Activation of APC/C:Cdc20 by dissociation of Cdc20:phospho-APC/C from Cdc20:phospho-APC/C:Mad2:Bub3:BubR1

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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

Fabregat, A., Sidiropoulos, K., Viteri, G., Forner, O., Marin-Garcia, P., Arnau, V. et al. (2017). Reactome pathway analysis: a high-performance in-memory approach. *BMC bioinformatics, 18*, 142. ↗

Sidiropoulos, K., Viteri, G., Sevilla, C., Jupe, S., Webber, M., Orlic-Milacic, M. et al. (2017). Reactome enhanced pathway visualization. *Bioinformatics, 33*, 3461-3467. ↗

Fabregat, A., Jupe, S., Matthews, L., Sidiropoulos, K., Gillespie, M., Garapati, P. et al. (2018). The Reactome Pathway Knowledgebase. *Nucleic Acids Res, 46*, D649-D655. ↗

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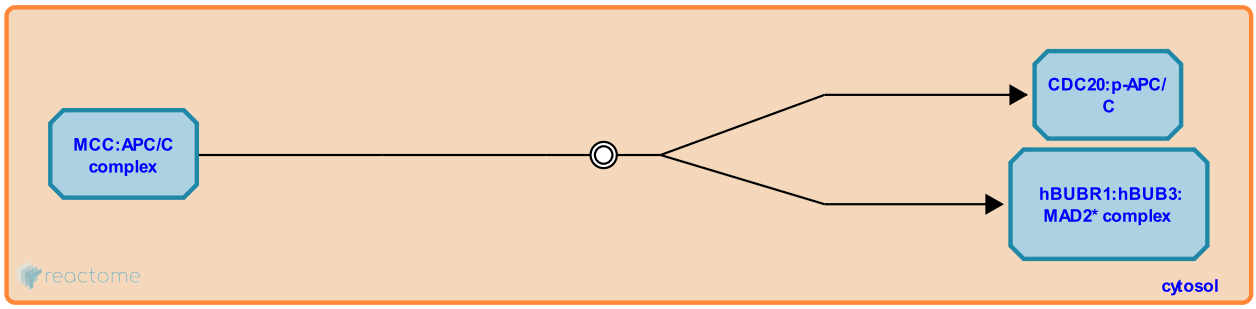
Activation of APC/C:Cdc20 by dissociation of Cdc20:phospho-APC/C from Cdc20:phospho-APC/C:Mad2:Bub3:BubR1

Stable identifier: R-HSA-174238

Type: dissociation

Compartments: cytosol



One model (the direct inhibition model) describing the inhibition of the APC/C during the mitotic spindle checkpoint suggests that the association of the hBUBR1:hBUB3:MAD2*:CDC20 mitotic checkpoint complex (MCC) with APC/C results in the inactivation of APC/C. The affinity between MCC and APC/C is not high, thus inhibition is readily reversible when the mitotic spindle checkpoint has been satisfied.

Literature references

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