

Product datasheet for **KN200717LP**

MGAT1 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control
Donor DNA:	Luciferase-Puro
Symbol:	MGAT1
Locus ID:	4245
Components:	KN200717G1 , MGAT1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) KN200717G2 , MGAT1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) KN200717LPD , donor DNA containing left and right homologous arms and Luciferase-Puro functional cassette.

Homologous arm and Luciferase-Puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **Luciferase-Puro in green**;

Right arm in violet

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TGTTAAATAA CCCTGGAGAT GATGGGCAAC TCGTTTTGC TCCTGACATT CGTGGGGTGC CTCTGGTGC
TCCTGTGG TAAGGGGTTA ACTGTAGCCC TGAGGTGGGA CATTGATTT TAAAAATCAG TCATCTGGG
GCGCTTAGT TAGAGGAATG GTAGGCAGAT GCTGTCACTC CTTGCCCTC CCCTCCTCCT TCCACCTGG
AGGGGAAATG AAATCTGACA GGTAGAAAGA GGGGAGTTGG GGTCTTTTT CTCTCTCCCT CCACCAGCAT
CACTCTCTGC CTCTCCCTCA AAAATACGTT CCTGGGTCAG GATATATGTT GACTCCCTAG AGAGCTCTGG
AGTCAACCTC CTGGCCTTCC TCCACCCTCA CTCTGGCCT TTTCTGCCC CCATTTCCTC TACCTGTGGG
GCATGGAGCC ACGAGCCTT GTGTGACGGT TTGCTTCTC TCTCCTGTCT TTAGGTGCAT GGCTGCCTCC
TAATCCCATA GTCCAGAGGA GGCATCCCTA GGACTGCGGG CAAGGGAGCC GGGCAAGCCC AGGGCAGCCT
TGAACCGTCC CCTGGCCTGC CCTCCCCGGT GGGGGCCAGG TCGATGGCGA CCCC GCCAGC
AAGTGATTCG CCTGGCCCAA GACGCCGAGG TGGAGCTGGA GCGGCAGCGT GGGCTGCTGC AGCAGATCGG
GGATGCCCTG TCGAGCCAGC GGGGGAGGGT GCCCACC GCGCCCTCCG CCCAGCCGCG TGTGCCTGTG
ACCCCGCGC CGGCGGTGAT TCCCATCCTG GTCATCGCCT GTGACCGCAG CACTGTTCCG CGCTGCCTGG
ACAAGCTGCT GCATTATCGG CCCTCGGCTG AGCTCTTCCC CATCATCGTT AGCCAGGACT GCGGGCACGA
GGAGACGGCC CAGGCCATCG CCTCTACGG CAGCGCGGTC ACGCACATCC GGCAGCCCGA CCTGAGCAGC
ATTGCGGTGC CGCCGACCA CCGCAAGTTC CAGGGCTACT ACAAGATCGC GCGCCACTAC CGCTGGGCGC
TGGGCCAGGT CTTCGGCAG TTTGCTTCC CCGCGCCGT GGTGGTGGAG GATGACCTGG AGGTGGCCCC
GGACTTCTC GAGTACTTC GGGCCACCTA TCCGCTGCTG AAGGCCGACC CCTCCCTGTG GTGCGTCTCG
GCCTGGAATG
```

GE100003, scramble sequence in pCas-Guide vector



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Disclaimer: These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

RefSeq: [NM_001114617](#), [NM_001114618](#), [NM_001114619](#), [NM_001114620](#), [NM_002406](#), [NM_001364390](#), [NR_157150](#), [NR_157151](#), [NM_001364379](#), [NM_001364380](#), [NM_001364384](#), [NM_001364386](#), [NM_001364388](#), [NM_001364391](#), [NM_001364392](#), [NM_001364393](#), [NM_001364394](#), [NM_001364377](#), [NM_001364381](#), [NM_001364382](#), [NM_001364383](#), [NM_001364385](#), [NM_001364387](#), [NM_001364389](#), [NM_001364395](#), [NR_157152](#), [NR_157153](#), [NR_157154](#)

UniProt ID: [P26572](#)

Synonyms: GLCNAC-TI; GLCT1; GLYT1; GNT-1; GNT-I; MGAT

Summary: 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. [provided by RefSeq, Jul 2008]

Product images:

