

DGAT2 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51760

Product Information

Application	WB
Primary Accession	<u>Q96PD7</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	43831

Additional Information

Gene ID	84649
Other Names	Diacylglycerol O-acyltransferase 2, Acyl-CoA retinol O-fatty-acyltransferase, ARAT, Retinol O-fatty-acyltransferase, Diglyceride acyltransferase 2, DGAT2
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human DGAT2. The exact sequence is proprietary.
Dilution	WB~~1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	DGAT2 (<u>HGNC:16940</u>)
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: <u>27184406</u>). 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: <u>28420705</u>).
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.

Background

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. Probably plays a central role in cytosolic lipid accumulation. In liver, is primarily responsible for incorporating endogenously synthesized fatty acids into triglycerides (By similarity). Functions also as an acyl-CoA retinol acyltransferase (ARAT).

References

Cases S., et al.J. Biol. Chem. 276:38870-38876(2001). Wakimoto K., et al.Biochem. Biophys. Res. Commun. 310:296-302(2003). Clark H.F., et al.Genome Res. 13:2265-2270(2003). Bechtel S., et al.BMC Genomics 8:399-399(2007). Taylor T.D., et al.Nature 440:497-500(2006).

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