

Beta-Pix: CDC42:GTP binds CBL in EGF:p-6Y-EGFR:CBL:CIN85

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04/05/2024

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.

The development of Reactome is supported by grants from the US National Institutes of Health (P41 HG003751), University of Toronto (CFREF Medicine by Design), European Union (EU STRP, EMI-CD), and the European Molecular Biology Laboratory (EBI Industry program).

Literature references

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Reactome database release: 88

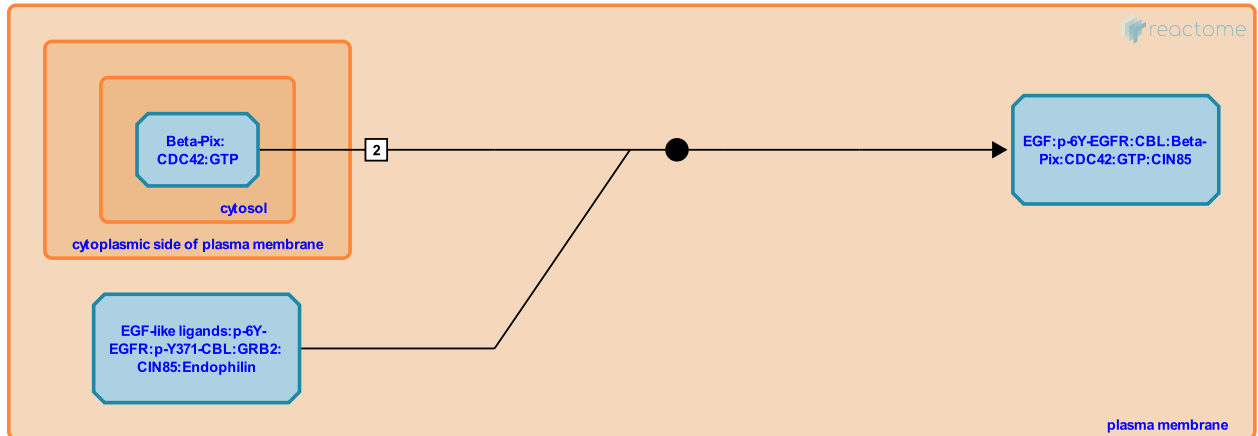
This document contains 1 reaction ([see Table of Contents](#))

Beta-Pix: CDC42:GTP binds CBL in EGF:p-6Y-EGFR:CBL:CIN85 [↗](#)

Stable identifier: R-HSA-183002

Type: binding

Compartments: cytosol, plasma membrane



High concentrations of active CDC42 (bound to GTP) and Beta-Pix may promote the binding of Beta-Pix to CBL, pushing out the usually preferred binding partner CIN85 (SH3KBP1) from the CBL complex. This competitive mechanism could block the CIN85-imposed clustering phenomenon on CBL that is required for tighter binding (Schmidt et al. 2006).

Literature references

Schmidt, MH., Szymkiewicz, I., Husnjak, K., Dikic, I., Haglund, K. (2006). Cbl escapes Cdc42-mediated inhibition by downregulation of the adaptor molecule betaPix. *Oncogene*, 25, 3071-8. [↗](#)

Editions

2006-10-10	Authored	Castagnoli, L.
2008-02-12	Reviewed	Heldin, CH.
2016-12-07	Edited	Jassal, B.