

Resource Summary Report

Generated by [NIF](#) on Jul 30, 2026

pCMV G-CEPIA1er

RRID:Addgene_58215

Type: Plasmid

Proper Citation

RRID:Addgene_58215

Plasmid Information

URL: <http://www.addgene.org/58215>

Proper Citation: RRID:Addgene_58215

Insert Name: G-CEPIA1er

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:24923787](#)

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:4819; Vector Backbone:pCMV/myc/ER; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Plasmid Name: pCMV G-CEPIA1er

Relevant Mutation: G-GECO1.1 E299D M304L D328N N345K F360W G369S E372D V395E D401E

Record Creation Time: 20220422T222337+0000

Record Last Update: 20260725T074911+0000

Ratings and Alerts

No rating or validation information has been found for pCMV G-CEPIA1er.

No alerts have been found for pCMV G-CEPIA1er.

Data and Source Information

Usage and Citation Metrics

We found 34 mentions in open access literature.

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

Liu H, et al. (2025) Peroxynitrite regulates ER stress-mediated Ca²⁺ flux to mitochondria characterizing cardiac microvascular ischemia-reperfusion injury associated with hyperhomocysteinemia. *Journal of translational medicine*, 23(1), 1254.

Delrio-Lorenzo A, et al. (2024) In vitro and in vivo calibration of low affinity genetic Ca²⁺ indicators. *Cell calcium*, 117, 102819.

Lopez-Charcas O, et al. (2024) Blockade of CaV3 calcium channels and induction of G0/G1 cell cycle arrest in colon cancer cells by gossypol. *British journal of pharmacology*, 181(22), 4546.

Hanitrarimalala V, et al. (2024) Intracellular cartilage oligomeric matrix protein augments breast cancer resistance to chemotherapy. *Cell death & disease*, 15(7), 480.

Zhao J, et al. (2024) Tripeptidyl peptidase II coordinates the homeostasis of calcium and lipids in the central nervous system and its depletion causes presenile dementia in female mice through calcium/lipid dyshomeostasis-induced autophagic degradation of CYP19A1. *Theranostics*, 14(4), 1390.

Ryu JE, et al. (2024) Circadian regulation of endoplasmic reticulum calcium response in cultured mouse astrocytes. *eLife*, 13.

Jeyarajan S, et al. (2023) Simultaneous Measurement of Changes in Mitochondrial and Endoplasmic Reticulum Free Calcium in Pancreatic Beta Cells. *Biosensors*, 13(3).

Sánchez-Vázquez VH, et al. (2023) Heterogeneity of the endoplasmic reticulum Ca²⁺ store determines colocalization with mitochondria. *Cell calcium*, 109, 102688.

Koval OM, et al. (2023) The mitochondrial regulation of smooth muscle cell proliferation in type 2 diabetes. *bioRxiv : the preprint server for biology*.

Knutson KR, et al. (2023) Intestinal enteroendocrine cells rely on ryanodine and IP3 calcium store receptors for mechanotransduction. *The Journal of physiology*, 601(2), 287.

Koval OM, et al. (2023) Regulation of Smooth Muscle Cell Proliferation by Mitochondrial Ca²⁺ in Type 2 Diabetes. *International journal of molecular sciences*, 24(16).

Yip KP, et al. (2023) Epac induces ryanodine receptor-dependent intracellular and inter-organellar calcium mobilization in mpkCCD cells. *Frontiers in physiology*, 14, 1250273.

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

Tang W, et al. (2022) Stem cell differentiation with consistent lineage commitment induced by a flash of ultrafast-laser activation in vitro and in vivo. *Cell reports*, 38(10), 110486.

Tang W, et al. (2022) Protocol to photoactivate adipose-derived stem cell differentiation using a tightly-focused femtosecond laser. *STAR protocols*, 3(3), 101574.

Rossi AM, et al. (2021) Quantal Ca^{2+} release mediated by very few IP_3 receptors that rapidly inactivate allows graded responses to IP_3 . *Cell reports*, 37(5), 109932.

Maneshi MM, et al. (2020) Orai1 Channels Are Essential for Amplification of Glutamate-Evoked Ca^{2+} Signals in Dendritic Spines to Regulate Working and Associative Memory. *Cell reports*, 33(9), 108464.

Cantonero C, et al. (2020) PGRMC1 Inhibits Progesterone-Evoked Proliferation and Ca^{2+} Entry Via STIM2 in MDA-MB-231 Cells. *International journal of molecular sciences*, 21(20).

Hamilton S, et al. (2020) Increased RyR2 activity is exacerbated by calcium leak-induced mitochondrial ROS. *Basic research in cardiology*, 115(4), 38.

Li J, et al. (2020) Visible light excited ratiometric-GECIs for long-term in-cellulo monitoring of calcium signals. *Cell calcium*, 87, 102165.