

Anti-PMP70 Antibody
Catalog # ABO11398**Specification**

Anti-PMP70 Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P28288
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

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
Western blot, 0.1-0.5 µg/ml, Rat, Human, Mouse

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 reconstitution, 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-oxidation (PubMed: [11248239](http://www.uniprot.org/citations/11248239)), PubMed: [24333844](http://www.uniprot.org/citations/24333844), PubMed: [25168382](http://www.uniprot.org/citations/25168382), PubMed: [29397936](http://www.uniprot.org/citations/29397936)). Has fatty acyl-CoA thioesterase and ATPase activities (PubMed: [29397936](http://www.uniprot.org/citations/29397936)). 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: [24333844](http://www.uniprot.org/citations/24333844), PubMed: [25944712](http://www.uniprot.org/citations/25944712)).

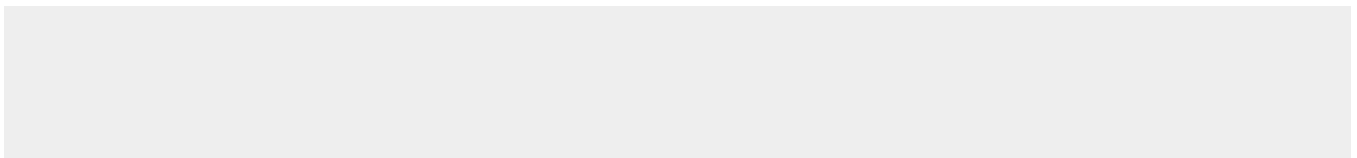
Cellular Location

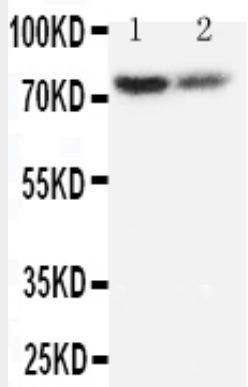
Peroxisome membrane; Multi-pass membrane protein

Anti-PMP70 Antibody - Protocols

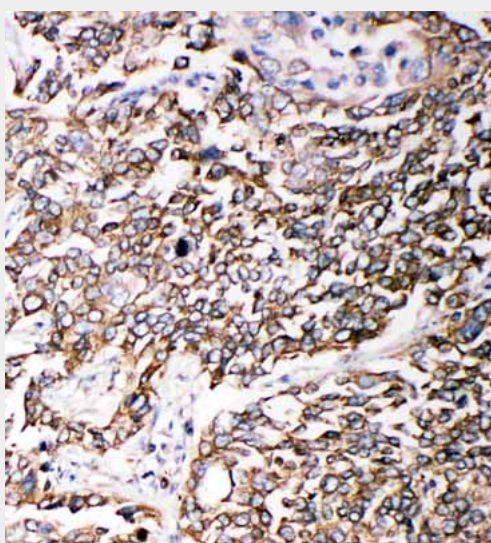
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

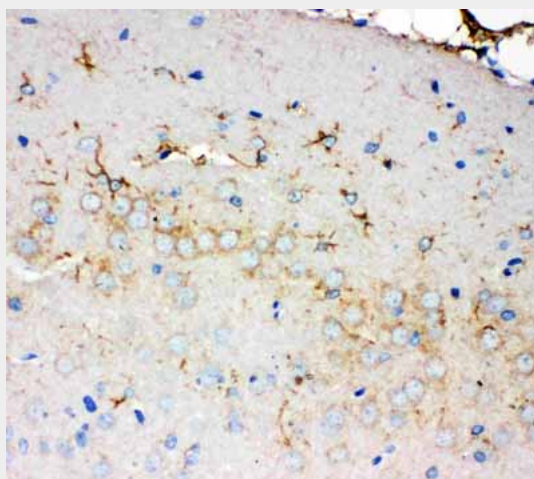
Anti-PMP70 Antibody - Images



Anti-PMP70 antibody, ABO11398, Western blotting Lane 1: Rat Lung Tissue Lysate Lane 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.