

# PEX5L binds PEX7:Cargo protein

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19/05/2024

## 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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Sidiropoulos, K., Viteri, G., Sevilla, C., Jupe, S., Webber, M., Orlic-Milacic, M. et al. (2017). Reactome enhanced pathway visualization. *Bioinformatics*, 33, 3461-3467. [↗](#)

Fabregat, A., Jupe, S., Matthews, L., Sidiropoulos, K., Gillespie, M., Garapati, P. et al. (2018). The Reactome Pathway Knowledgebase. *Nucleic Acids Res*, 46, D649-D655. [↗](#)

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: 88

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

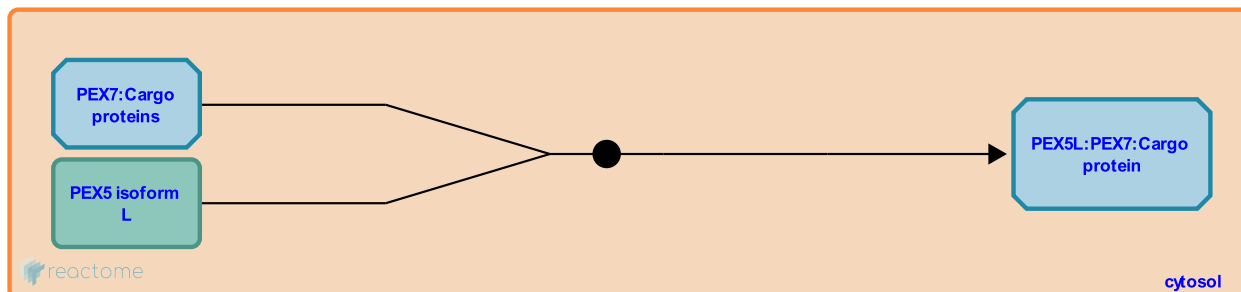
## PEX5L binds PEX7:Cargo protein ↗

**Stable identifier:** R-HSA-9033240

**Type:** binding

**Compartments:** cytosol

**Inferred from:** [PEX5L binds PEX7:Acaa1a \(Cricetulus griseus\)](#)



The long isoform of PEX5, PEX5L, binds PEX7 that is already bound to a PTS2-containing cargo protein (Braverman et al. 1998, Dodt et al. 2001, Kunze et al. 2015, Rodrigues et al. 2015). The binding of PEX5L to PEX7 increases the affinity of PEX7 for cargo protein (Kunze et al. 2015). Mutations affecting the additional sequence present only in the long isoform of PEX5 cause rhizomelic chondrodysplasia punctata type 5 (Baroy et al. 2015).

### Literature references

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### Editions

2017-12-15	Authored, Edited	May, B.
2018-02-13	Reviewed	Van Veldhoven, PP., Fransen, M.
2018-03-12	Reviewed	Azevedo, JE.