

Resource Summary Report

Generated by [RRID](#) on Aug 18, 2026

CMV-R-GECO1.2

RRID:Addgene_45494

Type: Plasmid

Proper Citation

RRID:Addgene_45494

Plasmid Information

URL: <http://www.addgene.org/45494>

Proper Citation: RRID:Addgene_45494

Insert Name: R-GECO1.2

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:23452507](#)

Vector Backbone Description: Backbone Size:3200; Vector Backbone:Customized Vector; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Plasmid Name: CMV-R-GECO1.2

Relevant Mutation: R-GECO1 M164R/I166V/V174L/F222L/N267S/S270T/I330M/L419I

Record Creation Time: 20220422T222235+0000

Record Last Update: 20260815T081524+0000

Ratings and Alerts

No rating or validation information has been found for CMV-R-GECO1.2.

No alerts have been found for CMV-R-GECO1.2.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 25 mentions in open access literature.

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

Söllner J, et al. (2026) Distances and charges along the Orai1 nexus-TM3 interface control STIM1 binding and pore opening. *Cell reports*, 45(2), 116940.

Luan H, et al. (2026) Orai1 is required for Ca²⁺-dependent plasma membrane repair and mechanoadaptation. *bioRxiv* : the preprint server for biology.

Kargar Gaz Kooh Y, et al. (2025) A Micro-Engineered Heart Tissue Model of Desmin-related Cardiomyopathy Caused by Mutant β B Crystallin. *bioRxiv* : the preprint server for biology.

Humer C, et al. (2024) Bidirectional Allosteric Coupling between PIP2 Binding and the Pore of the Oncochannel TRPV6. *International journal of molecular sciences*, 25(1).

Yu T, et al. (2023) S417 in the CC3 region of STIM1 is critical for STIM1-Orai1 binding and CRAC channel activation. *Life science alliance*, 6(4).

Raj N, et al. (2023) Early Endosomes Act as Local Exocytosis Hubs to Repair Endothelial Membrane Damage. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 10(13), e2300244.

Durner A, et al. (2023) Improved ANAP incorporation and VCF analysis reveal details of P2X7 current facilitation and a limited conformational interplay between ATP binding and the intracellular ballast domain. *eLife*, 12.

Maltan L, et al. (2023) Photocrosslinking-induced CRAC channel-like Orai1 activation independent of STIM1. *Nature communications*, 14(1), 1286.

Erkan-Candag H, et al. (2022) Diacylglycerols interact with the L2 lipidation site in TRPC3 to induce a sensitized channel state. *EMBO reports*, 23(7), e54276.

Barbacena P, et al. (2022) Competition for endothelial cell polarity drives vascular morphogenesis in the mouse retina. *Developmental cell*, 57(19), 2321.

George AJ, et al. (2022) The E3 ubiquitin ligase RNF216/TRIAD3 is a key coordinator of the hypothalamic-pituitary-gonadal axis. *iScience*, 25(6), 104386.

Chua CJ, et al. (2021) Integration of Engineered "Spark-Cell" Spheroids for Optical Pacing of Cardiac Tissue. *Frontiers in bioengineering and biotechnology*, 9, 658594.

Guillén-Samander A, et al. (2021) VPS13D bridges the ER to mitochondria and peroxisomes via Miro. *The Journal of cell biology*, 220(5).

De Niz M, et al. (2021) Organotypic endothelial adhesion molecules are key for *Trypanosoma brucei* tropism and virulence. *Cell reports*, 36(12), 109741.

Hussein W, et al. (2020) Red Photoactivatable Genetic Optical-Indicators. *Frontiers in cellular neuroscience*, 14, 113.

Klimas A, et al. (2020) Multimodal on-axis platform for all-optical electrophysiology with near-infrared probes in human stem-cell-derived cardiomyocytes. *Progress in biophysics and molecular biology*, 154, 62.

Graziani A, et al. (2020) Light-Mediated Control over TRPC3-Mediated NFAT Signaling. *Cells*, 9(3).

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

Bacsa B, et al. (2020) Pharmacology-Optogenetic Targeting of TRPC Activity Allows for Precise Control Over Mast Cell NFAT Signaling. *Frontiers in immunology*, 11, 613194.

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.