

PXMP3 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP9179c

Specification

PXMP3 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

<u>P28328</u>

PXMP3 Antibody (Center) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody AP9179c was selected from the Center region of human PXMP3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PXMP3 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - Protocols

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

• Blocking Peptides

PXMP3 Antibody (Center) Blocking Peptide - Images

PXMP3 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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)