

C2CD3 binds the mother centriole

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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

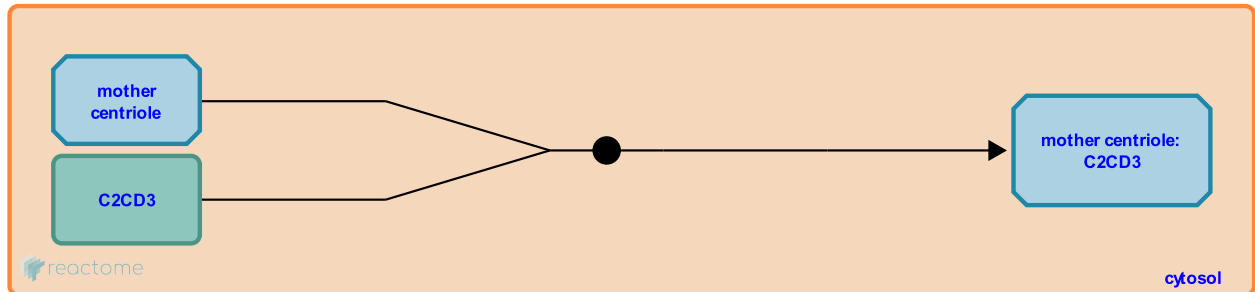
This document contains 1 reaction ([see Table of Contents](#))

C2CD3 binds the mother centriole [↗](#)

Stable identifier: R-HSA-5626220

Type: binding

Compartments: cytosol



C2 domain-containing protein 3 (C2CD3) is basal body-localized protein that is required for ciliogenesis and Hh signaling (Hoover et al, 2008; Balestra et al, 2013). C2CD3 is recruited to the centrosome in a pericentriolar material 1 protein (PCM1)- and microtubule-dependent manner and is required for the subsequent recruitment of the distal appendage proteins to the mother centriole (Tanos et al, 2013; Sillibourne et al, 2013; Ye et al, 2014; reviewed in Winey and O'Toole, 2014). The distal appendage proteins are thought to be a component of the transition fibres that anchor the basal body to the membrane at the base of the cilium and are themselves required for the recruitment of Tau-tubulin kinase 2 (TTBK2) and for docking ciliary vesicles to the mother centriole (Tanos et al, 2013; Wei et al, 2013; Joo et al, 2013; Schmidt et al, 2012; Sillibourne et al, 2013; Burke et al, 2014).

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Editions

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