

Resource Summary Report

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

pTorPE-R-GECO1

RRID:Addgene_32465

Type: Plasmid

Proper Citation

RRID:Addgene_32465

Plasmid Information

URL: <http://www.addgene.org/32465>

Proper Citation: RRID:Addgene_32465

Insert Name: R-GECO1.0

Organism: synthetic construct

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:21903779](#)

Vector Backbone Description: Backbone Size:4200; Vector Backbone:Customized Vector; Vector Types:Bacterial Expression, Lab constructed; Bacterial Resistance:Ampicillin

Comments: The vector is modified from pBAD/ His B (Invitrogen).

Plasmid Name: pTorPE-R-GECO1

Relevant Mutation: Substitutions relative to the mApple-derived analogue of GCaMP3: T47A/L60P/E61V/S63V/E64S/R81G/K83R/Y134C/M158L/N164aD/V228A/S290P/I366F/K380N/S404G/N414D/E430V

Record Creation Time: 20220422T222141+0000

Record Last Update: 20260815T081341+0000

Ratings and Alerts

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

No alerts have been found for pTorPE-R-GECO1.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 6 mentions in open access literature.

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

van der Linden FH, et al. (2021) A turquoise fluorescence lifetime-based biosensor for quantitative imaging of intracellular calcium. Nature communications, 12(1), 7159.

Beumer J, et al. (2020) High-Resolution mRNA and Secretome Atlas of Human Enteroendocrine Cells. Cell, 181(6), 1291.

Chen Z, et al. (2016) Single Fluorescent Protein-Based Indicators for Zinc Ion ($Zn(2+)$). Analytical chemistry, 88(18), 9029.

Matlashov ME, et al. (2015) Fluorescent ratiometric pH indicator SypHer2: Applications in neuroscience and regenerative biology. Biochimica et biophysica acta, 1850(11), 2318.

Keinath NF, et al. (2015) Live Cell Imaging with R-GECO1 Sheds Light on flg22- and Chitin-Induced Transient $[Ca(2+)]_{cyt}$ Patterns in Arabidopsis. Molecular plant, 8(8), 1188.

Wang Y, et al. (2015) Cytosolic $Ca(2+)$ Signals Enhance the Vacuolar Ion Conductivity of Bulging Arabidopsis Root Hair Cells. Molecular plant, 8(11), 1665.