

PXLP-K357-ABAT dimer:2Fe-2S transforms GABA to SUCCSA

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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: 88

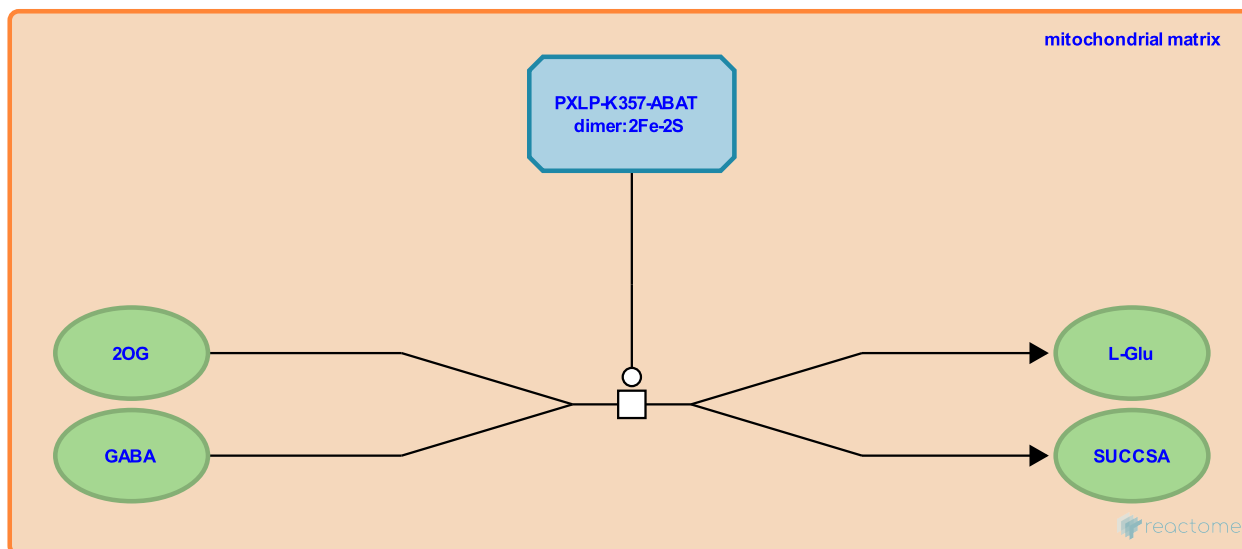
This document contains 1 reaction ([see Table of Contents](#))

PXLP-K357-ABAT dimer:2Fe-2S transforms GABA to SUCCSA [↗](#)

Stable identifier: R-HSA-916855

Type: transition

Compartments: mitochondrial matrix



GABA and 2-oxoglutarate (2OG) are converted to succinate semialdehyde (SUCCSA) and L-glutamate (L-Glu) by 4-aminobutyrate aminotransferase (ABAT). The reaction takes place in the mitochondrial matrix. The active form of the enzyme is a dimer, with each subunit associated with a molecule of pyridoxal phosphate (PXLP) (De Biase et al. 1995).

Literature references

Bossa, F., Barra, D., Simmaco, M., John, RA., De Biase, D. (1995). Primary structure and tissue distribution of human 4-aminobutyrate aminotransferase. *Eur J Biochem*, 227, 476-80. [↗](#)

Editions

2008-11-27	Reviewed	Restituto, S.
2010-06-30	Authored	Mahajan, SS.
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