

Cytosolic VBC complex ubiquitylates hydroxyprolyl-HIF-alpha

May, B., Rantanen, K.

European Bioinformatics Institute, New York University Langone Medical Center, Ontario Institute for Cancer Research, Oregon Health and Science University.

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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: 77

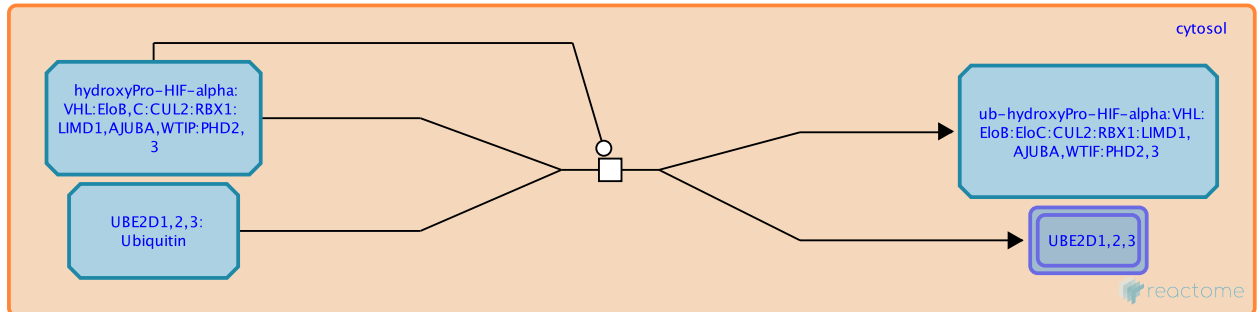
This document contains 1 reaction ([see Table of Contents](#))

Cytosolic VBC complex ubiquitinylates hydroxyprolyl-HIF-alpha ↗

Stable identifier: R-HSA-1234163

Type: transition

Compartments: cytosol



VHL is an E3 ubiquitin ligase that conjugates ubiquitin to hydroxylated HIF-alpha (Iwai et al. 1999, Kamura et al. 2000, Ohh et al. 2000, Groulx and Lee 2002, Maynard et al. 2003). VHL is predominantly cytosolic and shuttles between the cytosol and the nucleus (Lee et al. 1999, Groulx and Lee 2002). Ubiquitination and degradation of HIF-alpha can occur in both the cytosol and the nucleus (Berra et al. 2001).

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Editions

2011-03-09	Authored, Edited	May, B.
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