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PEX14 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP9150b

Specification

PEX14 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession O75381

PEX14 Antibody (C-term) 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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP9150b was selected from the C-term region of human PEX14. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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 (C-term) 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:<a href="http://www.uniprot.org/citations/28765278"

target="_blank">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 (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

PEX14 Antibody (C-term) Blocking Peptide - Images

PEX14 Antibody (C-term) Blocking Peptide - Background

PEX14 belongs to the peroxin 14 family. It is a component of the peroxisomal translocation machinery with PEX13 and PEX17 and interacts with both the PTS1 and PTS2 receptors. PEX14 binds directly to PEX17.Defects in PEX14 are the cause of peroxisome biogenesis disorder complementation group K (PBD-CGK) [MIM:601791] and Zellweger syndrome (ZWS) [MIM:214100].

PEX14 Antibody (C-term) Blocking Peptide - References

Neufeld C., et.al., EMBO J. 28:745-754(2009).