

**oxaloacetate + glutamate \rightleftharpoons aspartate +
alpha-ketoglutarate [GOT2]**

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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: 75

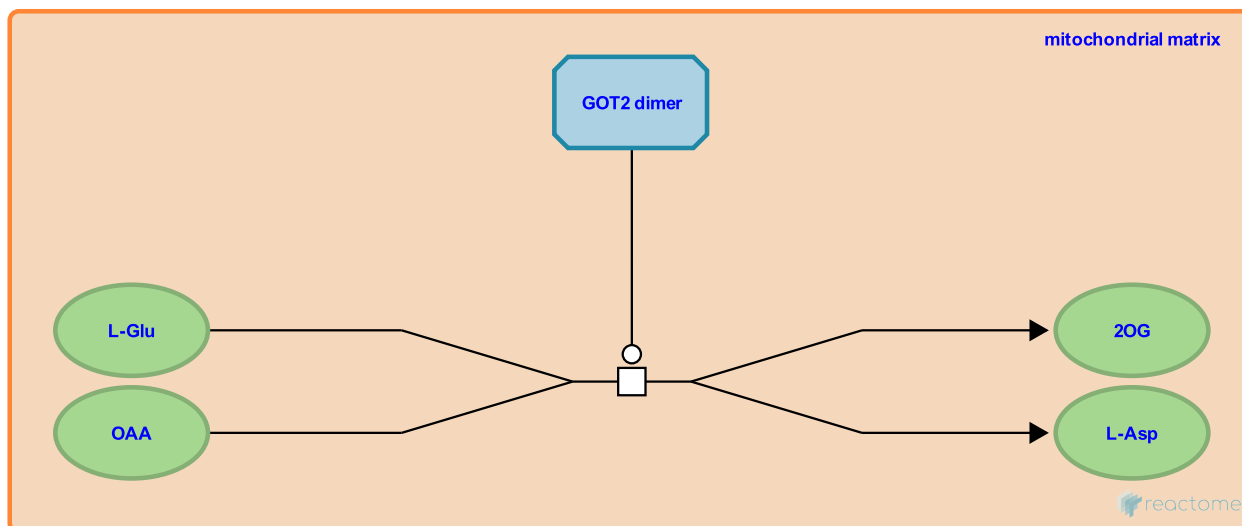
This document contains 1 reaction ([see Table of Contents](#))

oxaloacetate + glutamate <=> aspartate + alpha-ketoglutarate [GOT2] ↗

Stable identifier: R-HSA-70613

Type: transition

Compartments: mitochondrial matrix



Mitochondrial aspartate aminotransferase catalyzes the reversible reaction of oxaloacetate and glutamate to form aspartate and 2-oxoglutarate (alpha-ketoglutarate) (Martini et al. 1985). The active form of the enzyme is inferred to be a dimer with one molecule of pyridoxal phosphate associated with each monomer.

Literature references

Martini, F., Angelaccio, S., Barra, D., Pascarella, S., Maras, B., Doonan, S. et al. (1985). The primary structure of mitochondrial aspartate aminotransferase from human heart. *Biochim Biophys Acta*, 832, 46-51. ↗

Editions

2008-09-10

Reviewed

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