APSe is phosphorylated to PAPSe by Kaps

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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. ↗

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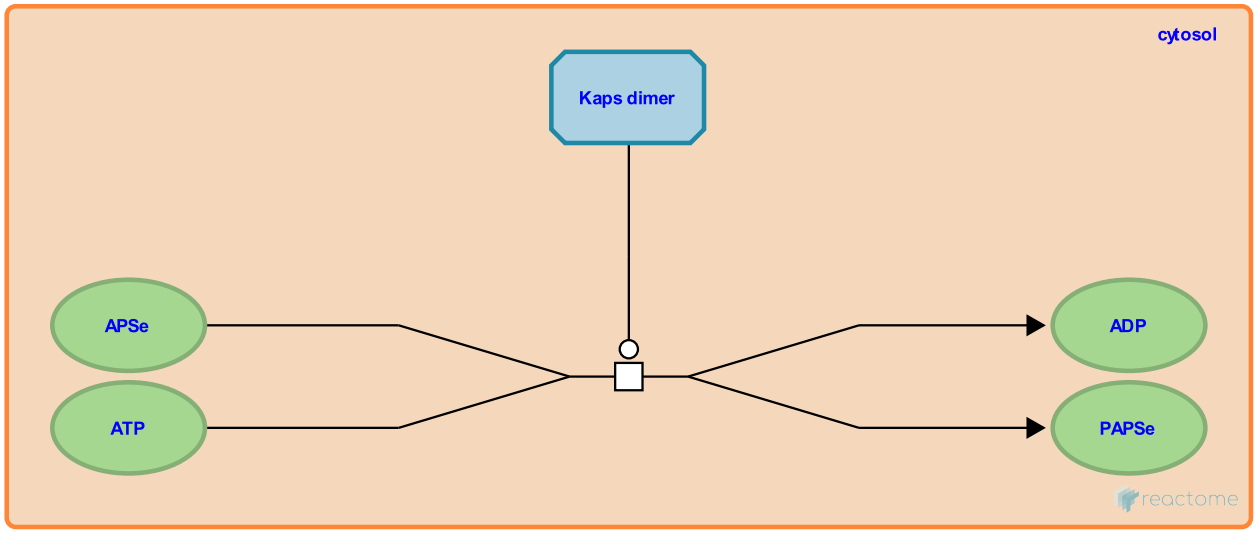
Stable identifier: R-PCH-2408503

Type: transition

Compartments: cytosol



In Penicillium chrysogenum, adenosine 5'-phosphosulfate (APS) kinase (Kaps) homodimer is involved in phosphorylating adenylylselenate (APSe) into 3'-phosphoadenylyl selenate (PAPSe) via its APS kinase domain (Yu et al. 1989).

Literature references

Chen, LJ., Segel, IH., Yu, M., Martin, RL., Jain, S. (1989). Rat liver ATP-sulfurylase: purification, kinetic characterization, and interaction with arsenate, selenate, phosphate, and other inorganic oxyanions. *Arch. Biochem. Biophys., 269*, 156-74. ↗

Editions

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