

Mitochondrial recruitment of Drp1

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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: 83

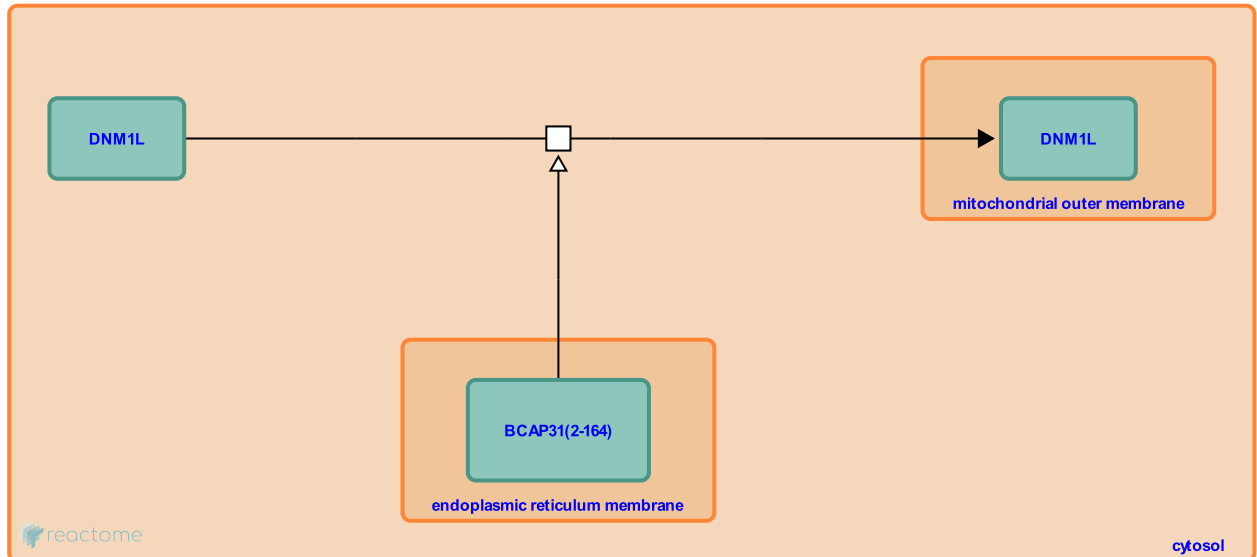
This document contains 1 reaction ([see Table of Contents](#))

Mitochondrial recruitment of Drp1 [↗](#)

Stable identifier: R-HSA-351948

Type: transition

Compartments: cytosol, mitochondrial outer membrane



Adenoviral expression of the BAP31 cleavage product, p20 causes early release of Ca^{2+} from the ER, concomitant uptake of Ca^{2+} into mitochondria, and recruitment of Drp1 to the mitochondria (Breckenridge et al., 2003). Drp1 mediates scission of the outer mitochondrial membrane, resulting in dramatic fragmentation and fission of the mitochondrial network.

Literature references

Stojanovic, M., Marcellus, RC., Shore, GC., Breckenridge, DG. (2003). Caspase cleavage product of BAP31 induces mitochondrial fission through endoplasmic reticulum calcium signals, enhancing cytochrome c release to the cytosol. *J Cell Biol*, 160, 1115-27. [↗](#)

Editions

2008-05-18	Authored	Schulze-Osthoff, K.
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