


## Product datasheet

# Anti-Abhd5/CGI-58 antibody [EPR12621] ab183739

Recombinant RabMAb

★★★★★ [2 Abreviews](#) [18 References](#) [5 Images](#)

### Overview

<b>Product name</b>	Anti-Abhd5/CGI-58 antibody [EPR12621]
<b>Description</b>	Rabbit monoclonal [EPR12621] to Abhd5/CGI-58
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	HepG2 cells and cell lysates; U87-MG and Human fetal liver cell lysates; Human lipomyoma tissue.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR12621

Isotype IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab183739 in the following tested applications.

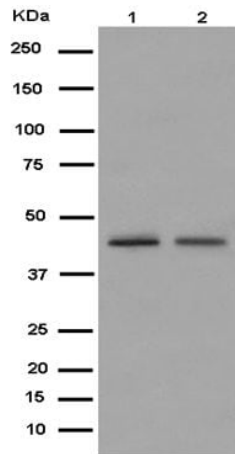
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/200. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (2)	1/1000 - 1/2000. Detects a band of approximately 45 kDa (predicted molecular weight: 39 kDa).
IHC-P		1/1000 - 1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

## Target

<b>Function</b>	Lysophosphatidic acid acyltransferase which functions in phosphatidic acid biosynthesis. May regulate the cellular storage of triacylglycerol through activation of the phospholipase PNPLA2. Involved in keratinocyte differentiation.
<b>Tissue specificity</b>	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).
<b>Involvement in disease</b>	Defects in ABHD5 are the cause of Chanarin-Dorfman syndrome (CDS) [MIM:275630]; also called triglyceride storage disease with impaired long-chain fatty acid oxidation or neutral lipid storage disease with ichthyosis. CDS is an autosomal recessive inborn error of lipid metabolism with multisystemic accumulation of triglycerides although plasma concentrations are normal. Clinical characteristics are congenital generalized ichthyosis, vacuolated leukocytes, hepatomegaly, myopathy, cataracts, neurosensory hearing loss and developmental delay. The disorder presents at birth with generalized, fine, white scaling of the skin and a variable degree of erythema resembling non-bullous congenital ichthyosiform erythroderma.
<b>Sequence similarities</b>	Belongs to the peptidase S33 family. ABHD4/ABHD5 subfamily.
<b>Developmental stage</b>	Detected in fetal epidermis from 49 to 135 days estimated gestational age (at protein level).
<b>Domain</b>	The HXXXXD motif is essential for acyltransferase activity and may constitute the binding site for the phosphate moiety of the glycerol-3-phosphate.
<b>Cellular localization</b>	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.

## Images



Western blot - Anti-Abhd5/CGI-58 antibody [EPR12621] (ab183739)

**All lanes :** Anti-Abhd5/CGI-58 antibody [EPR12621] (ab183739) at 1/1000 dilution

**Lane 1 :** HepG2 cell lysate

**Lane 2 :** U87-MG cell lysate

Lysates/proteins at 10 µg per lane.

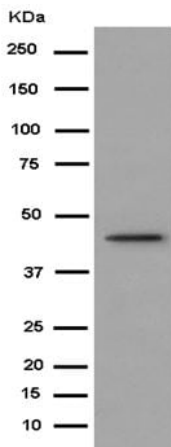
**Secondary**

**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 39 kDa

**Observed band size:** 45 kDa

PMID: 28211464, PMID: 19801371, PMID: 18606822, PMID: 18832586.



Western blot - Anti-Abhd5/CGI-58 antibody [EPR12621] (ab183739)

Anti-Abhd5/CGI-58 antibody [EPR12621] (ab183739) at 1/1000 dilution + Human fetal liver lysate at 10 µg

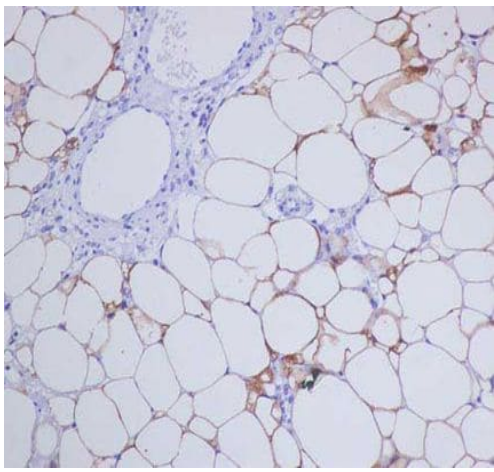
**Secondary**

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

**Predicted band size:** 39 kDa

**Observed band size:** 45 kDa

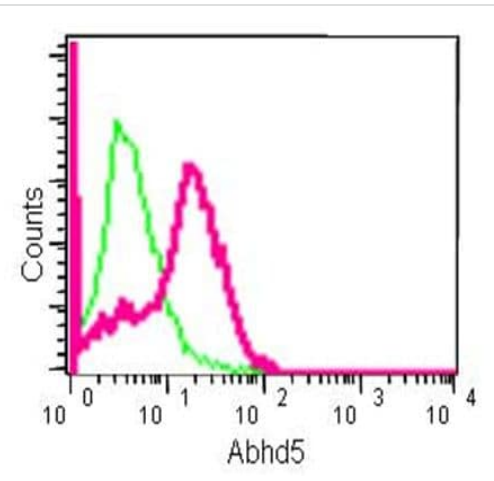
PMID: 28211464, PMID: 19801371, PMID: 18606822, PMID: 18832586.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Abhd5/CGI-58 antibody [EPR12621] (ab183739)

Immunohistochemical analysis of paraffin-embedded Human lipomyoma tissue labeling Abhd5/CGI-58 with ab183739 at 1/2000 dilution. The slide is counterstained with Hematoxylin.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-Abhd5/CGI-58 antibody [EPR12621] (ab183739)

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed HepG2 cells labeling Abhd5/CGI-58 with ab183739 at 1/200 dilution. Goat anti-rabbit IgG (FITC) at 1/150 dilution was used as the secondary antibody. Rabbit monoclonal IgG was used as the isotype control.

Why choose a recombinant antibody?

**Research with confidence**  
Consistent and reproducible results

**Long-term and scalable supply**  
Recombinant technology

**Success from the first experiment**  
Confirmed specificity

**Ethical standards compliant**  
Animal-free production

Anti-Abhd5/CGI-58 antibody [EPR12621] (ab183739)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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