026

pCAG mito-GCaMP5G

RRID:Addgene_105009

Type: Plasmid

Proper Citation

RRID:Addgene_105009

Plasmid Information

URL: <http://www.addgene.org/105009>

Proper Citation: RRID:Addgene_105009

Insert Name: GCaMP5G

Organism: Other

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:27429220](#)

Vector Backbone Description: Vector Backbone:pCIG2; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Plasmid Name: pCAG mito-GCaMP5G

Record Creation Time: 20220422T221509+0000

Record Last Update: 20260725T073412+0000

Ratings and Alerts

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

No alerts have been found for pCAG mito-GCaMP5G.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 5 mentions in open access literature.

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

Eom Y, et al. (2025) Xylene Impairs Neuronal Development by Dysregulating Calcium Homeostasis and Neuronal Activity in Developing Hippocampal Neurons. *Biomolecules & therapeutics*, 33(5), 830.

Puebla-Huerta A, et al. (2025) Calcium (Ca²⁺) fluxes at mitochondria-ER contact sites (MERCs) are a new target of senolysis in therapy-induced senescence (TIS). *npj aging*, 11(1), 11.

Vevea JD, et al. (2023) Mitofusin 2 Sustains the Axonal Mitochondrial Network to Support Presynaptic Ca²⁺ Homeostasis and the Synaptic Vesicle Cycle in Rat Hippocampal Axons. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 43(19), 3421.

Tan LX, et al. (2022) Analysis of mitochondrial dynamics and function in the retinal pigment epithelium by high-speed high-resolution live imaging. *Frontiers in cell and developmental biology*, 10, 1044672.

Joshi DC, et al. (2019) Inappropriate Intrusion of an Axonal Mitochondrial Anchor into Dendrites Causes Neurodegeneration. *Cell reports*, 29(3), 685.