

# Resource Summary Report

Generated by [RRID](#) on Aug 25, 2026

## CMV-G-GECO1.1

RRID:Addgene\_32445

Type: Plasmid

### Proper Citation

RRID:Addgene\_32445

### Plasmid Information

**URL:** <http://www.addgene.org/32445>

**Proper Citation:** RRID:Addgene\_32445

**Insert Name:** G-GECO1.1

**Bacterial Resistance:** Ampicillin

**Defining Citation:** [PMID:21903779](#)

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

**Comments:** Note: Could not make stable cell line using this vector.

**Plasmid Name:** CMV-G-GECO1.1

**Relevant Mutation:** GCaMP3 K69E/N77Y/D86G/K119I/L173Q/K380N/S404G/E430V

**Record Creation Time:** 20220422T222141+0000

**Record Last Update:** 20260815T081346+0000

### Ratings and Alerts

No rating or validation information has been found for CMV-G-GECO1.1.

No alerts have been found for CMV-G-GECO1.1.

### Data and Source Information

**Source:** [Addgene](#)

## Usage and Citation Metrics

We found 10 mentions in open access literature.

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

van der Linden FH, et al. (2025) A green lifetime biosensor for calcium that remains bright over its full dynamic range. *eLife*, 14.

Kobayashi T, et al. (2022) Molecular basis for gating of cardiac ryanodine receptor explains the mechanisms for gain- and loss-of function mutations. *Nature communications*, 13(1), 2821.

Ishida N, et al. (2021) Spontaneous calcium responses of SF2 rat dental epithelial cells stably expressing the calcium sensor G-GECO. *Biomedical research (Tokyo, Japan)*, 42(5), 193.

Sueyoshi K, et al. (2019) Lipopolysaccharide suppresses T cells by generating extracellular ATP that impairs their mitochondrial function via P2Y11 receptors. *The Journal of biological chemistry*, 294(16), 6283.

Murayama T, et al. (2018) A tryptophan residue in the caffeine-binding site of the ryanodine receptor regulates Ca<sup>2+</sup> sensitivity. *Communications biology*, 1, 98.

Uehara A, et al. (2017) Extensive Ca<sup>2+</sup> leak through K4750Q cardiac ryanodine receptors caused by cytosolic and luminal Ca<sup>2+</sup> hypersensitivity. *The Journal of general physiology*, 149(2), 199.

Ledderose C, et al. (2016) Mitochondrial Dysfunction, Depleted Purinergic Signaling, and Defective T Cell Vigilance and Immune Defense. *The Journal of infectious diseases*, 213(3), 456.

Murata K, et al. (2016) Effect of 1,25-dihydroxyvitamin D3 on spontaneous calcium responses in rat dental epithelial SF2 cells revealed by long-term imaging. *Biomedical research (Tokyo, Japan)*, 37(6), 329.

Nakahata Y, et al. (2016) Dual observation of the ATP-evoked small GTPase activation and Ca<sup>2+</sup> transient in astrocytes using a dark red fluorescent protein. *Scientific reports*, 6, 39564.

Pech U, et al. (2013) Mushroom body miscellanea: transgenic *Drosophila* strains expressing anatomical and physiological sensor proteins in Kenyon cells. *Frontiers in neural circuits*, 7, 147.