

# MOGT3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11954b

## **Product Information**

Application	WB, FC, E
Primary Accession	<u>Q86VF5</u>
Other Accession	<u>NP_835470.1</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB12724
Calculated MW	38730
Antigen Region	295-329

### **Additional Information**

Gene ID	346606
Other Names	2-acylglycerol O-acyltransferase 3, Acyl-CoA:monoacylglycerol acyltransferase 3, MGAT3, Diacylglycerol O-acyltransferase candidate 7, hDC7, Diacylglycerol acyltransferase 2-like protein 7, Monoacylglycerol O-acyltransferase 3, MOGAT3, DC7, DGAT2L7
Target/Specificity	This MOGT3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 295-329 amino acids from the C-terminal region of human MOGT3.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MOGT3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	MOGAT3 ( <u>HGNC:23249</u> )
Synonyms	DC7, DGAT2L7

Function	Catalyzes the formation of diacylglycerol from 2- monoacylglycerol and fatty acyl-CoA. Also able to catalyze the terminal step in triacylglycerol synthesis by using diacylglycerol and fatty acyl-CoA as substrates. Has a preference toward palmitoyl-CoA and oleoyl-CoA. May be involved in absorption of dietary fat in the small intestine by catalyzing the resynthesis of triacylglycerol in enterocytes. 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. Cytoplasm, perinuclear region
Tissue Location	Selectively expressed in the digestive system. Highly expressed in the ileum, and at lower level in jejunum, duodenum, colon, cecum and the rectum. Not expressed in the stomach and the esophagus and trachea. Expressed at very low level in liver

## Background

Acyl-CoA:monoacylglycerol acyltransferase (MOGAT; EC 2.3.1.22) catalyzes the synthesis of diacylglycerol from 2-monoacylglycerol and fatty acyl-CoA (Cheng et al., 2003 [PubMed 12618427]).

## References

Clark, H.F., et al. Genome Res. 13(10):2265-2270(2003) Cheng, D., et al. J. Biol. Chem. 278(16):13611-13614(2003) Winter, A., et al. Cytogenet. Genome Res. 102 (1-4), 42-47 (2003) :

#### Images



MOGT3 Antibody (C-term) (Cat. #AP11954b) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the MOGT3 antibody detected the MOGT3 protein (arrow).



MOGT3 Antibody (C-term) (Cat. #AP11954b) flow cytometric analysis of Jurkat cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis. Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.