ALPI dimer hydrolyses phosphate monoesters

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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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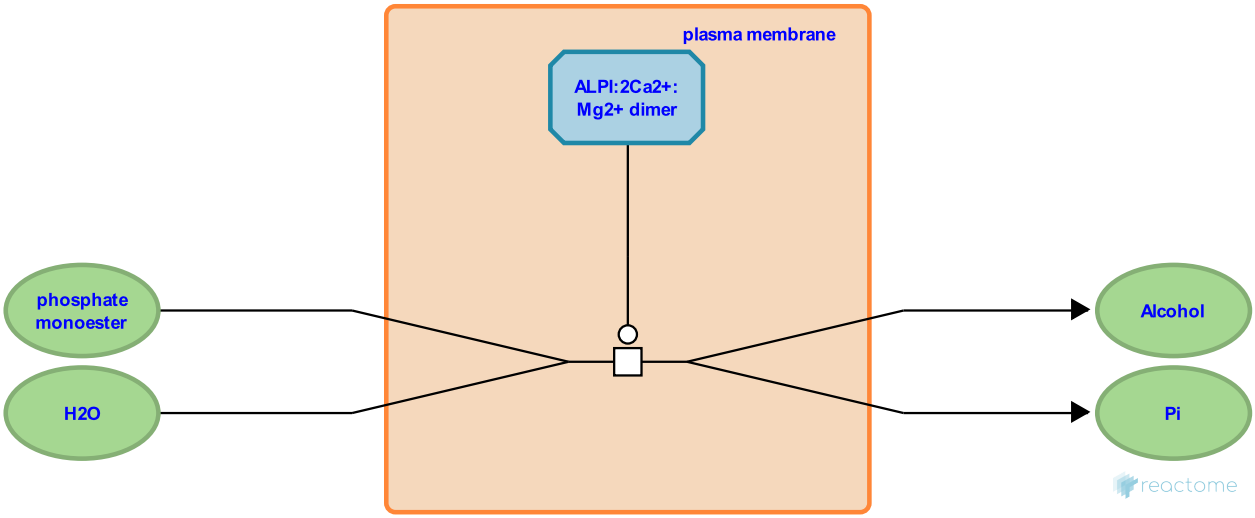
Stable identifier: R-HSA-8878787

Type: transition

Compartments: extracellular region, plasma membrane



Alkaline phosphatases (ALPs) are ubiquitous membrane-bound glycoproteins that catalyse the hydrolysis of phosphate monoesters in alkaline conditions (Sharma et al. 2014). To date, little is known about the physiological function of ALPs in most tissues. In humans, four isozymes exist, named from their tissue localisations. One isozyme, intestinal-type alkaline phosphatase (ALPI, IAP), possesses alkaline phosphatase activity but has no specific physiological substrate defiend for it yet. It may be involved in the hydrolysis of pro-drugs in the intestine (Lowe et al. 1990).

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Editions

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