P6C transforms to 2AMAS

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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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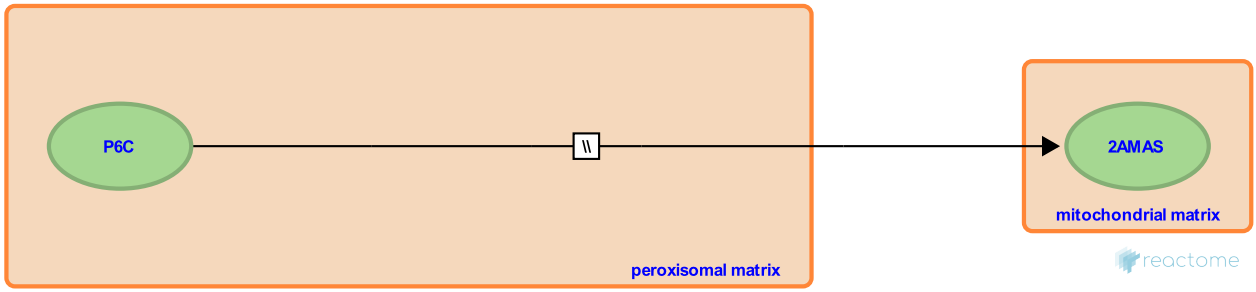
Stable identifier: R-HSA-6783883

Type: omitted

Compartments: mitochondrial matrix, peroxisomal matrix



The saccharopine pathway is the predominant lysine degradative pathway in extracerebral tissues, whereas the pipecolate pathway predominates in adult brain. (S)-1-piperideine-6-carboxylate (P6C), an intermediate of the pipecolate pathway, is in equilibrium with alpha-aminoadipate delta-semialdehyde (2AMAS), which connects the two degradative pathways. How peroxisomal P6C transports to mitochondrial 2AMAS is unknown (Hallen et al. 2013).

Literature references

Cooper, AJ., Jamie, JF., Hallen, A. (2013). Lysine metabolism in mammalian brain: an update on the importance of recent discoveries. *Amino Acids, 45*, 1249-72.

Editions

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