

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

**Specification**

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**PEX1 Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O43933</a>
Other Accession	<a href="#">NP_000457.1</a>
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

**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

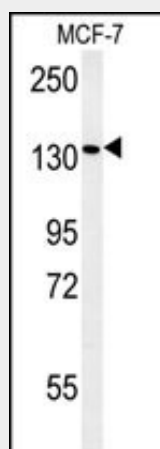
Cytoplasm, cytosol. Peroxisome membrane. Note=Associated with peroxisomal membranes; anchored by PEX26 to peroxisome membranes

#### 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)