Resource Summary Report

Generated by dkNET on Aug 18, 2026

pCMV CEPIA2mt

RRID:Addgene_58218
Type: Plasmid

Proper Citation

RRID:Addgene_58218

Plasmid Information

URL: http://www.addgene.org/58218

Proper Citation: RRID:Addgene_58218

Insert Name: CEPIA2mt

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: PMID:24923787

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:4799; Vector Backbone:pCMV/myc/mito; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Plasmid Name: pCMV CEPIA2mt

Relevant Mutation: GCaMP2 N263Y E282V M339L

Record Creation Time: 20220422T222337+0000

Record Last Update: 20260815T081714+0000

Ratings and Alerts

No rating or validation information has been found for pCMV CEPIA2mt.

No alerts have been found for pCMV CEPIA2mt.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 28 mentions in open access literature.

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

Haschke AM, et al. (2026) Biallelic MCUR1 nonsense mutation associated with vacuolar myopathy and altered mitochondrial calcium signaling. Acta neuropathologica communications, 14(1).

Pemberton JG, et al. (2025) Acute diacylglycerol production activates critical membrane-shaping proteins leading to mitochondrial tubulation and fission. Nature communications, 16(1), 2685.

Endoni BT, et al. (2025) MIRO1 Is Required for Dynamic Increases in Mitochondria-ER Contact Sites and Mitochondrial ATP During the Cell Cycle. Cells, 14(7).

Campos J, et al. (2024) IP3R-Mediated Calcium Release Promotes Ferroptotic Death in SH-SY5Y Neuroblastoma Cells. Antioxidants (Basel, Switzerland), 13(2).

Yu F, et al. (2024) Mitochondria-ER contact sites expand during mitosis. iScience, 27(4), 109379.

Kim M, et al. (2024) ECM stiffness regulates calcium influx into mitochondria via tubulin and VDAC1 activity. Animal cells and systems, 28(1), 417.

Hernansanz-Agustín P, et al. (2024) A transmitochondrial sodium gradient controls membrane potential in mammalian mitochondria. Cell.

Liiv M, et al. (2024) ER calcium depletion as a key driver for impaired ER-to-mitochondria calcium transfer and mitochondrial dysfunction in Wolfram syndrome. Nature communications, 15(1), 6143.

Clement D, et al. (2023) The Lysosomal Calcium Channel TRPML1 Maintains Mitochondrial Fitness in NK Cells through Interorganelle Cross-Talk. Journal of immunology (Baltimore, Md. : 1950), 211(9), 1348.

Fernandez Garcia E, et al. (2023) The mitochondrial Ca2+ channel MCU is critical for tumor growth by supporting cell cycle progression and proliferation. Frontiers in cell and developmental biology, 11, 1082213.

Sutandy FXR, et al. (2023) A cytosolic surveillance mechanism activates the mitochondrial UPR. Nature, 618(7966), 849.

Tanwar J, et al. (2023) Mitochondrial calcium signaling mediated transcriptional regulation of keratin filaments is a critical determinant of melanogenesis. bioRxiv : the preprint server for biology.

Nguyen HT, et al. (2023) CDN1163, an activator of sarco/endoplasmic reticulum Ca2+ ATPase, up-regulates mitochondrial functions and protects against lipotoxicity in pancreatic ?-cells. British journal of pharmacology, 180(21), 2762.

Obeng B, et al. (2023) Pharmaceutical agent cetylpyridinium chloride inhibits immune mast cell function by interfering with calcium mobilization. Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association, 179, 113980.

Obeng B, et al. (2023) Pharmaceutical agent cetylpyridinium chloride inhibits immune mast cell function by interfering with calcium mobilization. bioRxiv : the preprint server for biology.

Dhoundiyal A, et al. (2022) Glycerol-3-Phosphate Shuttle Is a Backup System Securing Metabolic Flexibility in Neurons. The Journal of neuroscience : the official journal of the Society for Neuroscience, 42(39), 7339.

Combot Y, et al. (2022) Seipin localizes at endoplasmic-reticulum-mitochondria contact sites to control mitochondrial calcium import and metabolism in adipocytes. Cell reports, 38(2), 110213.

Stavsky A, et al. (2021) Aberrant activity of mitochondrial NCLX is linked to impaired synaptic transmission and is associated with mental retardation. Communications biology, 4(1), 666.

Byts N, et al. (2021) Transmembrane Prolyl 4-Hydroxylase is a Novel Regulator of Calcium Signaling in Astrocytes. eNeuro, 8(1).

Xue Y, et al. (2021) SMARCA4/2 loss inhibits chemotherapy-induced apoptosis by restricting IP3R3-mediated Ca2+ flux to mitochondria. Nature communications, 12(1), 5404.