

# GALK1 phosphorylates Gal to Gal1P

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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

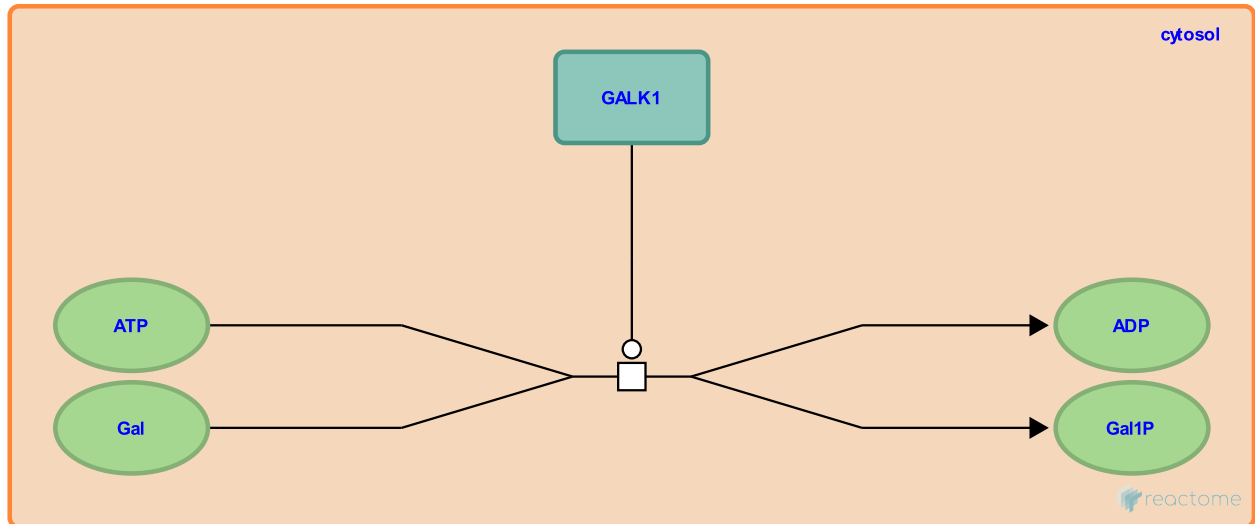
This document contains 1 reaction ([see Table of Contents](#))

## GALK1 phosphorylates Gal to Gal1P [↗](#)

**Stable identifier:** R-HSA-70355

**Type:** transition

**Compartments:** cytosol



Cytosolic galactokinase (GALK1) catalyses the reaction of ATP and D-galactose to form ADP and D-galactose 1-phosphate (Ai et al. 1995).

### Literature references

Basu, M., Bergsma, DJ., Ai, Y., Stambolian, D. (1995). Comparison of the enzymatic activities of human galactokinase GALK1 and a related human galactokinase protein GK2. *Biochem Biophys Res Commun*, 212, 687-91. [↗](#)

### Editions

2010-01-25

Revised

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