

DGAT1 Antibody (Internal)
Goat Polyclonal Antibody
Catalog # ALS14254**Specification**

DGAT1 Antibody (Internal) - Product Information

Application	WB, IHC-P, E
Primary Accession	O75907
Reactivity	Human, Mouse, Rat, Hamster, Monkey, Pig, Goat, Sheep, Horse, Bovine, Dog
Host	Goat
Clonality	Polyclonal
Calculated MW	55kDa KDa
Dilution	WB~~1:1000 IHC-P~~N/A E~~N/A

DGAT1 Antibody (Internal) - Additional Information**Gene ID** 8694**Other Names**

Diacylglycerol O-acyltransferase 1, 2.3.1.20, ACAT-related gene product 1, Acyl-CoA retinol O-fatty-acyltransferase, ARAT, Retinol O-fatty-acyltransferase, 2.3.1.76, Diglyceride acyltransferase, DGAT1, AGRP1, DGAT

Target/Specificity

Human DGAT1.

Reconstitution & Storage

Store at -20°C. Minimize freezing and thawing.

Precautions

DGAT1 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

DGAT1 Antibody (Internal) - 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, PubMed:18768481, PubMed:28420705, PubMed:32433610, PubMed:32433611, PubMed:9756920)

target="_blank">9756920). Highly expressed in epithelial cells of the small intestine and its activity is essential for the absorption of dietary fats (PubMed:18768481). In liver, plays a role in esterifying exogenous fatty acids to glycerol, and is required to synthesize fat for storage (PubMed:16214399). 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:18768481). 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:16214399). 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:28420705).

Cellular Location

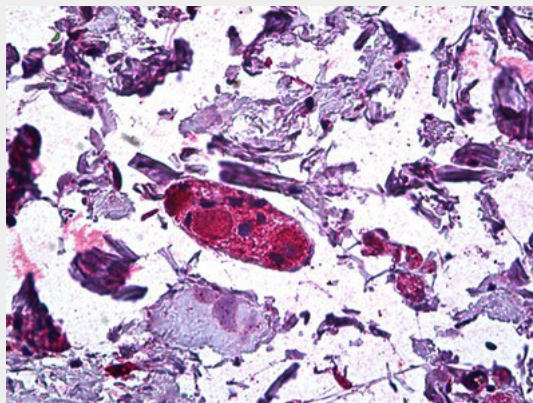
Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9Z2A7}; Multi-pass membrane protein

DGAT1 Antibody (Internal) - Protocols

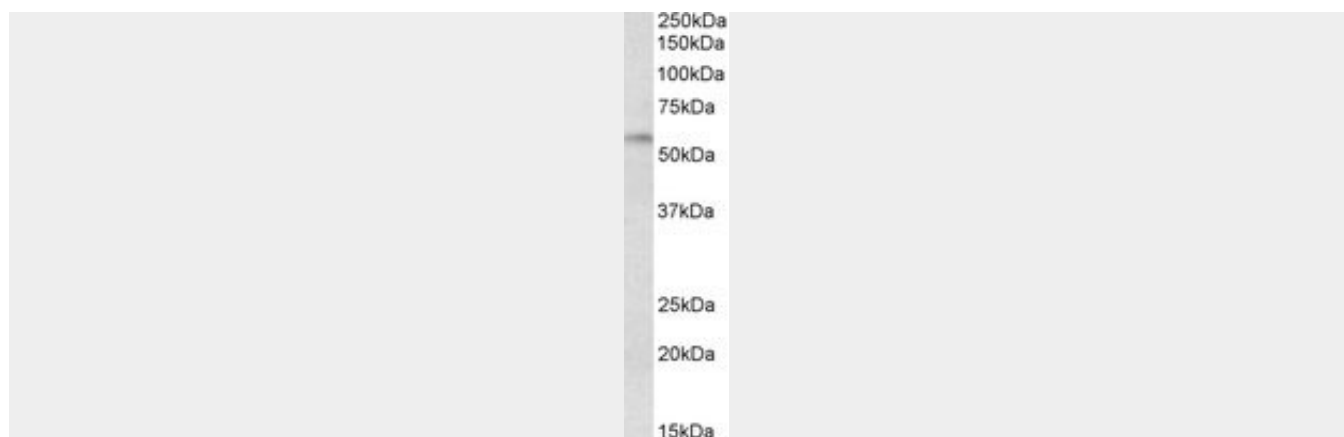
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

DGAT1 Antibody (Internal) - Images



Anti-DGAT1 antibody IHC of human colon, ganglion.



Staining (0.3 ug/ml) of rat duodenum lysate (35 ug protein in RIPA buffer).

DGAT1 Antibody (Internal) - Background

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. In liver, plays a role in esterifying exogenous fatty acids to glycerol. 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.

DGAT1 Antibody (Internal) - References

Oelkers P.,et al.J. Biol. Chem. 273:26765-26771(1998).
Yamasaki Y.,et al.Submitted (MAR-2001) to the EMBL/GenBank/DDBJ databases.
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Orland M.D.,et al.Biochim. Biophys. Acta 1737:76-82(2005).
Haas J.T.,et al.J. Clin. Invest. 122:4680-4684(2012).