

# Resource Summary Report

Generated by [RRID](#) on Aug 30, 2026

## pcDNA3-EGFP-Rac1(wt)

RRID:Addgene\_13719

Type: Plasmid

### Proper Citation

RRID:Addgene\_13719

### Plasmid Information

**URL:** <http://www.addgene.org/13719>

**Proper Citation:** RRID:Addgene\_13719

**Insert Name:** EGFP-Rac1(wt)

**Organism:** Homo sapiens

**Bacterial Resistance:** Ampicillin

**Defining Citation:** [PMID:11030651](#)

**Vector Backbone Description:** Backbone Marker:Invitrogen; Backbone Size:5500; Vector Backbone:pcDNA3; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

**Comments:** Protocols for production and use of Hahn lab biosensors and photactivatable proteins can be found on their web page, at the URL below. If you have suggestions for the protocols or have any questions, please feel free to contact the Hahn lab. Good luck with your experiments! Hahn lab biosensor protocol: <http://www.hahnlab.com/tools/index.html>

**Plasmid Name:** pcDNA3-EGFP-Rac1(wt)

**Record Creation Time:** 20220422T221756+0000

**Record Last Update:** 20260829T075611+0000

### Ratings and Alerts

No rating or validation information has been found for pcDNA3-EGFP-Rac1(wt).

No alerts have been found for pcDNA3-EGFP-Rac1(wt).

## Data and Source Information

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

## Usage and Citation Metrics

We found 14 mentions in open access literature.

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

Xiao B, et al. (2025) Spatiotemporal distribution of YAP and importin- $\beta$  in nucleus and cytosol after wounding of adjacent cells. *In vitro cellular & developmental biology. Animal*, 61(6), 712.

Tang M, et al. (2024) Inhibition of thioredoxin reductase 1 sensitizes glucose-starved glioblastoma cells to disulfidptosis. *Cell death and differentiation*.

Liu X, et al. (2024) RABV induces biphasic actin cytoskeletal rearrangement through Rac1 activity modulation. *Journal of virology*, 98(7), e0060624.

Kitzinger R, et al. (2022) Nuclear RAC1 is a modulator of the doxorubicin-induced DNA damage response. *Biochimica et biophysica acta. Molecular cell research*, 1869(10), 119320.

Sasaki S, et al. (2021) Spatiotemporal distribution of PKC $\beta$ , Cdc42, and Rac1 before directed cell migration. *Biochemical and biophysical research communications*, 584, 26.

Medina CM, et al. (2021) Trypanosoma cruzi extracellular amastigotes engage Rac1 and Cdc42 to invade RAW macrophages. *Microbes and infection*, 23(8), 104837.

Lopez-Guerrero AM, et al. (2020) RAC1-Dependent ORAI1 Translocation to the Leading Edge Supports Lamellipodia Formation and Directional Persistence. *Scientific reports*, 10(1), 6580.

Kühn S, et al. (2020) Actin Assembly around the Shigella-Containing Vacuole Promotes Successful Infection. *Cell reports*, 31(6), 107638.

Mo CF, et al. (2020) IQGAP1 promotes anoikis resistance and metastasis through Rac1-dependent ROS accumulation and activation of Src/FAK signalling in hepatocellular carcinoma. *British journal of cancer*, 123(7), 1154.

Bonfim-Melo A, et al. (2018) Rac1/WAVE2 and Cdc42/N-WASP Participation in Actin-Dependent Host Cell Invasion by Extracellular Amastigotes of Trypanosoma cruzi. *Frontiers in microbiology*, 9, 360.

Aeberhard L, et al. (2015) The Proteome of the Isolated Chlamydia trachomatis Containing Vacuole Reveals a Complex Trafficking Platform Enriched for Retromer Components. *PLoS pathogens*, 11(6), e1004883.

Sumida GM, et al. (2015) Rho GTPases and the downstream effectors actin-related protein 2/3 (Arp2/3) complex and myosin II induce membrane fusion at self-contacts. *The*

Journal of biological chemistry, 290(6), 3238.

Lomakin AJ, et al. (2015) Competition for actin between two distinct F-actin networks defines a bistable switch for cell polarization. Nature cell biology, 17(11), 1435.

Hodis E, et al. (2012) A landscape of driver mutations in melanoma. Cell, 150(2), 251.