Cargo of PEX5L:PEX7 translocates from the cytosol to the peroxisomal matrix

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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


Reactome database release: 73

This document contains 1 reaction (see Table of Contents)
Cargo of PEX5L:PEX7 translocates from the cytosol to the peroxisomal matrix

**Stable identifier:** R-HSA-9033514

**Type:** uncertain

**Compartments:** peroxisomal membrane

The cargo protein bound to PEX7 is released from PEX7 into the peroxisomal matrix in a reaction that does not require ATP (Purdue et al. 1997, Dodt et al. 2001, Rodrigues et al. 2014, Rodrigues et al. 2015). PEX7 may also be released into the matrix (inferred from yeast in Nair et al. 2004), however later research indicates that PEX7 remains with PEX5L in the peroxisomal membrane (Rodrigues et al. 2015) apparently in a proteinaceous cavity (Dias et al. 2017). Mutations in PEX5 cause defects in import of PTS1-containing proteins or PTS2-containing proteins or both (Eberrink et al. 2009, Barøy et al. 2015).

**Literature references**


**Editions**

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