BBOX1:AscH-:Fe2+ dimer dioxygenates TE-ABT and 2OG to form CAR and SUCCA

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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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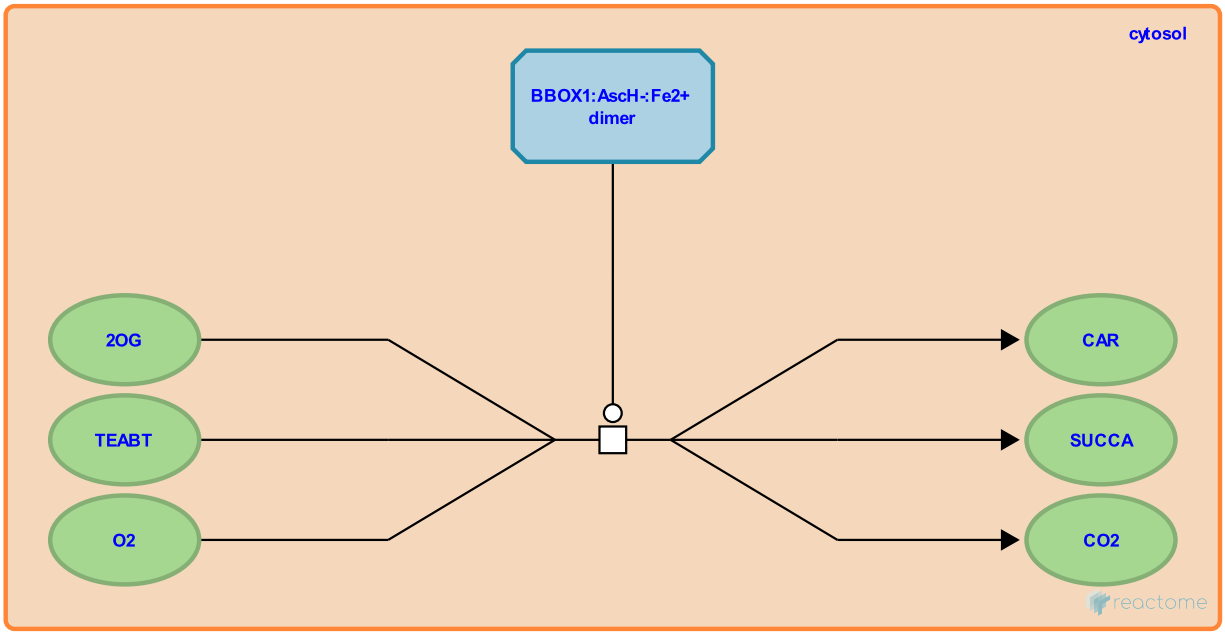
Stable identifier: R-HSA-71261

Type: transition

Compartments: cytosol



Cytosolic gamma-butyrobetaine hydroxylase dimer (BBOX1), a dioxygenase, catalyzes the reaction of oxygen, 4-trimethylammoniobutanoate (TEABT), and 2-oxoglutarate (2OG)to form CO2, succinate (SUCCA), and carnitine (CAR) (Lindstedt and Nordin 1984; Tars et al. 2010; Vaz et al. 1998).

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Editions

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