

Glc6P is isomerised to I3P by ISYNA1 in the cytosol

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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

- Fabregat, A., Sidiropoulos, K., Viteri, G., Forner, O., Marin-Garcia, P., Arnau, V. et al. (2017). Reactome pathway analysis: a high-performance in-memory approach. *BMC bioinformatics*, 18, 142. [↗](#)
- Sidiropoulos, K., Viteri, G., Sevilla, C., Jupe, S., Webber, M., Orlic-Milacic, M. et al. (2017). Reactome enhanced pathway visualization. *Bioinformatics*, 33, 3461-3467. [↗](#)
- Fabregat, A., Jupe, S., Matthews, L., Sidiropoulos, K., Gillespie, M., Garapati, P. et al. (2018). The Reactome Pathway Knowledgebase. *Nucleic Acids Res*, 46, D649-D655. [↗](#)
- Fabregat, A., Korninger, F., Viteri, G., Sidiropoulos, K., Marin-Garcia, P., Ping, P. et al. (2018). Reactome graph database: Efficient access to complex pathway data. *PLoS computational biology*, 14, e1005968. [↗](#)

Reactome database release: 74

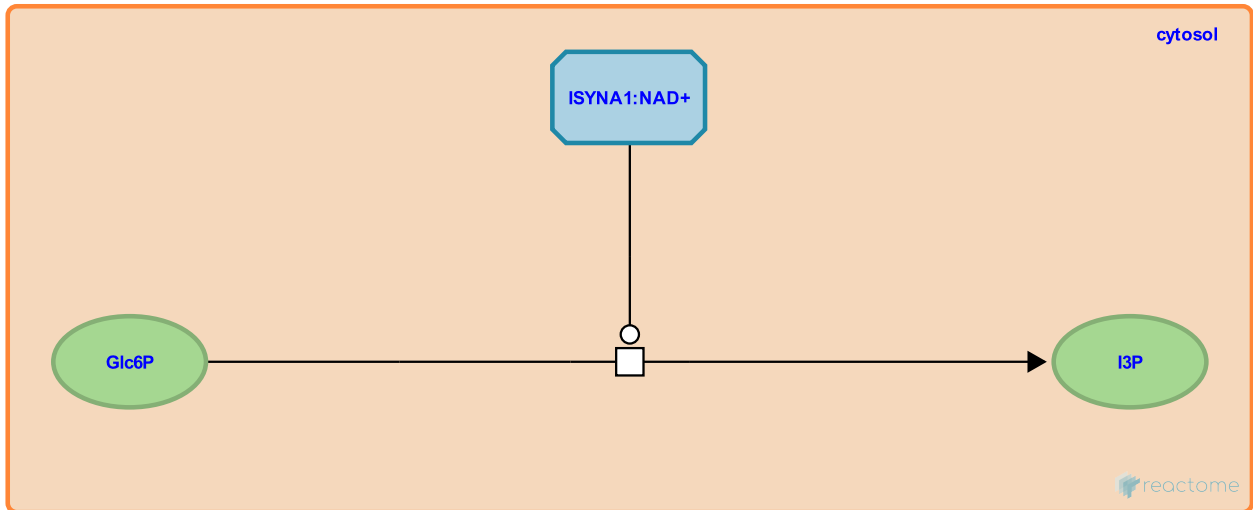
This document contains 1 reaction ([see Table of Contents](#))

Glc6P is isomerised to I3P by ISYNA1 in the cytosol ↗

Stable identifier: R-HSA-1855178

Type: transition

Compartments: cytosol



Inositol-3-phosphate synthase 1 (ISYNA1) aka hIPS isomerises glucose 6-phosphate (Glc6P) to inositol 3-phosphate (I3P) (Ju et al. 2004).

Literature references

Ju, S., Shaltiel, G., Shamir, A., Agam, G., Greenberg, ML. (2004). Human 1-D-myo-inositol-3-phosphate synthase is functional in yeast. *J Biol Chem*, 279, 21759-65. ↗

Editions

2011-10-28	Authored, Edited	Williams, MG.
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