TBC1D15 accelerates GTP hydrolysis by RAB7

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Introduction

Reactome is open-source, open access, manually curated and peer-reviewed pathway database. Pathway annotations are authored by expert biologists, in collaboration with Reactome editorial staff and cross-referenced to many bioinformatics databases. A system of evidence tracking ensures that all assertions are backed up by the primary literature. Reactome is used by clinicians, geneticists, genomics researchers, and molecular biologists to interpret the results of high-throughput experimental studies, by bioinformaticians seeking to develop novel algorithms for mining knowledge from genomic studies, and by systems biologists building predictive models of normal and disease variant pathways.

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Literature references


Reactome database release: 73

This document contains 1 reaction (see Table of Contents)
TBC1D15 accelerates GTP hydrolysis by RAB7

Stable identifier: R-HSA-8854329

Type: transition

Compartments: lysosomal membrane, cytosol

The small GTPase Rab7 promotes fusion events between late endosomes and lysosomes. TBC domain family, member 15 (TAB1CD15) is ubiquitously expressed and localized predominantly to the cytosol. TBC1D15 stimulates the intrinsic GTPase activity of Rab7, reducing Rab7 binding to its effector protein RILP, fragmenting the lysosome, and conferring resistance to growth factor withdrawal-induced cell death (Zhang et al. 2005, Peralta et al. 2010).

Literature references


Editions

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