APSe is phosphorylated to PAPSe by PAPSS1,2

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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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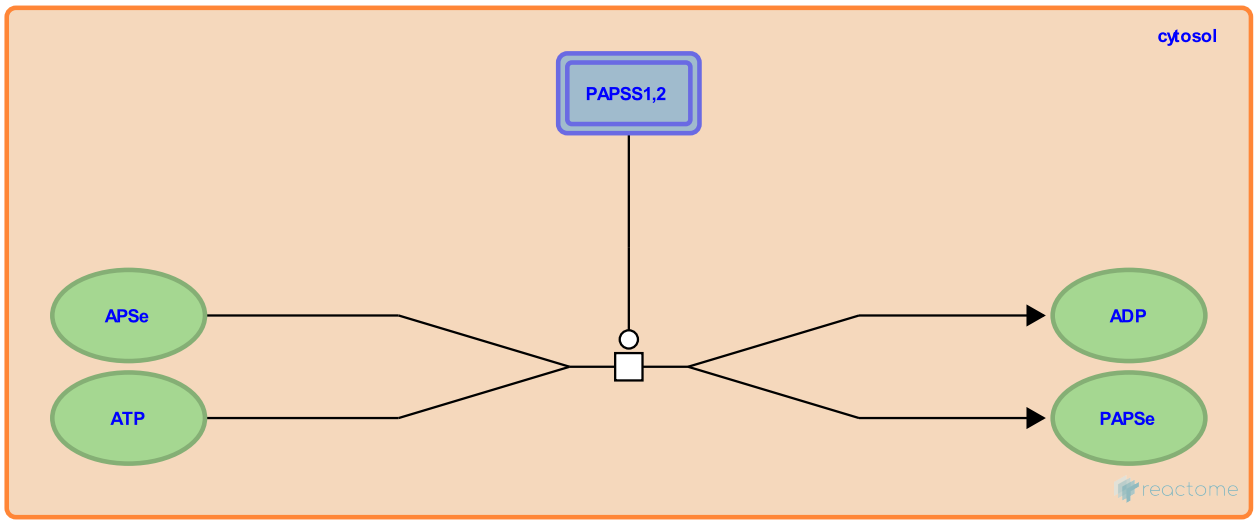
APSe is phosphorylated to PAPSe by PAPSS1,2 ↗

Stable identifier: R-HSA-2408540

Type: transition

Compartments: cytosol

Inferred from: APSe is phosphorylated to PAPSe by Kaps (Penicillium chrysogenum)



Bifunctional 3'-phosphoadenosine 5'-phosphosulfate synthases 1 and 2 (PAPSS1,2) (Venkatachalam et al. 1998, Xu et al. 2000) are involved in phosphorylating adenylylselenate (APSe) into 3'-phosphoadenylyl selenate (PAPSe) via its APS kinase domain. This reaction is inferred from the event in Penicillium chrysogenum involving APS kinase (Kaps) (Yu et al. 1989).

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Editions

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