

# MGAT1 with GNT1 Knockout 293F Cell Lysate, Homozygous

Catalog No.: RM02769

## Basic Information

### Catalog No.

RM02769

### Category

Cell Lysate

### Parental Cell line

293F

### Genotype

Knockout

## Gene Information

### Gene Symbol

MGAT1,GNT1

### Species

Human

### Gene ID

4245

### Swiss Prot

P26572

### Synonyms

GnTI; MGAT; GLCT1; GLYT1; GNT-1; GNT-I; GLCNAC-TI; MGAT1

## Contact

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## Background

There are believed to be over 100 different glycosyltransferases involved in the synthesis of protein-bound and lipid-bound oligosaccharides. UDP-N-acetylglucosamine:alpha-3-D-mannoside beta-1,2-N-acetylglucosaminyltransferase I is a medial-Golgi enzyme essential for the synthesis of hybrid and complex N-glycans. The protein, encoded by a single exon, shows typical features of a type II transmembrane protein. The protein is believed to be essential for normal embryogenesis. Several variants encoding the same protein have been found for this gene.

## Product Information

### Description

MGAT1,GNT1 Knockout cell line is engineered from 293F cell line with Gene-Editing Technology.

Allele-1:exon3 was deleted Allele-2:85bp deletion in exon3(GNT1)

Allele-1:53bp deletion in exon1,Allele-2:52bp deletion in exon1(MGAT1)

Mammalian cells such as human, rat and mouse cells are normally diploid with two alleles. Homozygote: both alleles were knocked out, mRNA has no signal, no expression of proteins. Heterozygote: only one allele was knocked out, the mRNA transcript levels was decreased compared to wild type, and the protein expression levels was also lower than that of the wild type.

### Packaging

1 vial parental cell Lysate and 1 vial knockout cell Lysate

### Shipping Conditions

4°C

### Amount

50μL, 2μg/μL.

### Storage

Lysate is stable for 12 months when stored at -20°C. Minimizing freeze-thaw cycles.

### Protocol

To be used as WB control. Lysate is supplied in 1× SDS sample buffer (2% SDS, 60 mM Tris-HCl pH 6.8, 10% Glycerol, 0.02% Bromophenol blue, 60 mM beta-mercaptoethanol). Lysate should be boiled for 3 - 5 minutes before loading onto gel.

## Sequencing data

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WT TTTGCCCTCCCAG\*\*\*\*\*GTCAAACCAAGGTC  
Mut TTTGCCCTCCCAG\*\*\*Deletion\*\*\*GTCAAACCAAGGTC  
Allele-1: exon3 was deleted(GNT1)  
WT GCCCTCCCAGGTC\*\*\*\*\*AAACCAAGGTCAA  
Mut GCCCTCCCAGGTC\*\*\*Deletion\*\*\*AAACCAAGGTCAA  
Allele-2: 85bp deletion in exon3(GNT1)

WT CAGTCAGCGCTCTC\*\*\*\*\*CGAGGTGGAGCTGG  
Mut CAGTCAGCGCTCTC\*\*\*Deletion\*\*\*CGAGGTGGAGCTGG  
Allele-1: 53bp deletion in exon1(MGAT1)  
WT TCAGTCAGCGCTCT\*\*\*\*\*GCCGAGGTGGAGCT  
Mut TCAGTCAGCGCTCT\*\*\*Deletion\*\*\*GCCGAGGTGGAGCT  
Allele-2: 52bp deletion in exon1(MGAT1)

Genome sequence analysis of PCR products from parental (WT) and MGAT1 with GNT1 knockout (KO) 293F cells, using sanger sequencing.