DHB is hydroxylated to DHDB by COQ6

Kawamukai, M., Williams, MG.
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


Reactome database release: 83

This document contains 1 reaction (see Table of Contents)

https://reactome.org
**DHB is hydroxylated to DHDB by COQ6**

**Stable identifier:** R-HSA-2162187

**Type:** transition

**Compartments:** mitochondrial inner membrane, mitochondrial matrix

**Inferred from:** HHB is hydroxylated to DHHB by Coq6 (Saccharomyces cerevisiae)

A flavin-dependent monooxygenase involved in ubiquinone/ubiquinol biosynthesis, COQ6 (Heeringa et al. 2011) catalyses the C5-hydroxylation of 3-decaprenyl-4-hydroxybenzoic acid (DHB) to 3,4-dihydroxy-5-decaprenylbenzoic acid (DHDB). COQ6 is a peripheral membrane protein that localizes to the matrix side of the inner mitochondrial membrane (Gin et al. 2003). This reaction involving COQ6 is inferred from the equivalent reaction in yeast (Ozeir et al. 2011, Gin et al. 2003).

**Literature references**


**Editions**

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