

Datasheet for ABIN7560124

LPGAT1 Protein (AA 1-370) (His tag)



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Overview

Quantity:	1 mg
Target:	LPGAT1
Protein Characteristics:	AA 1-370
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This LPGAT1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Lpgat1 Protein expressed in mammalian cells.
Sequence:	<p>MAVTVEEAPW LGWIVAKALM RFAFMVANNL VAIPSYICYV IILQPLRVLD SKRFWYIEGL</p> <p>MYKWLLGMVA SWGWYAGYTV MEWGEDIKAI AKDEAVMLVN HQATGDVCTL MMCLQDKGPV</p> <p>VAQMMWLMDH IFKYTNFGIV SLIHGDFIR QGRAYRDQQL LVLKKHLEHN YRSRDRKWIV</p> <p>LFPEGGFLRK RRETSQAFK KNNLPFLTHV TLPFRGATNI ILKALVARQE NGSPAGGDAR</p> <p>GLECKSRGLQ WIIDTTIAYP KAEPIDIQTW ILGYRKPTVT HVHYRIFPIG DVPLETEDLT</p> <p>SWLYQRFIEK EDLLSHFYKT GAFPPPQGQK EAVCREMTLS NMWIFLIQSF AFLSGYLWYH</p> <p>IIQYFYHCLF 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.</p>
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:

Product Details

- 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

Target:	LPGAT1
Alternative Name:	Lpgat1 (LPGAT1 Products)
Background:	<p>Acyl-CoA:lysophosphatidylglycerol acyltransferase 1 (2-acylglycerophosphocholine O-acyltransferase) (EC 2.3.1.62) (Acyl-CoA:monoacylglycerol acyltransferase LPGAT1) (EC 2.3.1.22) (Lysophospholipid acyltransferase 7) (LPLAT7) (EC 2.3.1.-) (Stearoyl-CoA:1-lyso-2-acyl-PE acyltransferase),FUNCTION: Lysophospholipid acyltransferase involved in fatty acyl chain remodeling of glycerophospholipids in the endoplasmic reticulum membrane (PubMed:35131264). Selectively catalyzes the transfer and esterification of saturated long-chain fatty acids from acyl-CoA to the sn-1 position of 1-lyso-2-acyl phosphatidylethanolamines (1-lyso-PE, LPE), with a preference for stearoyl CoA over palmitoyl CoA as acyl donor (PubMed:36049524). Acts in concert with an unknown phospholipase A1 to convert palmitate PE species into stearate ones. Provides substrates to the PE methylation pathway, controlling stearate/palmitate composition of PE and phosphatidylcholine (PC) species with an overall impact on de novo hepatic lipid synthesis, body fat content and life span (PubMed:35131264). Can acylate lysophosphatidylglycerols (LPG) using various saturated fatty acyl-CoAs as acyl donors (By similarity). Can also acylate monoacylglycerols with a preference for 2-</p>

Target Details

	monoacylglycerols over 1-monoacylglycerols (PubMed:20018982, PubMed:35131264). Has no activity toward lysophosphatidic acids (LPA) and lysophosphatidylcholines (LPC) (PubMed:35131264). {ECO:0000250 UniProtKB:Q92604, ECO:0000269 PubMed:20018982, ECO:0000269 PubMed:35131264, ECO:0000269 PubMed:36049524}.
Molecular Weight:	43.1 kDa
UniProt:	Q91YX5

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.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months