Resource Summary Report

Generated by RRID on Aug 27, 2026

pRK5-HA GST RagB 54L

RRID:Addgene_19302
Type: Plasmid

Proper Citation

RRID:Addgene_19302

Plasmid Information

URL: http://www.addgene.org/19302

Proper Citation: RRID:Addgene_19302

Insert Name: Ras-related GTP binding B

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: PMID:18497260

Vector Backbone Description: Backbone Marker:BD PharMingen; Backbone Size:4754; Vector Backbone:pRK5; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: Please note that this plasmid is actually quite toxic to cells. From the Sabatini lab:"it is a dominant negative and therefore inhibits the mTORC1 pathway and thus cells." From the paper: "To verify the actions of the Rags in a more physiological setting than that achieved by transient cDNA transfection, we generated HEK-293T cell lines stably expressing Rheb1, RagB, or RagBGTP (attempts to generate lines stably expressing RagBGDP failed)."

Plasmid Name: pRK5-HA GST RagB 54L

Relevant Mutation: T54L

Record Creation Time: 20220422T222045+0000

Record Last Update: 20260815T081143+0000

Ratings and Alerts

No rating or validation information has been found for pRK5-HA GST RagB 54L.

No alerts have been found for pRK5-HA GST RagB 54L.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 8 mentions in open access literature.

Listed below are recent publications. The full list is available at RRID .

Hirst J, et al. (2021) Rag GTPases and phosphatidylinositol 3-phosphate mediate recruitment of the AP-5/SPG11/SPG15 complex. The Journal of cell biology, 220(2).

Jia J, et al. (2018) Galectins Control mTOR in Response to Endomembrane Damage. Molecular cell, 70(1), 120.

Peng M, et al. (2017) SZT2 dictates GATOR control of mTORC1 signalling. Nature, 543(7645), 433.

Wada S, et al. (2016) The tumor suppressor FLCN mediates an alternate mTOR pathway to regulate browning of adipose tissue. Genes & development, 30(22), 2551.

Ye Z, et al. (2015) PRL-3 activates mTORC1 in Cancer Progression. Scientific reports, 5, 17046.

Martina JA, et al. (2014) The nutrient-responsive transcription factor TFE3 promotes autophagy, lysosomal biogenesis, and clearance of cellular debris. Science signaling, 7(309), ra9.

Martina JA, et al. (2013) Rag GTPases mediate amino acid-dependent recruitment of TFEB and MITF to lysosomes. The Journal of cell biology, 200(4), 475.

Cully M, et al. (2010) A role for p38 stress-activated protein kinase in regulation of cell growth via TORC1. Molecular and cellular biology, 30(2), 481.