GSS:Mg2+ dimer synthesizes GSH

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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


Reactome database release: 75

This document contains 1 reaction (see Table of Contents)
In the second step in the formation of glutathione, gamma-glutamylcysteine (gGluCys) ligates with glycine (Gly) to form glutathione (GSH) (Gali & Board 1995). This reaction is catalysed by glutathione synthetase (GSS), a homodimeric enzyme present in the cytosol which requires one Mg2+ cofactor per subunit for activity (Polekhina et al. 1999).

**Literature references**


**Editions**

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