

PXMP3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9179c

Specification

PXMP3 Antibody (Center) - Product Information

Application WB, IHC-P, FC,E

Primary Accession P28328

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 165-194

PXMP3 Antibody (Center) - Additional Information

Gene ID 5828

Other Names

Peroxisome biogenesis factor 2, 35 kDa peroxisomal membrane protein, Peroxin-2, Peroxisomal membrane protein 3, Peroxisome assembly factor 1, PAF-1, RING finger protein 72, PEX2, PAF1, PMP3, PMP35, PXMP3, RNF72

Target/Specificity

This PXMP3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 165-194 amino acids from the Central region of human PXMP3.

Dilution

WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

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

PXMP3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

PXMP3 Antibody (Center) - Protein Information

Name PEX2 {ECO:0000303|PubMed:10891359, ECO:0000312|HGNC:HGNC:9717}



Function E3 ubiquitin-protein ligase 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). 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). PEX2 also regulates peroxisome organization by acting as a E3 ubiquitin-protein ligase (By similarity). PEX2 ubiquitinates PEX5 during its passage through the retrotranslocation channel: catalyzes monoubiquitination of PEX5 at 'Cys-11', a modification that acts as a signal for PEX5 extraction into the cytosol (By similarity). Required for pexophagy in response to starvation by mediating ubiquitination of peroxisomal proteins, such as PEX5 and ABCD3/PMP70 (PubMed:27597759). Also involved in the response to reactive oxygen species (ROS) by mediating 'Lys-48'-linked polyubiquitination and subsequent degradation of PNPLA2/ATGL, thereby regulating lipolysis (PubMed:34903883).

Cellular Location

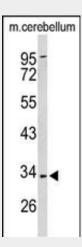
Peroxisome membrane; Multi-pass membrane protein

PXMP3 Antibody (Center) - Protocols

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

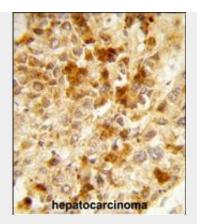
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

PXMP3 Antibody (Center) - Images

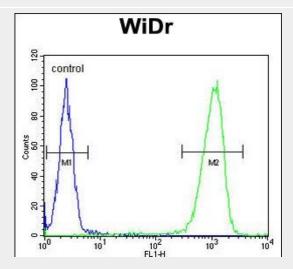


Western blot analysis of PXMP3 Antibody (Center) (Cat. #AP9179c) in mouse cerebellum tissue lysates (35ug/lane). PXMP3 (arrow) was detected using the purified Pab.





Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with PXMP3 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



PXMP3 Antibody (Center) (Cat. #AP9179c) flow cytometric analysis of WiDr cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

PXMP3 Antibody (Center) - Background

PXMP3 encodes an integral peroxisomal membrane protein required for peroxisome biogenesis. The protein is thought to be involved in peroxisomal matrix protein import.

PXMP3 Antibody (Center) - References

Steinberg, S., et.al., Mol. Genet. Metab. 83 (3), 252-263 (2004) Biermanns, M., et.al., Eur. J. Cell Biol. 82 (4), 155-162 (2003)