RAB11A:GTP-containing Golgi vesicles recruit RAB3IP

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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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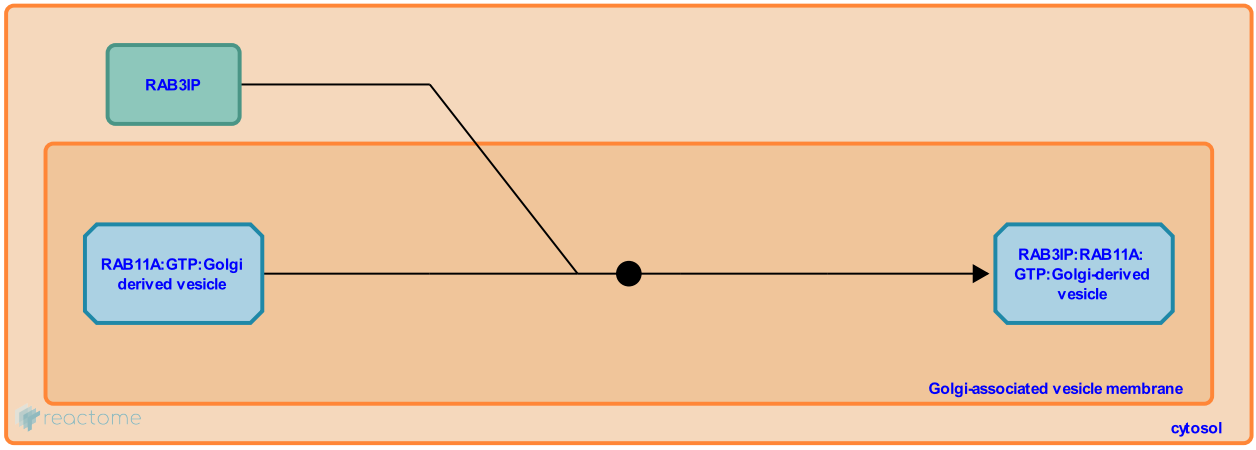
Stable identifier: R-HSA-5638014

Type: binding

Compartments: Golgi-associated vesicle membrane



The RAB8 guanine nucleotide exchange factor RAB3IP/RABIN8 is recruited to vesicles through interaction with membrane-tethered RAB11:GTP (Westlake et al, 2011; Knodler et al, 2010). Recruitment of RAB3IP may also depend on the TRAPPCII complex, a multiprotein complex with roles in vesicular trafficking (Westlake et al, 2011; reviewed in Sacher et al, 2008). RAB3IP is required for RAB8A to localize to the cilium, and depletion of RAB3IP compromises cilia formation (Nachury et al, 2007; Loktev et al, 2008). GTP-bound RAB8A may promote ciliogenesis by promoting the traffic of post-Golgi vesicles to the base of the cilium (Nachury et al, 2007; Westlake et al, 2011; Feng et al, 2012; reviewed in Reiter et al, 2012)

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Editions

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