

**DGAT1 Antibody**  
Rabbit mAb  
Catalog # AP92315

## Specification

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### 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

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: [16214399](http://www.uniprot.org/citations/16214399), PubMed: [18768481](http://www.uniprot.org/citations/18768481), PubMed: [28420705](http://www.uniprot.org/citations/28420705), PubMed: [32433610](http://www.uniprot.org/citations/32433610), PubMed: [32433611](http://www.uniprot.org/citations/32433611), PubMed: [9756920](http://www.uniprot.org/citations/9756920)). Highly expressed in epithelial cells of the small intestine and its activity is essential for the absorption of dietary fats (PubMed: [18768481](http://www.uniprot.org/citations/18768481)). 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 retinoid 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, including 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

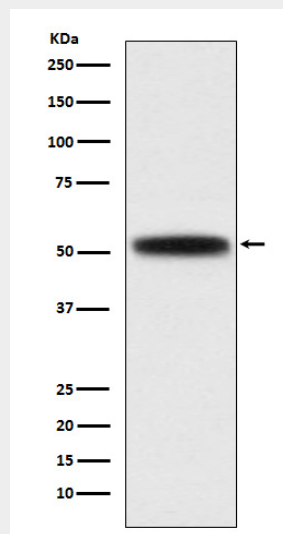
Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9Z2A7}; Multi-pass membrane protein

### 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 Cytometry](#)
- [Cell Culture](#)

### DGAT1 Antibody - Images



Western blot analysis of DGAT1 expression in HeLa cell lysate.