

Ccps deglutamylate tubulin

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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

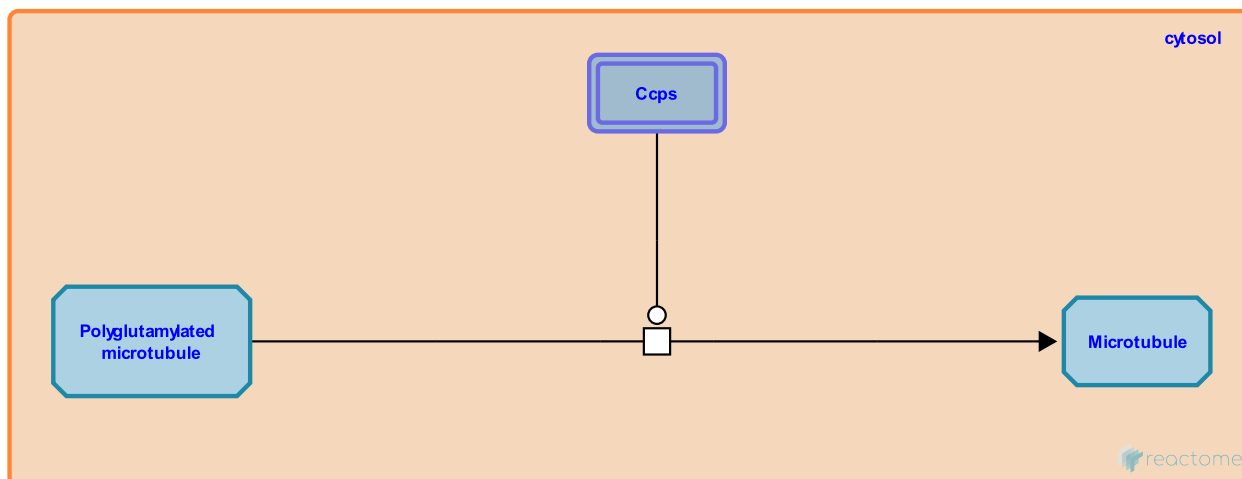
This document contains 1 reaction ([see Table of Contents](#))

Ccps deglutamylate tubulin [↗](#)

Stable identifier: R-NUL-8867463

Type: transition

Compartments: cytosol



Cytosolic carboxypeptidases (CCPs) catalyze the removal of glutamate residues from the C-terminal tails of both alpha- and beta-tubulin (Kalinina et al. 2007, Rodriguez de la Vega et al. 2007, Kimura et al. 2010, Rogowski et al. 2010). They are members of the MC clan, M14 family, subfamily M14D of metallopeptidases (Kalinina et al. 2007). Mouse Ccp1, 2, 3, 4, and 6 are functionally homologous and remove long glutamate chains from tubulin, while Ccp5 specifically removes branching-point glutamates (Rogowski et al. 2010; Tort et al. 2014).

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Editions

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