

# Datasheet for ABIN7549501 MOGAT2 Protein (AA 1-334) (His tag)



## Overview

Quantity:	1 mg
Target:	MOGAT2
Protein Characteristics:	AA 1-334
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MOGAT2 protein is labelled with His tag.

### **Product Details**

Troduct Details	
Purpose:	Custom-made recombinant MOGAT2 Protein expressed in mammalian cells.
Sequence:	MVEFAPLFMP WERRLQTLAV LQFVFSFLAL AEICTVGFIA LLFTRFWLLT VLYAAWWYLD
	RDKPRQGGRH IQAIRCWTIW KYMKDYFPIS LVKTAELDPS RNYIAGFHPH GVLAVGAFAN
	LCTESTGFSS IFPGIRPHLM MLTLWFRAPF FRDYIMSAGL VTSEKESAAH ILNRKGGGNL
	LGIIVGGAQE ALDARPGSFT LLLRNRKGFV RLALTHGAPL VPIFSFGEND LFDQIPNSSG
	SWLRYIQNRL QKIMGISLPL FHGRGVFQYS FGLIPYRRPI TTVVGKPIEV QKTLHPSEEE
	VNQLHQRYIK ELCNLFEAHK LKFNIPADQH LEFC Sequence without tag. The proposed
	Purification-Tag is based on experiences with the expression system, a different complexity
	of the protein could make another tag necessary. In case you have a special request, please
	contact us.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:

- · Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- · State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

### **Target Details**

### Alternative Name:

#### MOGAT2 (MOGAT2 Products)

Background:

2-acylglycerol O-acyltransferase 2 (EC 2.3.1.20) (EC 2.3.1.22) (Acyl-CoA:monoacylglycerol acyltransferase 2) (MGAT2) (hMGAT2) (Diacylglycerol O-acyltransferase candidate 5) (hDC5) (Diacylglycerol acyltransferase 2-like protein 5) (Monoacylglycerol O-acyltransferase 2),FUNCTION: Involved in glycerolipid synthesis and lipid metabolism (PubMed:12621063, PubMed:18768481, PubMed:27184406, PubMed:28420705). Catalyzes the formation of diacylglycerol, the precursor of triacylglycerol, by transferring the acyl chain of a fatty acyl-CoA to a monoacylglycerol (PubMed:12621063, PubMed:27184406). 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:12621063). 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:28420705). Possesses weak but

Handling Advice:

Storage Comment:

Storage:

Expiry Date:

Target Details	
	significant activity with diacylglycerol as substrate, producing triacylglycerol (triacyl-sn-glycerol) (PubMed:18768481). {ECO:0000250 UniProtKB:Q80W94, ECO:0000269 PubMed:12621063, ECO:0000269 PubMed:18768481, ECO:0000269 PubMed:27184406, ECO:0000269 PubMed:28420705}.
Molecular Weight:	38.2 kDa
UniProt:	Q3SYC2
Application Details	
Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.

Avoid repeated freeze-thaw cycles.

-80 °C

Store at -80°C.

12 months