

#### KD-Validated Anti-ABHD5 Rabbit Monoclonal Antibody Rabbit monoclonal antibody Catalog # AGI1209

## **Specification**

# KD-Validated Anti-ABHD5 Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW Gene Name Aliases	WB, FC <u>Q8WTS1</u> Human, Mouse Monoclonal Rabbit IgG Predicted, 39 kDa , observed, 45 kDa KDa ABHD5 ABHD5; Antibodyhydrolase Domain Containing 5, Lysophosphatidic Acid Acyltransferase; NCIE2; 1-Acylglycerol-3-Phosphate O-Acyltransferase ABHD5; Antibodyhydrolase Domain-Containing Protein 5; Lipid Droplet-Binding Protein CGI-58; EC 2.3.1.51; CGI-58; Antibodyhydrolase Domain Containing 5; CGIE2: JECN2
Immunogen	CGI58; IECN2 A synthesized peptide derived from human ABHD5

### KD-Validated Anti-ABHD5 Rabbit Monoclonal 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 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=21396" target="\_blank">HGNC:21396</a>), NCIE2

# KD-Validated Anti-ABHD5 Rabbit Monoclonal 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:<a

href="http://www.uniprot.org/citations/18606822" target="\_blank">18606822</a>). Functions preferentially with 1-oleoyl- lysophosphatidic acid followed by 1-palmitoyl-lysophosphatidic acid, 1stearoyl-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:<a

href="http://www.uniprot.org/citations/18606822" target="\_blank">18606822</a>). May regulate the cellular storage of triacylglycerol through activation of the phospholipase PNPLA2 (PubMed:<a href="http://www.uniprot.org/citations/16679289" target="\_blank">16679289</a>). Involved in keratinocyte differentiation (PubMed:<a href="http://www.uniprot.org/citations/18832586" target="\_blank">18832586</a>). 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**

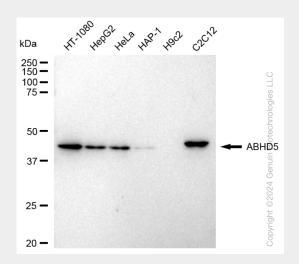
Widely expressed in various tissues, including lymphocytes, liver, skeletal muscle and brain. Expressed by upper epidermal layers and dermal fibroblasts in skin, hepatocytes and neurons (at protein level).

## KD-Validated Anti-ABHD5 Rabbit Monoclonal Antibody - Protocols

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

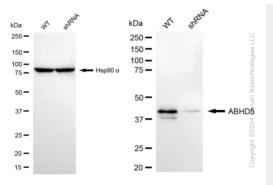
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### KD-Validated Anti-ABHD5 Rabbit Monoclonal Antibody - Images

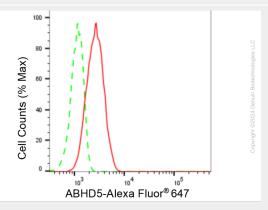


Western blotting analysis using anti-ABHD5 antibody (Cat#AGI1209). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-ABHD5 antibody (Cat#AGI1209, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Western blotting analysis using anti-ABHD5 antibody (Cat#AGI1209). ABHD5 expression in wild type (WT) and ABHD5 shRNA knockdown (KD) HeLa cells with 30  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-ABHD5 antibody (Cat#AGI1209, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of ABHD5 expression in C2C12 cells using ABHD5 antibody (Cat#AGI1209, 1:2,000). Green, isotype control; red, ABHD5.