

#### **PEX12 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9604c

## **Specification**

## PEX12 Antibody (Center) - Product Information

Application WB,E
Primary Accession 000623

Other Accession <u>Q8VC48</u>, <u>A4FUD4</u>

Reactivity Human

Predicted Bovine, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 40797
Antigen Region 131-158

## PEX12 Antibody (Center) - Additional Information

#### **Gene ID 5193**

#### **Other Names**

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

#### **Target/Specificity**

This PEX12 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 131-158 amino acids from the Central region of human PEX12.

## **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**

PEX12 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## PEX12 Antibody (Center) - 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:9354782, PubMed:9632816, PubMed:24662292). 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**

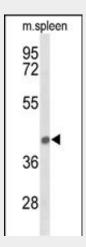
Peroxisome membrane; Multi-pass membrane protein

## PEX12 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 Cytomety
- Cell Culture

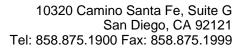
## PEX12 Antibody (Center) - Images



Western blot analysis of PEX12 Antibody (Center) (Cat. #AP9604c) in mouse spleen tissue lysates (35ug/lane). PEX12 (arrow) was detected using the purified Pab.

# PEX12 Antibody (Center) - 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) - 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)