

PI3P is phosphorylated to PI(3,5)P2 by PIP5K1A/B at the plasma membrane

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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: 70

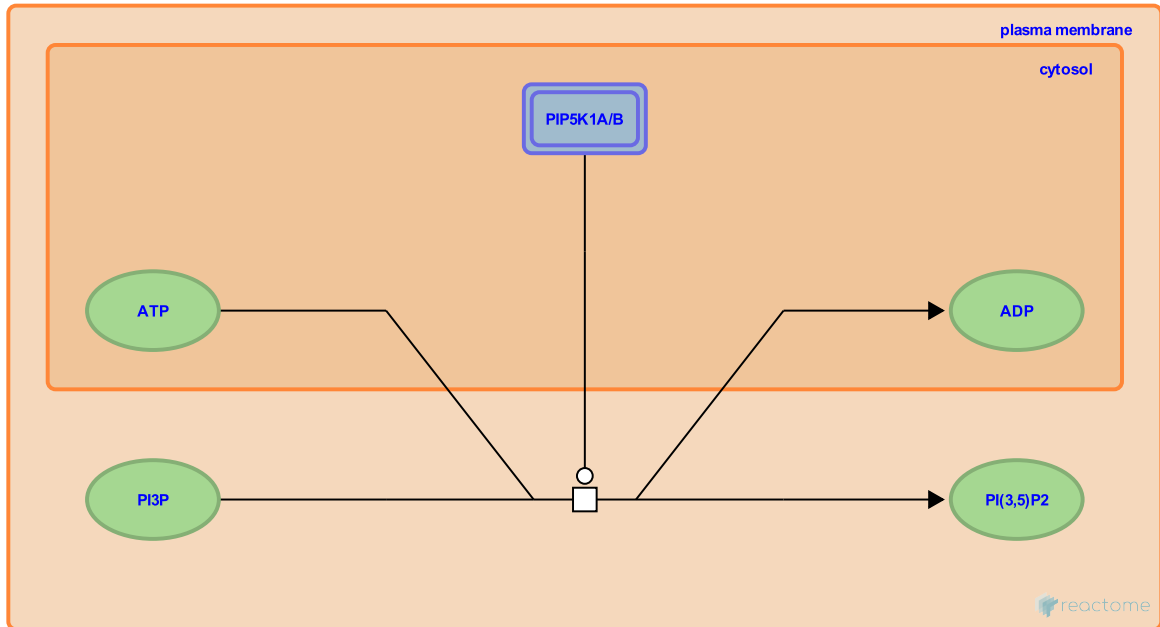
This document contains 1 reaction ([see Table of Contents](#))

PI3P is phosphorylated to PI(3,5)P2 by PIP5K1A/B at the plasma membrane [↗](#)

Stable identifier: R-HSA-1676134

Type: transition

Compartments: plasma membrane, cytosol



At the plasma membrane, phosphatidylinositol-4-phosphate 5-kinase type-1 alpha (PIP5K1A) and beta (PIP5K1B) phosphorylate phosphatidylinositol 3-phosphate (PI3P) to phosphatidylinositol 3,5-bisphosphate (PI(3,5)P2) (Tolias et al. 1998).

Literature references

Tolias, KF., Rameh, L.E., Ishihara, H., Shibasaki, Y., Chen, J., Prestwich, GD. et al. (1998). Type I phosphatidylinositol-4-phosphate 5-kinases synthesize the novel lipids phosphatidylinositol 3,5-bisphosphate and phosphatidylinositol 5-phosphate. *J Biol Chem*, 273, 18040-6. [↗](#)

Editions

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