

PEX14 Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP12560c**Specification**

PEX14 Antibody (Center) Blocking peptide - Product InformationPrimary Accession [O75381](#)**PEX14 Antibody (Center) Blocking peptide - Additional Information****Gene ID** 5195**Other Names**

Peroxisomal membrane protein PEX14, PTS1 receptor-docking protein, Peroxin-14, Peroxisomal membrane anchor protein PEX14, PEX14

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PEX14 Antibody (Center) Blocking peptide - Protein Information**Name** PEX14 {ECO:0000303|PubMed:9653144, ECO:0000312|HGNC:HGNC:8856}**Function**

Component of the PEX13-PEX14 docking complex, a translocon channel that specifically mediates the import of peroxisomal cargo proteins bound to PEX5 receptor (PubMed:9653144, PubMed:24235149, PubMed:28765278). The PEX13-PEX14 docking complex forms a large import pore which can be opened to a diameter of about 9 nm (By similarity). Mechanistically, PEX5 receptor along with cargo proteins associates with the PEX14 subunit of the PEX13-PEX14 docking complex in the cytosol, leading to the insertion of the receptor into the organelle membrane with the concomitant translocation of the cargo into the peroxisome matrix (PubMed:24235149, PubMed:28765278). Plays a key role for peroxisome movement through a direct interaction with tubulin (PubMed:21525035).

Cellular Location

Peroxisome membrane; Single-pass membrane protein {ECO:0000250|UniProtKB:Q642G4}

PEX14 Antibody (Center) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

PEX14 Antibody (Center) Blocking peptide - Images

PEX14 Antibody (Center) Blocking peptide - Background

This gene encodes an essential component of the peroxisomal import machinery. The protein is integrated into peroxisome membranes with its C-terminus exposed to the cytosol, and interacts with the cytosolic receptor for proteins containing a PTS1 peroxisomal targeting signal. The protein also functions as a transcriptional corepressor and interacts with a histone deacetylase. A mutation in this gene results in one form of Zellweger syndrome.

PEX14 Antibody (Center) Blocking peptide - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Macgregor, S., et al. Hum. Mol. Genet. 19(13):2716-2724(2010) Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Shiozawa, K., et al. J. Biol. Chem. 284(37):25334-25342(2009)