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# Product datasheet for KN500460

## Mgat4d Mouse Gene Knockout Kit (CRISPR)

### Product data:

| | |
|---|---|
| **Product Type:** | Knockout Kits (CRISPR) |
| **Format:** | 2 gRNA vectors, 1 linear donor |
| **Donor DNA:** | EF1a-GFP-P2A-Puro |
| **Symbol:** | Mgat4d |
| **Locus ID:** | 67555 |

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**Components:**

**KN500460G1**, Mgat4d gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN500460G2**, Mgat4d gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

**KN500460D**, Linear donor DNA containing LoxP-EF1A-tGFP-P2A-Puro-LoxP:

The sequence below is cassette sequence only. The linear donor DNA also contains proprietary target sequence.

LoxP-EF1A-tGFP-P2A-Puro-LoxP (2739 bp)

```
ATAACTTCGT ATAATGTATG CTATACGAAG TTATCGTGAG GCTCCGGTGC CCGTCAGTGG GCAGAGCGCA CATCGCCCAC
AGTCCCCGAG AAGTTGGGGG GAGGGGTCGG CAATTGAACC GGTGCCTAGA GAAGGTGGCG CGGGGTAAAC TGGGAAAGTG
ATGTCGTGTA CTGGCTCCGC CTTTTTCCCG AGGGTGGGGG AGAACCGTAT ATAAGTGCAG TAGTCGCCGT GAACGTTCTT
TTTCGCAACG GGTTTGCCGC CAGAACACAG GTAAGTGCCG TGTGTGGTTC CCGCGGGCCT GGCCTCTTTA CGGGTTATGG
CCCTTGCGTG CCTTGAATTA CTTCCACCTG GCTGCAGTAC GTGATTCTTG ATCCCGAGCT TCGGGTTGGA AGTGGGTGGG
AGAGTTCGAG GCCTTGCGCT TAAGGAGCCC CTTCGCCTCG TGCTTGAGTT GAGGCCTGGC CTGGGCGCTG GGGCCGCCGC
GTGCGAATCT GGTGGCACCT TCGCGCCTGT CTCGCTGCTT TCGATAAGTC TCTAGCCATT TAAAATTTTT GATGACCTGC
TGCGACGCTT TTTTTCTGGC AAGATAGTCT TGTAAATGCG GGCCAAGATC TGCACACTGG TATTTCGGTT TTTGGGGCCG
CGGGCGGCGA CGGGGCCCGT GCGTCCCAGC GCACATGTTC GGCGAGGCGG GGCCTGCGAG CGCGGCCACC GAGAATCGGA
CGGGGGTAGT CTCAAGCTGG CCGGCCTGCT CTGGTGCCTG GCCTCGCGCC GCCGTGTATC GCCCCGCCCT GGGCGGCAAG
GCTGGCCCGG TCGGCACCAG TTGCGTGAGC GGAAAGATGG CCGCTTCCCG GCCCTGCTGC AGGGAGCTCA AAATGGAGGA
CGCGGCGCTC GGGAGAGCGG GCGGGTGAGT CACCCACACA AAGGAAAAGG GCCTTTCCGT CCTCAGCCGT CGCTTCATGT
GACTCCACGG AGTACCGGGC GCCGTCCAGG CACCTCGATT AGTTCTCGAG CTTTTGGAGT ACGTCGTCTT TAGGTTGGGG
GGAGGGGTTT TATGCGATGG AGTTTCCCCA CACTGAGTGG GTGGAGACTG AAGTTAGGCC AGCTTGGCAC TTGATGTAAT
TCTCCTTGGA ATTTGCCCTT TTTGAGTTTG GATCTTGGTT CATTCTCAAG CCTCAGACAG TGGTTCAAAG TTTTTTTCTT
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CCAAAGGCGC CCTGACCTTC AGCCCCTACC TGCTGAGCCA CGTGATGGGC TACGGCTTCT ACCACTTCGG CACCTACCCC
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TCCCCGAGGA CAGCGTGATC TTCACCGACA AGATCATCCG CAGCAACGCC ACCGTGGAGC ACCTGCACCC CATGGGCGAT
AACGATCTGG ATGGCAGCTT CACCCGCACC TTCAGCCTGC GCGACGGCGG CTACTACAGC TCCGTGGTGG ACAGCCACAT
GCACTTCAAG AGCGCCATCC ACCCCAGCAT CCTGCAGAAC GGGGGCCCCA TGTTCGCCTT CCGCCGCGTG GAGGAGGATC
ACAGCAACAC CGAGCTGGGC ATCGTGGAGT ACCAGCACGC CTTCAAGACC CCGGATGCAG ATGCCGGTGA AGAAAGAGGA
AGCGGAGCTA CTAACTTCAG CCTGCTGAAG CAGGCTGGAG ACGTGGAGGA GAACCCTGGA CCTATGACCG AGTACAAGCC
CACGGTGCGC CTCGCCACCC GCGACGACGT CCCCAGGGCC GTACGCACCC TCGCCGCCGC GTTCGCCGAC TACCCCGCCA
CGCGCCACAC CGTCGATCCG GACCGCCACA TCGAGCGGGT CACCGAGCTG CAAGAACTCT TCCTCACGCG CGTCGGGCTC
GACATCGGCA AGGTGTGGGT CGCGGACGAC GGCGCCGCGG TGGCGGTCTG GACCACGCCG GAGAGCGTCG AAGCGGGGGC
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TGGCGCCGCA CCGGCCCAAG GAGCCCGCGT GGTTCCTGGC CACCGTCGGC GTCTCGCCCG ACCACCAGGG CAAGGGTCTG
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CAACCTCCCC TTCTACGAGC GGCTCGGCTT CACCGTCACC GCCGACGTCG AGGTGCCCGA AGGACCGCGC ACCTGGTGCA
TGACCCGCAA GCCCGGTGCC TGAAACTTGT TTATTGCAGC TTATAATGGT TACAAATAAA GCAATAGCAT CACAAATTTC
ACAAATAAAG CATTTTTTTC ACTGCATTCT AGTTGTGGTT TGTCCAAACT CATCAATGTA TCTTAATAAC TTCGTATAAT
GTATGCTATA CGAAGTTAT
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**OTI 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.

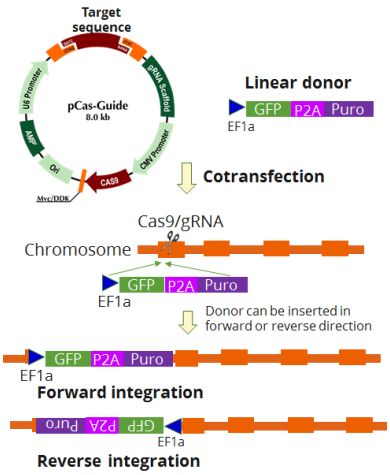
**RefSeq:** NM_026233

**UniProt ID:** Q9D4R2

**Synonyms:** 4933434I20Rik; GnT1IP; GnT1IP-L

**Summary:** Isoform 2: May play a role in male spermatogenesis. In vitro acts as inhibitor of MGAT1 activity causing cell surface proteins to carry mainly high mannose N-glycans. The function is mediated by its lumenal domain and occurs specifically in the Golgi. A catalytic glucosyltransferase activity is not detected. May be involved in regulation of Sertoli-germ cell interactions during specific stages of spermatogenesis.[UniProtKB/Swiss-Prot Function]

## Product images:




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