

Product datasheet for KN310676BN

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OriGene Technologies, Inc.

N6amt1 Mouse Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control

Donor DNA: mBFP-Neo Symbol: N6amt1 67768 Locus ID:

KN310676G1, N6amt1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) Components:

KN310676G2, N6amt1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN310676BND, donor DNA containing left and right homologous arms and mBFP-Neo

functional cassette.

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.

NM 001159331, NM 026366 RefSeq:

UniProt ID: O6SKR2

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-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:

Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter