

Resource Summary Report

Generated by [PRECISE-TBI](#) on Sep 1, 2026

G-GECO1.2-Orai1

RRID:Addgene_73562

Type: Plasmid

Proper Citation

RRID:Addgene_73562

Plasmid Information

URL: <http://www.addgene.org/73562>

Proper Citation: RRID:Addgene_73562

Insert Name: G-GECO1.2-Orai1

Organism: Homo sapiens

Bacterial Resistance: Kanamycin

Defining Citation: [PMID:26712003](#)

Vector Backbone Description: Backbone Marker:Clontech; Backbone Size:3954; Vector Backbone:pEGFP-C2; Vector Types:Mammalian Expression; Bacterial Resistance:Kanamycin

Comments: The fusion protein in this plasmid contains the genetically encoded calcium indicator G-GECO1.2 from the plasmid CMV-G-GECO1.2 (Addgene plasmid # 32446) provided by Robert Campbell. Note that the hOrai1 gene isolated in the Cahalan lab contains a silent mutation/polymorphism (T798C; aa T266).

Plasmid Name: G-GECO1.2-Orai1

Record Creation Time: 20220422T222450+0000

Record Last Update: 20260829T081004+0000

Ratings and Alerts

No rating or validation information has been found for G-GECO1.2-Orai1.

No alerts have been found for G-GECO1.2-Orai1.

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 [PRECISE-TBI](#) .

Lopez JJ, et al. (2025) A subset of Orai1⁺ and Orai1⁻ subunits heteromerizes to form CRAC channels. Cell communication and signaling : CCS, 23(1), 260.

Sanchez-Collado J, et al. (2022) Orai1⁺, but not Orai1⁻, co-localizes with TRPC1 and is required for its plasma membrane location and activation in HeLa cells. Cellular and molecular life sciences : CMLS, 79(1), 33.

Löhndorf A, et al. (2021) 2-Methoxyestradiol and its derivatives inhibit store-operated Ca²⁺ entry in T cells: Identification of a new and potent inhibitor. Biochimica et biophysica acta. Molecular cell research, 1868(6), 118988.

Sanchez-Collado J, et al. (2019) Adenylyl Cyclase Type 8 Overexpression Impairs Phosphorylation-Dependent Orai1 Inactivation and Promotes Migration in MDA-MB-231 Breast Cancer Cells. Cancers, 11(11).

Diercks BP, et al. (2018) ORAI1, STIM1/2, and RYR1 shape subsecond Ca²⁺ microdomains upon T cell activation. Science signaling, 11(561).