

**Mouse MOGT2 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP1122b****Specification**

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**Mouse MOGT2 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [Q80W94](#)**Mouse MOGT2 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 233549**Other Names**

2-acylglycerol O-acyltransferase 2, Acyl-CoA:monoacylglycerol acyltransferase 2, MGAT2, Diacylglycerol acyltransferase 2-like protein 5, Monoacylglycerol O-acyltransferase 1-like, Monoacylglycerol O-acyltransferase 2, Mogat2, Dgat2l5, Mgat1l

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP1122b](/product/products/AP1122b) was selected from the C-term region of human Mouse MOGT2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**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.

**Mouse MOGT2 Antibody (C-term) Blocking Peptide - Protein Information****Name** Mogat2 {ECO:0000312|MGI:MGI:2663253}**Synonyms** Dgat2l5, Mgat1l**Function**

Involved in glycerolipid synthesis and lipid metabolism (PubMed:[12576479](http://www.uniprot.org/citations/12576479), PubMed:[12730219](http://www.uniprot.org/citations/12730219), PubMed:[14966132](http://www.uniprot.org/citations/14966132), PubMed:[12621063](http://www.uniprot.org/citations/12621063)). Plays a central role in absorption of dietary fat in the small intestine by catalyzing the resynthesis of triacylglycerol in enterocytes (Probable). 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/12730219" target="\_blank">12730219</a>). Has a preference toward monoacylglycerols containing unsaturated fatty acids in an order of C18:3 > C18:2 > C18:1 > C18:0 (PubMed:<a href="http://www.uniprot.org/citations/12730219" target="\_blank">12730219</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) (PubMed:<a href="http://www.uniprot.org/citations/12730219" target="\_blank">12730219</a>). Possesses weak but significant activity with diacylglycerol as substrate, producing triacylglycerol (triacyl-sn-glycerol) (PubMed:<a href="http://www.uniprot.org/citations/12730219" target="\_blank">12730219</a>).

#### **Cellular Location**

Endoplasmic reticulum membrane; Multi-pass membrane protein. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:Q3SYC2}

#### **Tissue Location**

Mainly expressed in small intestine. Detected in the small intestine in a proximal-to-distal gradient that correlated with fat absorption pattern. Present not only in the villi, but also in the crypt regions of the small intestine, which suggests that expression occurs prior to the maturation of enterocytes. Not detectable in other sections of the digestive tract, including stomach, cecum, colon and rectum, or other tissues such as kidney, liver and adipocytes (at protein level). Also detected in kidney, adipose and stomach. Expressed at very low level in liver, skeletal muscle and spleen. Not expressed in brain, heart, lung, skin, testis and thymus

#### **Mouse MOGT2 Antibody (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

#### **Mouse MOGT2 Antibody (C-term) Blocking Peptide - Images**

#### **Mouse MOGT2 Antibody (C-term) Blocking Peptide - Background**

MOGT2 catalyzes the formation of diacylglycerol from 2-monoacylglycerol and fatty acyl-CoA. It exhibits a preference toward monoacylglycerols containing unsaturated fatty acids in the order of C18:3 > C18:2 > C18:1 > C18:0. This protein plays a central role in absorption of dietary fat in the small intestine by catalyzing the resynthesis of triacylglycerol in enterocytes. MOGT2 may play a role in diet-induced obesity.

#### **Mouse MOGT2 Antibody (C-term) Blocking Peptide - References**

Cao,J., J. Biol. Chem. 279 (18), 18878-18886 (2004)Cao,J., J. Biol. Chem. 278 (28), 25657-25663 (2003)Yen,C.L., J. Biol. Chem. 278 (20), 18532-18537 (2003)