For Research Use Only

ABHD18 Polyclonal antibody

Catalog Number:25036-1-AP

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Antibodies | ELISA kits | Proteins
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Basic Information

Catalog Number:
25036-1-AP

Size:
150ul , Concentration: 700 ug/ml by Nanodrop and 427 ug/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG19120

GenBank Accession Number:
BC128143

GeneID (NCBI):
80167

UNIPROT ID:
Q0P651

Full Name:
chromosome 4 open reading frame 29

Calculated MW:
414 aa, 47 kDa

Observed MW:
60 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB: 1:500-1:1000
IHC: 1:50-1:500
IF/ICC: 1:50-1:500

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Species Specificity:
human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : PC-3 cells, A549 cells, mouse heart tissue

IHC : human liver tissue,

IF/ICC : A549 cells,

Background Information

ABHD18 (α/β hydrolase domain-containing protein 18) is a transmembrane protein in mammals whose function has not yet been fully elucidated. It belongs to the large α/β hydrolase superfamily, whose members typically possess hydrolase activity and are involved in a variety of metabolic reactions. The ABHD18 protein is localized on the lysosomal membrane and may participate in intracellular lipid metabolism or signal transduction processes. Recent studies have shown that ABHD18 is the key enzyme in human cells that catalyzes the deacylation of cardiolipin to MLCL. The loss of ABHD18 function can significantly alleviate mitochondrial supercomplex defects, energy metabolism disorders, and cardiomyopathy phenotypes caused by TAZ deficiency, even achieving a "genetic suppression" effect in mice and patient cells. This not only reveals ABHD18 as a core node in the cardiolipin remodeling pathway but also provides an entirely new therapeutic approach for mitochondrial diseases such as Barth syndrome.

Storage

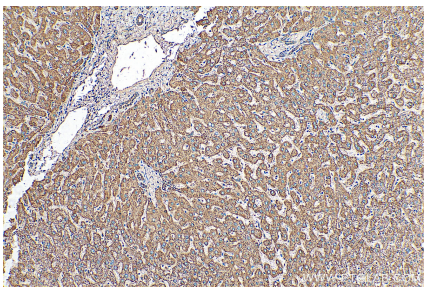
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1%BSA

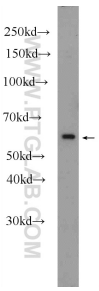
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

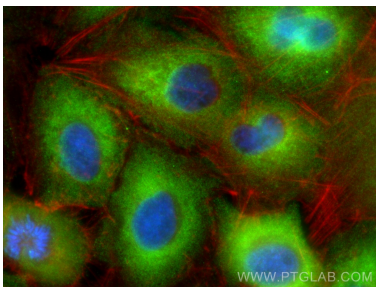
Selected Validation Data



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 25036-1-AP (C4orf29 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



PC-3 cells were subjected to SDS PAGE followed by western blot with 25036-1-AP (C4orf29 Antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed A549 cells using C4orf29 antibody (25036-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).