

### CGI-58 Antibody

Rabbit Polyclonal Antibody Catalog # ABV10698

## Specification

# CGI-58 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB <u>Q8WTS1</u> <u>AAD34053</u> Human, Mouse, Rat Rabbit Polyclonal Rabbit IgG 39096

## CGI-58 Antibody - Additional Information

Gene ID 51099

Application & Usage

Western blotting (0.5-4  $\mu$ g/ml). However, the optimal conditions should be determined individually. The antibody recognizes ~45 kDa of CGI-58 in 3T3 cell lysate. Reactivity to other species has not been tested.

**Other Names** Comparative Gene Identification-58, CGI58, CGI-58, CGI 58

Target/Specificity CGI-58

Antibody Form Liquid

Appearance Colorless liquid

**Formulation** 100  $\mu$ g (0.5 mg/ml) affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

**Background Descriptions** 



### Precautions

CGI-58 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# CGI-58 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).

### **CGI-58 Antibody - Protocols**

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

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

CGI-58 Antibody - Images





Western blot analysis of CGI-58 expression in 3T3 cell lysate.

# CGI-58 Antibody - Background

Comparative Gene Identification-58 (CGI-58) is a causal gene of Dorfman-Chanarin syndrome, a neutral lipid storage disease characterized by the presence of intracellular lipid droplets in tissues. CGI-58 comes from a large family of proteins characterized by an  $\alpha/\beta$  hydrolase fold that activates adipose triglyceride lipase thus, may involve in lipid metabolism.