Nuclear PHD1,3 hydroxylates proline residues on EPAS1 (HIF2A)

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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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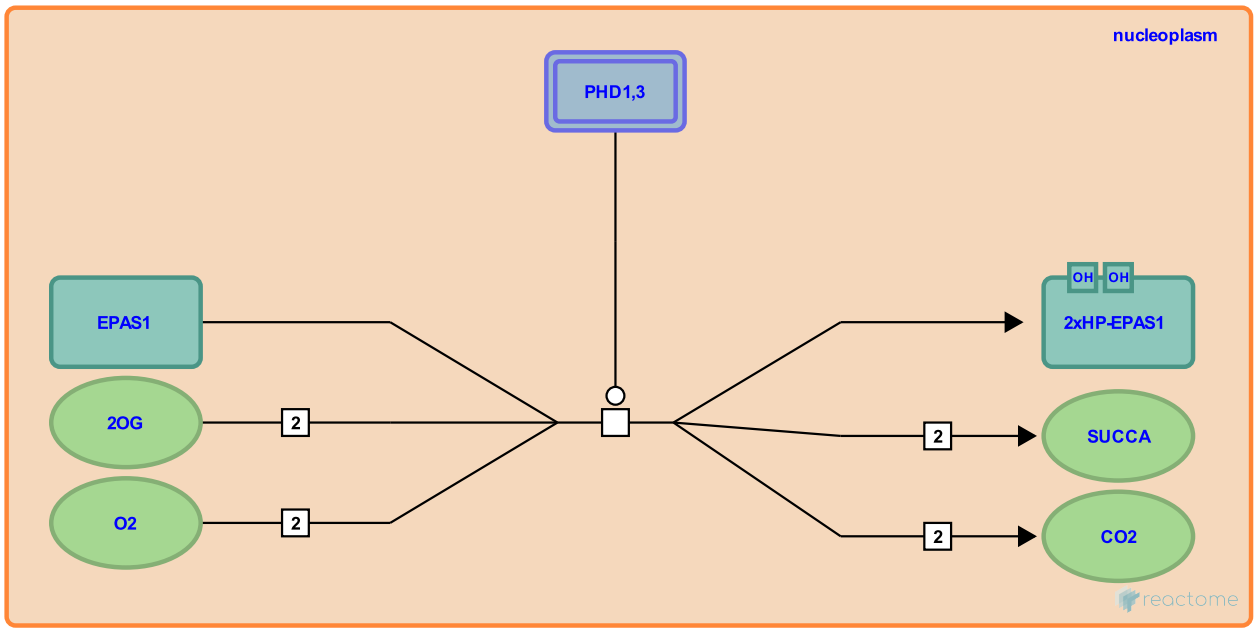
Stable identifier: R-HSA-1234166

Type: transition

Compartments: nucleoplasm

Inferred from: Nuclear PHD1,3 hydroxylates proline residues on HIF1A (Homo sapiens)



Proline hydroxylases PHD1 (EGLN2) and PHD3 (EGLN3) located in the nucleus hydroxylate HIF2A (EPAS1) at proline-405 and proline-531 (Hirsila et al. 2003, Percy et al. 2008, Furlow et al. 2009). The amount of hydroxylation occurring in the nucleus is controversial. Most hydroxylation is believed to be cytosolic.

Literature references

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Editions

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