

## Product datasheet for **KN310676**

### N6amt1 Mouse Gene Knockout Kit (CRISPR)

#### Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	N6amt1
Locus ID:	67768
Components:	<p><b>KN310676G1</b>, N6amt1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGAGGACACGTTCTGTTAC</p> <p><b>KN310676G2</b>, N6amt1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AGTGTCACGCGTTGTA</p> <p><b>KN310676D</b>, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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 TTAATTGTTG CCGGGAAGCT AGAGTAAGTA GTTCGCCAGT TAATAGTTTG CGCAACGTTG TTGCCATTGC  
 TACAGGCATC GTGGTGTCAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

**GE100003**, scramble sequence in pCas-Guide vector

**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\\_001159331](#), [NM\\_026366](#)

**UniProt ID:**

[Q6SKR2](#)

**Synonyms:**

5830445C04Rik; Hemk2; Pred28

**Summary:**

Methyltransferase that can methylate both proteins and DNA, and to a lower extent, arsenic (PubMed:20606008, PubMed:26797129). Catalytic subunit of a heterodimer with TRMT112, which catalyzes N5-methylation of Glu residue of proteins with a Gly-Gln-Xaa-Xaa-Xaa-Arg motif (PubMed:26797129). Methylates ETF1 on 'Gln-185'; ETF1 needs to be complexed to ERF3 in its GTP-bound form to be efficiently methylated (PubMed:20606008, PubMed:26797129). Also acts as a N(6)-adenine-specific DNA methyltransferase by mediating methylation of DNA on the 6th position of adenine (N(6)-methyladenosine) (By similarity). N(6)-methyladenosine (m6A) DNA is significantly enriched in exonic regions and is associated with gene transcriptional activation (By similarity). May also play a role in the modulation of arsenic-induced toxicity by mediating the conversion of monomethylarsonous acid (3+) into the less toxic dimethylarsonic acid (By similarity). It however only plays a limited role in arsenic metabolism compared with AS3MT (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**
