

Anti-PMP70 Antibody

Catalog # ABO11398

## Specification

## Anti-PMP70 Antibody - Product Information

Application Primary Accession Host Reactivity Clonality Format **Description** Babbit InG polyclona WB, IHC-P <u>P28288</u> Rabbit Human, Mouse, Rat Polyclonal Lyophilized

Rabbit IgG polyclonal antibody for ATP-binding cassette sub-family D member 3(ABCD3) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## Anti-PMP70 Antibody - Additional Information

Gene ID 5825

**Other Names** ATP-binding cassette sub-family D member 3, 70 kDa peroxisomal membrane protein, PMP70, ABCD3, PMP70, PXMP1

Calculated MW 75476 MW KDa

**Application Details** Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat<br>Western blot, 0.1-0.5 µg/ml, Rat, Human, Mouse<br>

Subcellular Localization Peroxisome membrane ; Multi-pass membrane protein .

**Protein Name** ATP-binding cassette sub-family D member 3

**Contents** Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

**Immunogen** A synthetic peptide corresponding to a sequence at the C-terminus of human PMP70(646-659aa EFKQITEDTVEFGS), different from the related mouse and rat sequences by one amino acid.

**Purification** Immunogen affinity purified.



**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the ABC transporter superfamily. ABCD family. Peroxisomal fatty acyl CoA transporter (TC 3.A.1.203) subfamily.

### **Anti-PMP70 Antibody - Protein Information**

Name ABCD3 (HGNC:67)

#### Function

Broad substrate specificity ATP-dependent transporter of the ATP-binding cassette (ABC) family that catalyzes the transport of long- chain fatty acids (LCFA)-CoA, dicarboxylic acids-CoA, long-branched- chain fatty acids-CoA and bile acids from the cytosol to the peroxisome lumen for beta-oxydation (PubMed:<a href="http://www.uniprot.org/citations/11248239" target="\_blank">11248239</a>, PubMed:<a href="http://www.uniprot.org/citations/24333844" target="\_blank">24333844</a>, PubMed:<a href="http://www.uniprot.org/citations/25168382" target="\_blank">25168382</a>, PubMed:<a href="http://www.uniprot.org/citations/29397936" target="\_blank">29397936</a>). Has fatty acyl-CoA thioesterase and ATPase activities (PubMed:<a href="http://www.uniprot.org/citations/29397936" target="\_blank">29397936</a>). Probably hydrolyzes fatty acyl- CoAs into free fatty acids prior to their ATP-dependent transport into peroxisomes (By similarity). Thus, play a role in regulation of LCFAs and energy metabolism namely, in the degradation and biosynthesis of fatty acids by beta-oxidation (PubMed:<a href="http://www.uniprot.org/citations/2433844" target="\_blank">24333844</a>, PubMed:<a href="http://www.uniprot.org/citations/29397936" target="\_blank">29397936</a>/a>). Has fatty acids prior to their ATP-dependent transport into peroxisomes (By similarity). Thus, play a role in regulation of LCFAs and energy metabolism namely, in the degradation and biosynthesis of fatty acids by beta-oxidation (PubMed:<a href="http://www.uniprot.org/citations/2433844" target="\_blank">24333844</a>, PubMed:<a href="http://www.unipr

#### **Cellular Location**

Peroxisome membrane; Multi-pass membrane protein

## Anti-PMP70 Antibody - Protocols

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

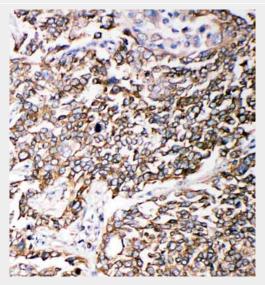
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-PMP70 Antibody - Images

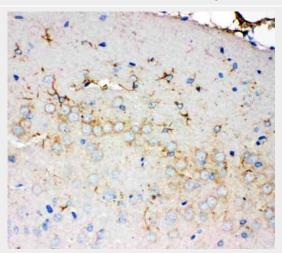




Anti-PMP70 antibody, ABO11398, Western blottingLane 1: Rat Lung Tissue LysateLane 2: Rat Ovary Tissue Lysate



Anti-PMP70 antibody, ABO11398, IHC(P)IHC(P): Human Lung Cancer Tissue



Anti-PMP70 antibody, ABO11398, IHC(P)IHC(P): Rat Brain Tissue

# Anti-PMP70 Antibody - Background

ATP-binding cassette sub-family D member 3 is a protein that in humans is encoded by the ABCD3 gene. The protein encoded by this gene is a member of the superfamily of ATP-binding cassette(ABC) transporters. The gene was assigned to human chromosome 1p21-p22 by in situ



hybridization. This peroxisomal membrane protein likely plays an important role in peroxisome biogenesis. Mutations have been associated with some forms of Zellweger syndrome, a heterogeneous group of peroxisome assembly disorders.