

Resource Summary Report

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

pcDNA3-EGFP-Rac1(Q61L)

RRID:Addgene_13720

Type: Plasmid

Proper Citation

RRID:Addgene_13720

Plasmid Information

URL: <http://www.addgene.org/13720>

Proper Citation: RRID:Addgene_13720

Insert Name: EGFP-Rac1(Q61L)

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(Q61L)

Record Creation Time: 20220422T221756+0000

Record Last Update: 20260829T075609+0000

Ratings and Alerts

No rating or validation information has been found for pcDNA3-EGFP-Rac1(Q61L).

No alerts have been found for pcDNA3-EGFP-Rac1(Q61L).

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 13 mentions in open access literature.

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

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

D??ring J, et al. (2024) Structural mechanisms of autoinhibition and substrate recognition by the ubiquitin ligase HACE1. *Nature structural & molecular biology*, 31(2), 364.

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

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.

Li Z, et al. (2020) The metastatic promoter DEPDC1B induces epithelial-mesenchymal transition and promotes prostate cancer cell proliferation via Rac1-PAK1 signaling. *Clinical and translational medicine*, 10(6), e191.

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.

O'Loughlin T, et al. (2018) The MYO6 interactome reveals adaptor complexes coordinating early endosome and cytoskeletal dynamics. *EMBO reports*, 19(4).

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.

Varela LM, et al. (2014) Postprandial triglyceride-rich lipoproteins promote invasion of human coronary artery smooth muscle cells in a fatty-acid manner through PI3k-Rac1-JNK signaling. *Molecular nutrition & food research*, 58(6), 1349.

Mills E, et al. (2012) Engineered networks of synthetic and natural proteins to control cell migration. *ACS synthetic biology*, 1(6), 211.

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