

## MOGT2 Antibody (N-term) Blocking peptide

Synthetic peptide Catalog # BP11666a

## **Specification**

### MOGT2 Antibody (N-term) Blocking peptide - Product Information

Primary Accession

Q3SYC2

# MOGT2 Antibody (N-term) Blocking peptide - Additional Information

**Gene ID 80168** 

### **Other Names**

2-acylglycerol O-acyltransferase 2, Acyl-CoA:monoacylglycerol acyltransferase 2, MGAT2, hMGAT2, Diacylglycerol O-acyltransferase candidate 5, hDC5, Diacylglycerol acyltransferase 2-like protein 5, Monoacylglycerol O-acyltransferase 2, MOGAT2, DC5, DGAT2L5

### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# MOGT2 Antibody (N-term) Blocking peptide - Protein Information

Name MOGAT2 (HGNC:23248)

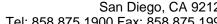
Synonyms DC5, DGAT2L5

# **Function**

Involved in glycerolipid synthesis and lipid metabolism (PubMed:<a

href="http://www.uniprot.org/citations/12621063" target="\_blank">12621063</a>, PubMed:<a href="http://www.uniprot.org/citations/18768481" target="\_blank">18768481</a>, PubMed:<a href="http://www.uniprot.org/citations/27184406" target="\_blank">27184406</a>, PubMed:<a href="http://www.uniprot.org/citations/28420705" target="\_blank">28420705</a>). Catalyzes the formation of diacylglycerol, the precursor of triacylglycerol, by transferring the acyl chain of a fatty acyl-CoA to a monoacylglycerol (PubMed:<a

href="http://www.uniprot.org/citations/12621063" target="\_blank">12621063</a>, PubMed:<a href="http://www.uniprot.org/citations/27184406" target="\_blank">27184406</a>). Plays a central role in absorption of dietary fat in the small intestine by catalyzing the resynthesis of triacylglycerol in enterocytes (By similarity). Has a preference toward monoacylglycerols containing unsaturated fatty acids in an order of C18:3 > C18:2 > C18:1 > C18:0 at sn-2 (PubMed:<a href="http://www.uniprot.org/citations/12621063" target="\_blank">12621063</a>). Able to use 1-monoalkylglycerol (1-MAkG, 1-O- alkylglycerol) as an acyl acceptor for the synthesis





of monoalkyl- monoacylglycerol (MAMAG, 1-O-alkyl-3-acylglycerol or 1-O-alkyl-2- acylglycerol) and subsequently, with lower efficiency, may add another acyl chain producing monoalkyl-diacylglycerol (MADAG, 1-O-alkyl-2,3- diacylglycerol) (PubMed:<a href="http://www.uniprot.org/citations/28420705" target="\_blank">28420705</a>). Possesses weak but significant activity with diacylglycerol as substrate, producing triacylglycerol (triacyl-sn-glycerol) (PubMed:<a href="http://www.uniprot.org/citations/18768481" target=" blank">18768481</a>).

### **Cellular Location**

Endoplasmic reticulum membrane; Multi-pass membrane protein. Cytoplasm, perinuclear region

### **Tissue Location**

Highly expressed in liver, small intestine, colon, stomach and kidney.

## MOGT2 Antibody (N-term) Blocking peptide - Protocols

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

### Blocking Peptides

MOGT2 Antibody (N-term) Blocking peptide - Images

# MOGT2 Antibody (N-term) Blocking peptide - Background

Receptor-activated non-selective cation channel involved in detection of sensations such as coolness, by being activated by cold temperature below 25 degrees Celsius, Activated by icilin. eucalyptol, menthol, cold and modulation of intracellular pH. Involved in menthol sensation. Permeable for monovalent cations sodium, potassium, and cesium and divalent cation calcium. Temperature sensing is tightly linked to voltage-dependent gating. Activated upon depolarization, changes in temperature resulting in graded shifts of its voltage-dependent activation curves. The chemical agonists menthol functions as a gating modifier, shifting activation curves towards physiological membrane potentials. Temperature sensitivity arises from a tenfold difference in the activation energies associated with voltage-dependent opening and closing.

## MOGT2 Antibody (N-term) Blocking peptide - References

Yee, N.S., et al. Cancer Lett. 297(1):49-55(2010)Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)Kuhn, F.J., et al. J. Biol. Chem. 285(35):26806-26814(2010)Gkika, D., et al. Oncogene 29(32):4611-4616(2010)Van Haute, C., et al. ScientificWorldJournal 10, 1597-1611 (2010):