

## **DGAT1** Antibody

Rabbit mAb Catalog # AP92315

# **Specification**

#### **DGAT1** Antibody - Product Information

Application WB, FC, ICC, IP

Primary Accession O75907
Clonality Monoclonal

**Other Names** 

ARAT; ARGP1; C75990; Dgat; DGAT1; DIAR7; Diglyceride acyltransferase;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 55278 Da

### **DGAT1 Antibody - Additional Information**

Dilution **WB~~1:1000** 

FC~~1:10~50 ICC~~N/A IP~~N/A

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

**DGAT1** 

Description Catalyzes the terminal and only committed

step in triacylglycerol synthesis by using diacylglycerol and fatty acyl CoA as substrates. In contrast to DGAT2 it is not

essential for survival. May be involved in VLDL (very low density lipoprotein)

assembly.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

### **DGAT1** Antibody - Protein Information

Name DGAT1 {ECO:0000303|PubMed:16214399, ECO:0000312|HGNC:HGNC:2843}

#### **Function**

Catalyzes the terminal and only committed step in triacylglycerol synthesis by using diacylglycerol and fatty acyl CoA as substrates (PubMed:<a href="http://www.uniprot.org/citations/16214399" target="\_blank">16214399</a>, PubMed:<a href="http://www.uniprot.org/citations/18768481" target="\_blank">18768481</a>, PubMed:<a href="http://www.uniprot.org/citations/28420705" target="\_blank">28420705</a>, PubMed:<a href="http://www.uniprot.org/citations/32433610" target="\_blank">32433610</a>, PubMed:<a href="http://www.uniprot.org/citations/32433611"



target="\_blank">32433611</a>, PubMed:<a href="http://www.uniprot.org/citations/9756920" target="\_blank">9756920</a>). Highly expressed in epithelial cells of the small intestine and its activity is essential for the absorption of dietary fats (PubMed:<a

href="http://www.uniprot.org/citations/18768481" target="\_blank">18768481</a>). In liver, plays a role in esterifying exogenous fatty acids to glycerol, and is required to synthesize fat for storage (PubMed:<a href="http://www.uniprot.org/citations/16214399" target="\_blank">16214399</a>). Also present in female mammary glands, where it produces fat in the milk (By similarity). May be involved in VLDL (very low density lipoprotein) assembly (PubMed:<a

href="http://www.uniprot.org/citations/18768481" target="\_blank">18768481</a>). In contrast to DGAT2 it is not essential for survival (By similarity). Functions as the major acyl-CoA retinol acyltransferase (ARAT) in the skin, where it acts to maintain retinoid homeostasis and prevent retinoid toxicity leading to skin and hair disorders (PubMed:<a

href="http://www.uniprot.org/citations/16214399" target="\_blank">16214399</a>). Exhibits additional acyltransferase activities, includin acyl CoA:monoacylglycerol acyltransferase (MGAT), wax monoester and wax diester synthases (By similarity). Also able to use 1-monoalkylglycerol (1-MAkG) as an acyl acceptor for the synthesis of monoalkyl-monoacylglycerol (MAMAG) (PubMed:<a href="http://www.uniprot.org/citations/28420705" target="blank">28420705</a>).

#### **Cellular Location**

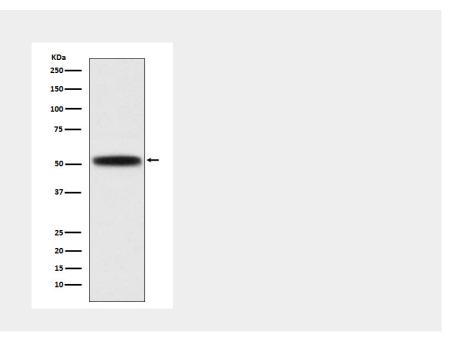
Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9Z2A7}; Multi-pass membrane protein

## **DGAT1 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 Cytomety
- Cell Culture

#### **DGAT1 Antibody - Images**







Western blot analysis of DGAT1 expression in HeLa cell lysate.