

Product datasheet for MG201062

N6amt1 (BC098330) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: N6amt1 (BC098330) Mouse Tagged ORF Clone

Tag: TurboGFP Symbol: N6amt1

Synonyms: 5830445C04Rik; Hemk2; Pred28

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >MG201062 representing BC098330

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCGGCGCGAGTGTCCCCACGCCGTTGTACGGGCACGTGGGTCGCGGAGCCTTCCGCGACGTGTACG
AGCCAGCGGAGGACACGTTCCTGTTACTGGACGCGCTCGAGGCGGCGGCGGCGGCGGCGAGCTAGCAGGAGTGGA
AATATGCCTTGAAGTAGGAGCAGGATCTGGTGTGTGTGTCTGCATTCCTGGCCTCCATGATAGGTCCTCGG
GCCTTATACATGTACACTGATATCAACCCTGAGGCAGCCGCATGTACCTTGGAAACAGCACGCTGTAACA
GAGTCCATGTTCAGCCAGTGATCACAGATTTGGTGCACGGCTTGCCCAGACTGAAGGGGAAAGTAGA
CCTGCTGGTGTTTAACCCCCCCTATGTAGTGACTCCGCCTGAAGAGGTAAGACTCACAACAGAACTCAGT

CTTTGTTCCCAGCTGTTTCACGAGACCAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG201062 representing BC098330

Red=Cloning site Green=Tags(s)

MAAPSVPTPLYGHVGRGAFRDVYEPAEDTFLLLDALEAAAAELAGVEICLEVGAGSGVVSAFLASMIGPR ALYMYTDINPEAAACTLETARCNRVHVQPVITDLVHGLLPRLKGKVDLLVFNPPYVVTPPEEVRLTTELS

LCSQLFHETK

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-Mlul



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

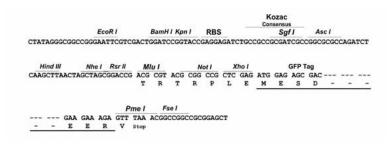
CN: techsupport@origene.cn

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Cloning Scheme:





ACCN: BC098330 **ORF Size:** 452 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>BC098330</u>, <u>AAH98330</u>

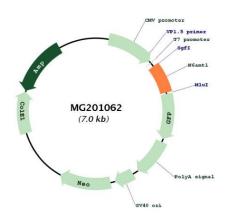
RefSeq Size: 3489 bp
RefSeq ORF: 452 bp
Locus ID: 67768
Cytogenetics: 16 C3.3



Gene 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:



Circular map for MG201062