

DGAT2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55035

Specification

DGAT2 Polyclonal Antibody - Product Information

Application Primary Accession

Reactivity
Host
Clonality
Calculated MW
Physical State
Immunogen

Epitope Specificity

Isotype **Purity**

affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

WB, IHC-P, IHC-F, IF

Rat, Pig, Dog, Bovine

from human DGAT2

096PD7

Rabbit

44 KDa

Liquid

laG

Polyclonal

251-360/388

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Endoplasmic reticulum membrane.
SIMILARITY Belongs to the diacylglycerol

acyltransferase family.

SUBUNIT Forms multimeric complexes consisting of

several DGAT2 subunits (By similarity).

Important Note

This product as supplied is intended for

research use only, not for use in human, therapeutic or diagnostic applications.

KLH conjugated synthetic peptide derived

Background Descriptions

Glucose and insulin are anabolic signals which upregulate the transcriptions of a series of lipogenic enzymes to convert excess carbohydrate into triglycerides for efficient energy storage. Acyl-coenzyme A:diacylglycerol acyltransferase, also known as DGAT1 and ARGP1, is a microsomal enzyme that assists in the synthesis of fatty acids into triglycerides. DGAT1 catalyzes the terminal and only committed step in triacylglycerol synthesis by using diacylglycerol (DAG) and fatty acyl CoA as substrates. DGAT1 plays a fundamental role in the metabolism of cellular diacylglycerol and is important in higher eukaryotes for physiologic processes involving triacylglycerol metabolism, such as intestinal fat absorption, lipoprotein assembly, adipose tissue form-ation and lactation. DGAT2, which has no homology to DGAT1, differs from DGAT1 in that its activity has been shown to be inhibited by MgCl in an in vitro assay. DGAT2 is expressed primarily in liver and white adipose tissue, which suggests that it plays an important role in mammalian triglyceride metabolism.

DGAT2 Polyclonal Antibody - Additional Information

Gene ID 84649

Other Names



Diacylglycerol O-acyltransferase 2, 2.3.1.20, Acyl-CoA retinol O-fatty-acyltransferase, ARAT, Retinol O-fatty-acyltransferase, 2.3.1.76, Diglyceride acyltransferase 2, DGAT2 (HGNC:16940)

Target/Specificity

Predominantly expressed in liver and white adipose tissue. Expressed at lower level in mammary gland, testis and peripheral blood leukocytes. Expressed in sebaceous glands of normal skin but decreased psoriatic skin.

Dilution

WB~~1:1000<br \> <span class
="dilution_IHC-P">IHC-P~~N/A<br \> <span class
="dilution_IHC-F">IHC-F~~N/A<br \> IF~~1:50~200

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 $^{\circ}$ C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 $^{\circ}$ C.

DGAT2 Polyclonal Antibody - Protein Information

Name DGAT2 (HGNC:16940)

Function

Essential acyltransferase that catalyzes the terminal and only committed step in triacylglycerol synthesis by using diacylglycerol and fatty acyl CoA as substrates. Required for synthesis and storage of intracellular triglycerides (PubMed:27184406). Probably plays a central role in cytosolic lipid accumulation. In liver, is primarily responsible for incorporating endogenously synthesized fatty acids into triglycerides (By similarity). Also functions as an acyl-CoA retinol acyltransferase (ARAT) (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; Multi-pass membrane protein. Lipid droplet. Cytoplasm, perinuclear region

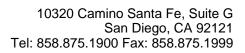
Tissue Location

Predominantly expressed in liver and white adipose tissue. Expressed at lower level in mammary gland, testis and peripheral blood leukocytes. Expressed in sebaceous glands of normal skin but decreased psoriatic skin.

DGAT2 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot





- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

DGAT2 Polyclonal Antibody - Images