

TRAF3IB1 recruits IFT20 to the IFT B complex from the Golgi

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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

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Reactome database release: 88

This document contains 1 reaction ([see Table of Contents](#))

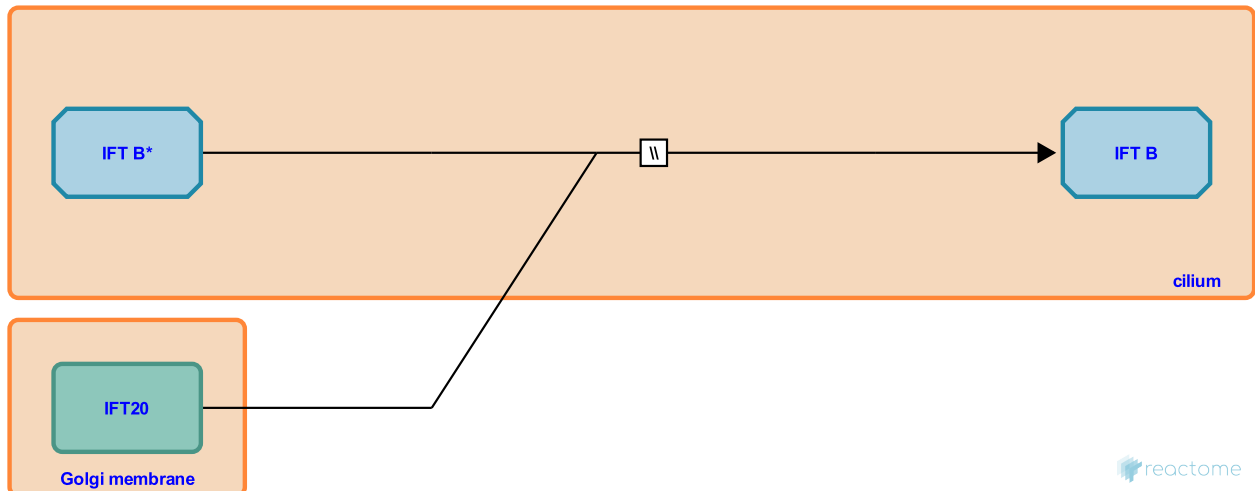
TRAF3IB1 recruits IFT20 to the IFT B complex from the Golgi ↗

Stable identifier: R-HSA-5617825

Type: omitted

Compartments: cilium

Inferred from: [Traf3ip1 binds Ift20 \(Mus musculus\)](#)



IFT20 is unique among IFT B components in that, in addition to being localized at the cilium and the centrosome, a pool of IFT20 exists at the Golgi in complex with the golgin protein TRIP11 (Follit et al, 2006; Follit et al, 2008; Follit et al, 2009). Independent of its interaction with TRIP11, IFT20 has been shown to interact with the IFT B complex member TRAF3IP1 at the cilium, and overexpression of TRAF3IP1 displaces IFT20 from the Golgi (Follit et al, 2009). Partial depletion of IFT20 disrupts the traffic of membrane proteins to the cilium (Follit et al, 2006; Follit et al, 2009). Taken together, these data suggest a model where TRAF3IP1 mediates recruitment of IFT20-carrying vesicles from the Golgi to the site of cilium assembly, thus completing assembly of the IFT B complex and delivering both lipid and protein cargo for cilium biogenesis (Follit et al, 2008; Follit et al, 2009; reviewed in Ishikawa et al, 2011).

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Editions

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