

PEX2:PEX10:PEX12 binds PEX5S,L (in PEX5S:PEX13:PEX14) and Ub:UBE2D1,2,3

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06/05/2024

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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Reactome database release: 88

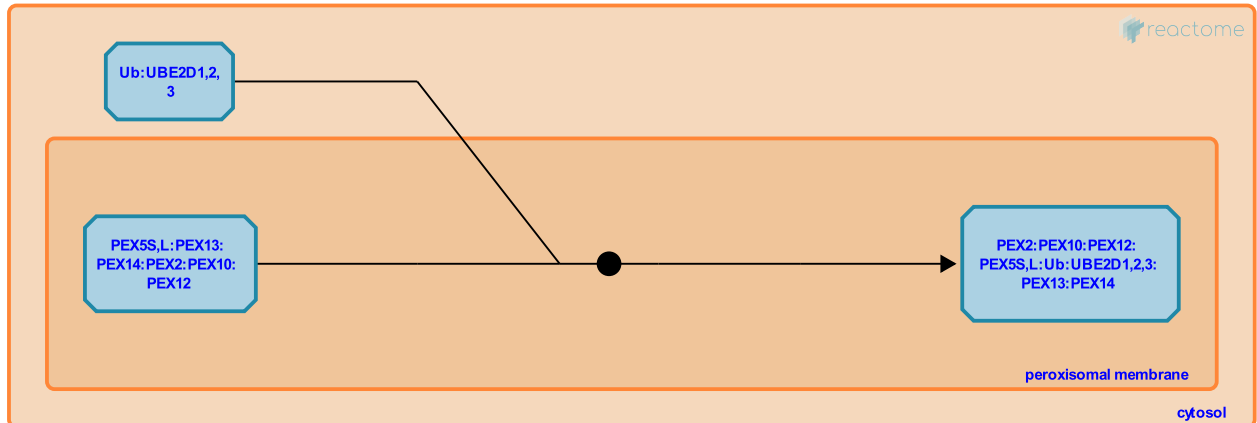
This document contains 1 reaction ([see Table of Contents](#))

PEX2:PEX10:PEX12 binds PEX5S,L (in PEX5S:PEX13:PEX14) and Ub:UBE2D1,2,3 [↗](#)

Stable identifier: R-HSA-8953917

Type: binding

Compartments: peroxisomal membrane



A RING E3 ubiquitin ligase complex containing PEX10, PEX12, and PEX2 ubiquitinates PEX5L. The PEX2:PEX10:PEX12 complex is believed to bind an activated E2-ubiquitin conjugate (one of Ub:UBE2D1, Ub:UBE2D2, Ub:UBE2D3) and PEX5L in a complex that also contains PEX13 and PEX14 (Chang et al. 1999, Carvalho et al. 2007, Grou et al. 2008, Grou et al. 2009, Okumoto et al. 2011). The short isoform of PEX5, PEX5S, is inferred to undergo the same reaction.

Literature references

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Editions

2017-01-01	Authored, Edited	May, B.
2018-02-13	Reviewed	Van Veldhoven, PP., Fransen, M.
2018-03-12	Reviewed	Azevedo, JE.