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PXMP3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9179c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P28328
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23198
Calculated MW	34843
Antigen Region	165-194

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~~1:100~500 FC~~1:10~50 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	PXMP3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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

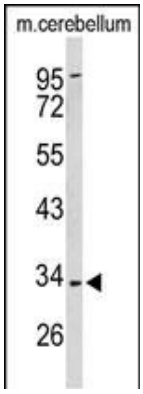
Background

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

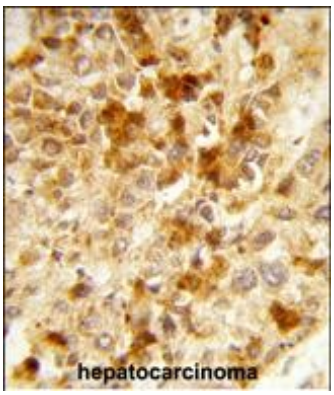
References

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)

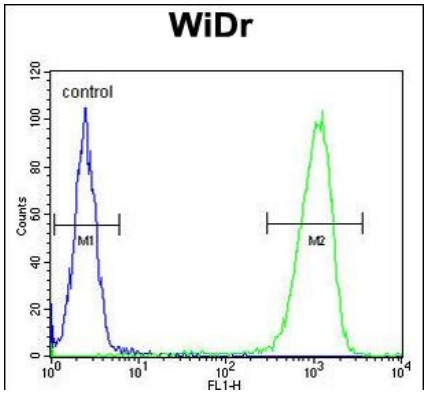
Images



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.