

PEX1 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10181c

Specification

PEX1 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	O43933
Other Accession	NP_000457.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	142867
Antigen Region	599-628

PEX1 Antibody (Center) - Additional Information

Gene ID 5189

Other Names

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

Target/Specificity

This PEX1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 599-628 amino acids from the Central region of human PEX1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PEX1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

PEX1 Antibody (Center) - 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

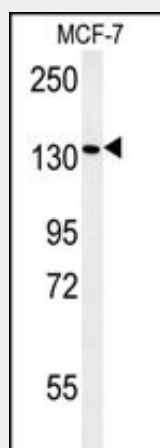
Cytoplasm, cytosol. Peroxisome membrane. Note=Associated with peroxisomal membranes; anchored by PEX26 to peroxisome membranes

PEX1 Antibody (Center) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PEX1 Antibody (Center) - Images



PEX1 Antibody (Center) (Cat. #AP10181c) western blot analysis in MCF-7 cell line lysates (35ug/lane). This demonstrates the PEX1 antibody detected the PEX1 protein (arrow).

PEX1 Antibody (Center) - Background

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

syndrome.

PEX1 Antibody (Center) - 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)