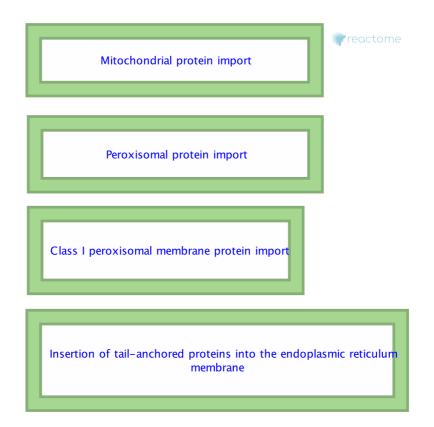


# **Protein localization**



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04/09/2021

### 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.

The development of Reactome is supported by grants from the US National Institutes of Health (P41 HG003751), University of Toronto (CFREF Medicine by Design), European Union (EU STRP, EMI-CD), and the European Molecular Biology Laboratory (EBI Industry program).

#### 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. A
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- Fabregat, A., Korninger, F., Viteri, G., Sidiropoulos, K., Marin-Garcia, P., Ping, P. et al. (2018). Reactome graph database: Efficient access to complex pathway data. *PLoS computational biology*, *14*, e1005968. *¬*

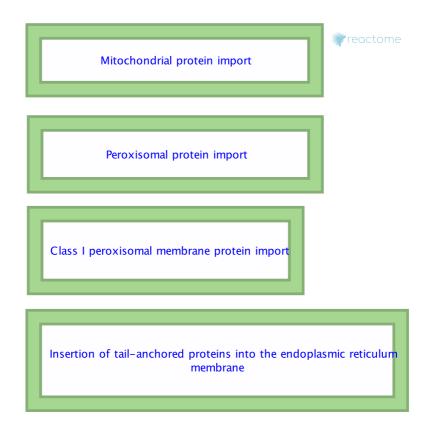
Reactome database release: 77

This document contains 5 pathways (see Table of Contents)

#### Protein localization 7

Stable identifier: R-CEL-9609507

Inferred from: Protein localization (Homo sapiens)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

#### Mitochondrial protein import 7

Location: Protein localization

Stable identifier: R-CEL-1268020

**Compartments:** cytosol, mitochondrial inner membrane, mitochondrial intermembrane space, mitochondrial matrix, mitochondrial outer membrane

Inferred from: Mitochondrial protein import (Homo sapiens)

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This event has been computationally inferred from an event that has been demonstrated in another species.

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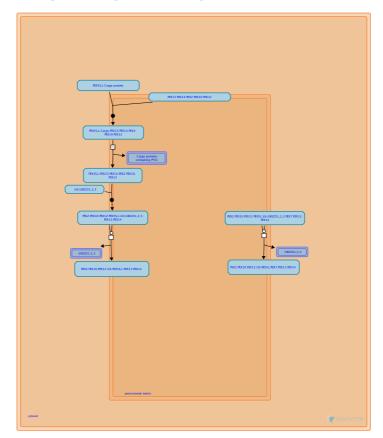
#### Peroxisomal protein import *▼*

**Location:** Protein localization

Stable identifier: R-CEL-9033241

Compartments: cytosol, peroxisomal matrix, peroxisomal membrane

Inferred from: Peroxisomal protein import (Homo sapiens)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

#### Class I peroxisomal membrane protein import 7

**Location:** Protein localization

Stable identifier: R-CEL-9603798

 Class 1 Providend Membrane

 Image: Class 1 PMP

 Image: Class 1 PMP

Inferred from: Class I peroxisomal membrane protein import (Homo sapiens)

This event has been computationally inferred from an event that has been demonstrated in another species.

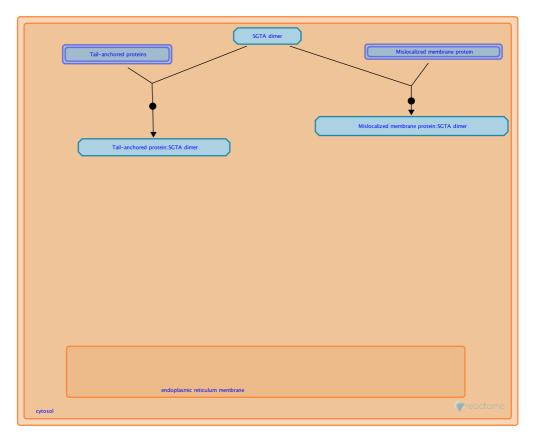
The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

#### Insertion of tail-anchored proteins into the endoplasmic reticulum membrane 7

Location: Protein localization

#### Stable identifier: R-CEL-9609523

**Inferred from:** Insertion of tail-anchored proteins into the endoplasmic reticulum membrane (Homo sapiens)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

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