

Datasheet for ABIN7554535 **MGAT3 Protein (AA 1-533) (His tag)**



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Quantity:	1 mg
Target:	MGAT3
Protein Characteristics:	AA 1-533
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MGAT3 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Custom-made recombinat MGAT3 Protein expressed in mammalien cells.
MKMRRYKLFL MFCMAGLCLI SFLHFFKTLS YVTFPRELAS LSPNLVSSFF WNNAPVTPQA
SPEPGGPDLL RTPLYSHSPL LQPLPPSKAA EELHRVDLVL PEDTTEYFVR TKAGGVCFKP
GTKMLERPPP GRPEEKPEGA NGSSARRPPR YLLSARERTG GRGARRKWVE CVCLPGWHGP
SCGVPTVVQY SNLPTKERLV PREVPRRVIN AINVNHEFDL LDVRFHELGD VVDAFVVCES
NFTAYGEPRP LKFREMLTNG TFEYIRHKVL YVFLDHFPPG GRQDGWIADD YLRTFLTQDG
VSRLRNLRPD DVFIIDDADE IPARDGVLFL KLYDGWTEPF AFHMRKSLYG FFWKQPGTLE
VVSGCTVDML QAVYGLDGIR LRRRQYYTMP NFRQYENRTG HILVQWSLGS PLHFAGWHCS
WCFTPEGIYF KLVSAQNGDF PRWGDYEDKR DLNYIRGLIR TGGWFDGTQQ EYPPADPSEH
MYAPKYLLKN YDRFHYLLDN PYQEPRSTAA GGWRHRGPEG RPPARGKLDE AEV 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. Characteristics: Key Benefits: Made to order protein - from design to production - by highly experienced protein experts. Protein expressed in mammalien 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. > 90 % as determined by Bis-Tris Page, Western Blot Purity: Grade: custom-made **Target Details** MGAT3 Target: Alternative Name: MGAT3 (MGAT3 Products) Background: Beta-1,4-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase (EC 2.4.1.144) (Nglycosyl-oligosaccharide-glycoprotein N-acetylglucosaminyltransferase III) (GNT-III) (GlcNAc-T III) (N-acetylglucosaminyltransferase III), FUNCTION: It is involved in the regulation of the biosynthesis and biological function of glycoprotein oligosaccharides. Catalyzes the addition of N-acetylglucosamine in beta 1-4 linkage to the beta-linked mannose of the trimannosyl core of N-linked sugar chains, called bisecting N-acetylglucosamine (GlcNAc). It is one of the most important enzymes involved in the regulation of the biosynthesis of glycoprotein

oligosaccharides. The addition of this bisecting GlcNAc residue alters not only the composition,

but also the conformation of the N-glycan. The introduction of the bisecting GlcNAc residue results in the suppression of further processing and elongation of N-glycans, precluding the

formation of beta-1,6 GlcNAc branching, catalyzed by MGAT5 since it is unable to use the

bisected oligosaccharide as a substrate (PubMed:19403558). Addition of bisecting N-

acetylglucosamine to CDH1/E-cadherin modulates CDH1 cell membrane location (PubMed:19403558). Inhibits NeuAc-alpha-2,3-Gal-beta-1,4-GlcNAc- formation which modulates sialylation levels and plays a role in cell migration regulation (PubMed:26801611). In brain, addition of bisecting N-acetylglucosamine to BACE1 blocks its lysosomal targeting in response to oxidative stress and further degradation which increases its location to early endosome and the APP cleavage (By similarity). {ECO:0000250|UniProtKB:Q10470, ECO:0000269|PubMed:19403558, ECO:0000269|PubMed:26801611}.

Molecular Weight:

61.3 kDa

UniProt:

Q09327

Application Details

Application Notes:

In addition to the applications listed above we expect the protein to work for functional studies as well. 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		