RHOT1 GEFs activate RHOT1

Castro, IG., Orlic-Milacic, M., Schrader, M.
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: 78

This document contains 1 reaction (see Table of Contents)

https://reactome.org
RHOT1 GEFs activate RHOT1

**Stable identifier:** R-HSA-9018817

**Type:** transition

**Compartments:** mitochondrial outer membrane, cytosol

**Inferred from:** Vimar activates Miro (Drosophila melanogaster)

Based on studies in Drosophila, RAP1GDS1, an orthologue of Drosophila Vimar, is a mitochondrial outer membrane-bound atypical guanine nucleotide exchange factor (GEF) that activates mitochondria-associated atypical RHO GTPase RHOT1, an orthologue of Drosophila Miro, by catalyzing GDP to GTP exchange, resulting in formation of the active RHOT1:GTP complex (Ding et al. 2016).

**Editions**

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