

PA translocates from the outer to the inner mitochondrial 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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- Sidiropoulos, K., Viteri, G., Sevilla, C., Jupe, S., Webber, M., Orlic-Milacic, M. et al. (2017). Reactome enhanced pathway visualization. *Bioinformatics*, 33, 3461-3467. [↗](#)
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Reactome database release: 73

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

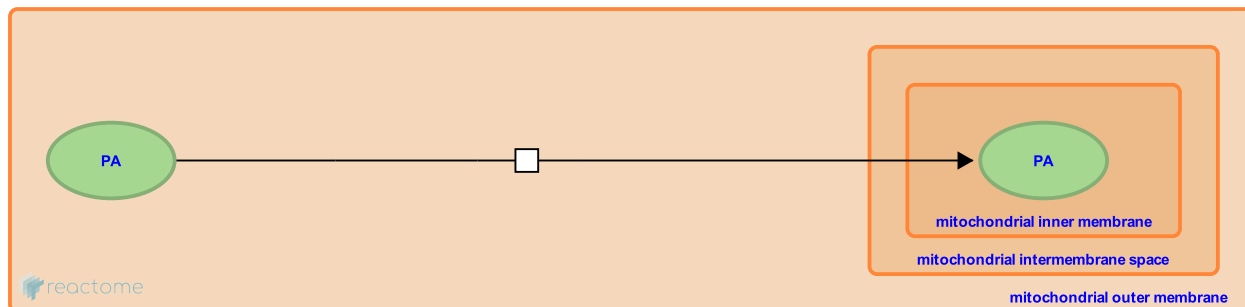
PA translocates from the outer to the inner mitochondrial membrane ↗

Stable identifier: R-HSA-1483099

Type: transition

Compartments: mitochondrial outer membrane, mitochondrial inner membrane

Inferred from: PA transports from the outer to the inner mitochondrial membrane (*Rattus norvegicus*)



Phosphatidic acid (PA) transport within the mitochondrion occurs as free diffusion through the aqueous phase and not mediated by phospholipid transfer proteins. This event is inferred from rats (Chakraborty et al. 1999, Wojtczak et al. 1990).

Literature references

Wojtczak, L., Baranska, J., Zborowski, J. (1990). Transport of phosphatidic acid within the mitochondrion. *Biochim Biophys Acta*, 1044, 284-7. ↗

Chakraborty, TR., Vancura, A., Balija, VS., Haldar, D. (1999). Phosphatidic acid synthesis in mitochondria. Topography of formation and transmembrane migration. *J Biol Chem*, 274, 29786-90. ↗

Editions

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