10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PEX12 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP9604c

Specification

PEX12 Antibody (Center) Blocking Peptide - Product Information

Primary Accession O00623

PEX12 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 5193

Other Names
Peroxisome assembly protein 12, Peroxin-12, Peroxisome assembly factor 3, PAF-3, PEX12, PAF3

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.

PEX12 Antibody (Center) Blocking Peptide - Protein Information

Name PEX12 {ECO:0000303|PubMed:9090384, ECO:0000312|HGNC:HGNC:8854}

Function
Component of a retrotranslocation channel required for peroxisome organization by mediating export of the PEX5 receptor from peroxisomes to the cytosol, thereby promoting PEX5 recycling (PubMed:24662292, PubMed:9354782, PubMed:9632816). The retrotranslocation channel is composed of PEX2, PEX10 and PEX12; each subunit contributing transmembrane segments that coassemble into an open channel that specifically allows the passage of PEX5 through the peroxisomal membrane (By similarity). PEX12 also regulates PEX5 recycling by activating the E3 ubiquitin-protein ligase activity of PEX10 (PubMed:24662292). When PEX5 recycling is compromised, PEX12 stimulates PEX10-mediated polyubiquitination of PEX5, leading to its subsequent degradation (By similarity).

Cellular Location
Peroxisome membrane; Multi-pass membrane protein

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PEX12 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

PEX12 Antibody (Center) Blocking Peptide - Images

PEX12 Antibody (Center) Blocking Peptide - Background

Peroxins (PEXs) are proteins that are essential for the assembly of functional peroxisomes. The peroxisome biogenesis disorders (PBDs) are a group of genetically heterogeneous autosomal recessive, lethal diseases characterized by multiple defects in peroxisome function. The peroxisomal biogenesis disorders are a heterogeneous group with at least 14 complementation groups and with more than 1 phenotype being observed in cases falling into particular complementation groups. Although the clinical features of PBD patients vary, cells from all PBD patients exhibit a defect in the import of one or more classes of peroxisomal matrix proteins into the organelle.

PEX12 Antibody (Center) Blocking Peptide - References

Zeharia, A., et al. J. Hum. Genet. 52(7):599-606(2007)Mano, S., et al. Plant J. 47(4):604-618(2006)Gootjes, J., et al. Hum. Mutat. 24(2):130-139(2004)