

Goat Anti-DGAT2 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1316a**Specification**

Goat Anti-DGAT2 Antibody - Product Information

Application	IHC, FC, Pep-ELISA
Primary Accession	Q96PD7
Other Accession	NP_115953 , 84649 , 67800 (mouse) , 252900 (rat)
Reactivity	Human
Predicted	Mouse, Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	43831

Goat Anti-DGAT2 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

Dilution

IHC~~1:100~500

FC~~1:10~50

Pep-ELISA~~N/A

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-DGAT2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-DGAT2 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.

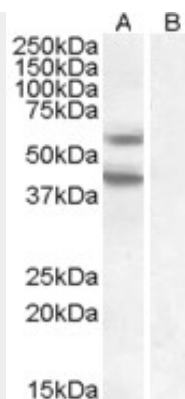
Goat Anti-DGAT2 Antibody - Protocols

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

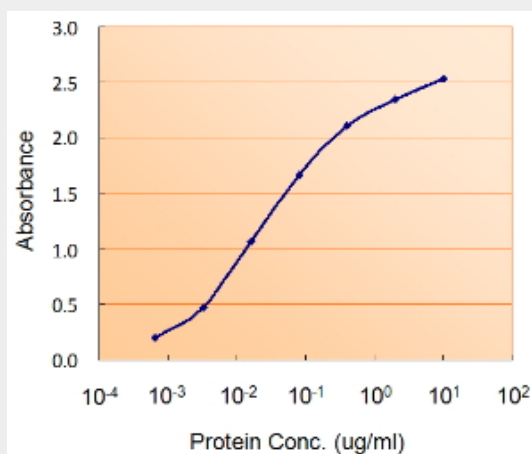
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Goat Anti-DGAT2 Antibody - Images

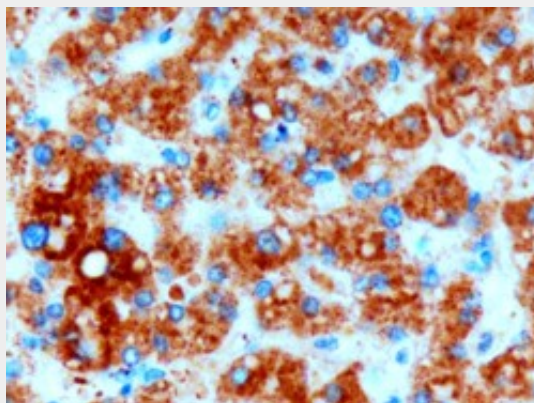
AF1316a (0.5 µg/ml) staining of Human Liver lysate in the third lane (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



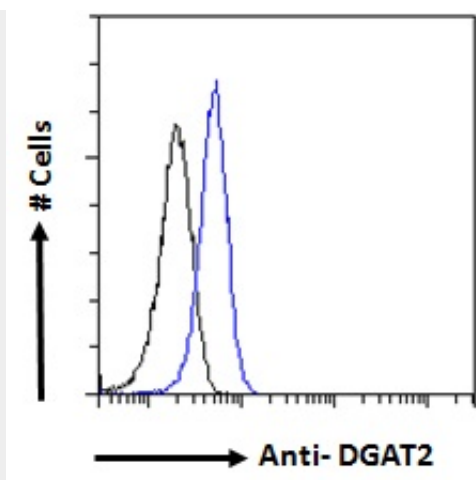
HEK293 overexpressing DGAT2 (lane A) and probed with AF1316a (mock transfection in lane B).



AF1316a (0.5ug/ml) as the reporter with AF1316a as the capture rabbit antibody (2.5ug/ml).



AF1316a (3μg/ml) staining of paraffin embedded Human Liver. Microwaved antigen retrieval with Tris/EDTA buffer pH9, HRP-staining.



AF1316a Flow cytometric analysis of paraformaldehyde fixed HeLa cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) fol

Goat Anti-DGAT2 Antibody - Background

Acyl-CoA:diacylglycerol acyltransferase, or DGAT (EC 2.3.1.20), is responsible for the synthesis of triglycerides. It catalyzes a reaction in which diacylglycerol is covalently joined to long chain fatty acyl-CoAs.

Goat Anti-DGAT2 Antibody - References

Pharmacogenetic analysis of lipid responses to rosuvastatin in Chinese patients. Hu M, et al. Pharmacogenet Genomics, 2010 Oct. PMID 20679960.
Variation at the NFATC2 Locus Increases the Risk of Thiazolinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.
Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.
Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. Talmud PJ, et al. Am J Hum Genet, 2009 Nov. PMID 19913121.
The endoplasmic reticulum enzyme DGAT2 is found in mitochondria-associated membranes and has a mitochondrial targeting signal that promotes its association with mitochondria. Stone SJ, et al. J Biol Chem, 2009 Feb 20. PMID 19049983.