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PEX1 Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP10181c

Specification

PEX1 Antibody (Center) Blocking peptide - Product Information

Primary Accession	O43933
Other Accession	NP_000457.1

PEX1 Antibody (Center) Blocking peptide - Additional Information

Gene ID 5189

Other Names
Peroxisome biogenesis factor 1, Peroxin-1, Peroxisome biogenesis disorder protein 1, PEX1

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.

PEX1 Antibody (Center) Blocking peptide - Protein Information

Name PEX1 {ECO:0000303|PubMed:9398848, ECO:0000312|HGNC:HGNC:8850}

Function
Component of the PEX1-PEX6 AAA ATPase complex, a protein dislocase complex that mediates the ATP-dependent extraction of the PEX5 receptor from peroxisomal membranes, an essential step for PEX5 recycling (PubMed:11439091, PubMed:16314507, PubMed:16854980, PubMed:21362118, PubMed:29884772). Specifically recognizes PEX5 monoubiquitinated at 'Cys-11', and pulls it out of the peroxisome lumen through the PEX2-PEX10-PEX12 retrotranslocation channel (PubMed:29884772). Extraction by the PEX1-PEX6 AAA ATPase complex is accompanied by unfolding of the TPR repeats and release of bound cargo from PEX5 (PubMed:29884772).

Cellular Location
Cytoplasm, cytosol. Peroxisome membrane. Note=Associated with peroxisomal membranes; anchored by PEX26 to peroxisome membranes

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PEX1 Antibody (Center) Blocking peptide - Protocols

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

- Blocking Peptides

PEX1 Antibody (Center) Blocking peptide - Images

PEX1 Antibody (Center) Blocking peptide - Background

This gene encodes a member of the AAA ATPase family, alarge group of ATPases associated with diverse cellular activities.This protein is cytoplasmic but is often anchored to a peroxisomalmembrane where it forms a heteromeric complex and plays a role inthe import of proteins into peroxisomes and peroxisome biogenesis.Mutations in this gene have been associated with complementationgroup 1 peroxisomal disorders such as neonataladrenoleukodystrophy, infantile Refsum disease, and Zellwegersyndrome.

PEX1 Antibody (Center) Blocking peptide - References

Zhao, J., et al. BMC Med. Genet. 11, 96 (2010) :Yik, W.Y., et al. Hum. Mutat. 30 (3), E467-E480 (2009) :Gudbjartsson, D.F., et al. Nat. Genet. 40(5):609-615(2008)Matsuoka, S., et al. Science 316(5828):1160-1166(2007)Tamura, S., et al. J. Biol. Chem. 281(38):27693-27704(2006)