

**Anti-Abhd5 Picoband Antibody**  
Catalog # ABO11639**Specification****Anti-Abhd5 Picoband Antibody - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">Q8WTS1</a>
Host	<b>Rabbit</b>
Reactivity	<b>Human, Rat</b>
Clonality	<b>Polyclonal</b>
Format	<b>Lyophilized</b>

**Description**

Rabbit IgG polyclonal antibody for 1-acylglycerol-3-phosphate O-acyltransferase ABHD5(ABHD5) detection. Tested with WB, IHC-P in Human;Rat.

**Reconstitution**

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

**Anti-Abhd5 Picoband Antibody - Additional Information**

**Gene ID** 51099

**Other Names**

1-acylglycerol-3-phosphate O-acyltransferase ABHD5, 2.3.1.51, Abhydrolase domain-containing protein 5, Lipid droplet-binding protein CGI-58, ABHD5, NCIE2

**Calculated MW**

39096 MW KDa

**Application Details**

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

**Subcellular Localization**

Cytoplasm . Lipid droplet . Colocalized with PLIN and ADRP on the surface of lipid droplets. The localization is dependent upon the metabolic status of the adipocytes and the activity of PKA (By similarity). .

**Tissue Specificity**

Widely expressed in various tissues, including lymphocytes, liver, skeletal muscle and brain. Expressed by upper epidermal layers and dermal fibroblasts in skin, hepatocytes and neurons (at protein level). .

**Protein Name**

1-acylglycerol-3-phosphate O-acyltransferase ABHD5

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>N.

**Immunogen**

E. coli-derived human Abhd5 recombinant protein (Position: R169-D349). Human Abhd5 shares 96.7% amino acid (aa) sequence identity with both mouse and rat Abhd5.

**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.**

**Anti-Abhd5 Picoband Antibody - Protein Information**

**Name** ABHD5 ([HGNC:21396](#))

**Synonyms** NCIE2

**Function**

Coenzyme A-dependent lysophosphatidic acid acyltransferase that catalyzes the transfer of an acyl group on a lysophosphatidic acid (PubMed: [18606822](http://www.uniprot.org/citations/18606822)). Functions preferentially with 1-oleoyl- lysophosphatidic acid followed by 1-palmitoyl-lysophosphatidic acid, 1-stearoyl-lysophosphatidic acid and 1-arachidonoyl-lysophosphatidic acid as lipid acceptor. Functions preferentially with arachidonoyl-CoA followed by oleoyl-CoA as acyl group donors (By similarity). Functions in phosphatidic acid biosynthesis (PubMed: [18606822](http://www.uniprot.org/citations/18606822)). May regulate the cellular storage of triacylglycerol through activation of the phospholipase PNPLA2 (PubMed: [16679289](http://www.uniprot.org/citations/16679289)). Involved in keratinocyte differentiation (PubMed: [18832586](http://www.uniprot.org/citations/18832586)). Regulates lipid droplet fusion (By similarity).

**Cellular Location**

Cytoplasm. Lipid droplet {ECO:0000250|UniProtKB:Q9DBL9}. Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q9DBL9}. Note=Colocalized with PLIN and ADRP on the surface of lipid droplets. The localization is dependent upon the metabolic status of the adipocytes and the activity of PKA (By similarity).

**Tissue Location**

Widely expressed in various tissues, including lymphocytes, liver, skeletal muscle and brain. Expressed by upper epidermal layers and dermal fibroblasts in skin, hepatocytes and neurons (at protein level).

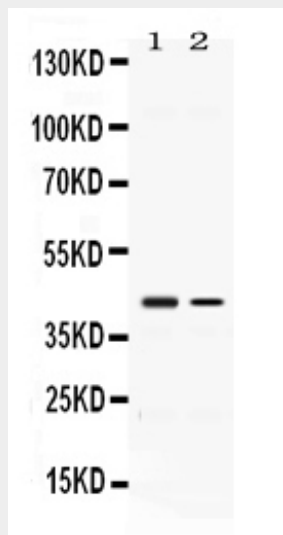
**Anti-Abhd5 Picoband Antibody - Protocols**

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

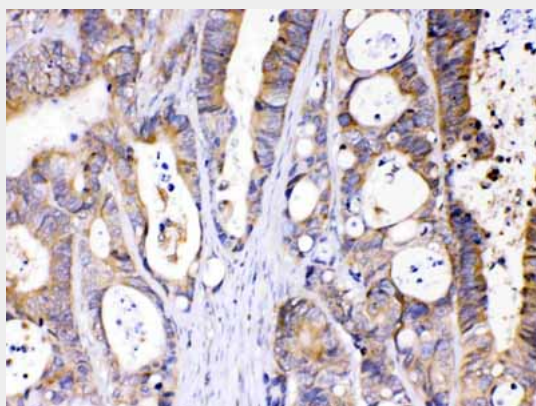
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-Abhd5 Picoband Antibody - Images



Western blot analysis of Abhd5 expression in rat kidney extract (lane 1) and A431 whole cell lysates (lane 2). Abhd5 at 43KD was detected using rabbit anti- Abhd5 Antigen Affinity purified polyclonal antibody (Catalog # ABO11639) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .



Abhd5 was detected in paraffin-embedded sections of human intestinal cancer tissues using rabbit anti- Abhd5 Antigen Affinity purified polyclonal antibody (Catalog # ABO11639) at 1 µg/mL. The immunohistochemical section was developed using SABC method .

### Anti-Abhd5 Picoband Antibody - Background

1-acylglycerol-3-phosphate O-acyltransferase ABHD5 is an enzyme that in humans is encoded by the ABHD5 gene. The protein encoded by this gene belongs to a large family of proteins defined by an alpha/beta hydrolase fold, and contains three sequence motifs that correspond to a catalytic triad found in the esterase/lipase/thioesterase subfamily. It differs from other members of this subfamily in that its putative catalytic triad contains an asparagine instead of the serine residue. Mutations in this gene have been associated with Chanarin-Dorfman syndrome, a triglyceride storage disease with impaired long-chain fatty acid oxidation.