

Product datasheet for MR201062

N6amt1 (BC098330) Mouse Tagged ORF Clone

Product data:

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product Type:	Expression Plasmids
Product Name:	N6amt1 (BC098330) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	N6amt1
Synonyms:	5830445C04Rik; Hemk2; Pred28
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR201062 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)
	TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCC <mark>GCGATCGC</mark> C
	ATGGCGGCGCCGAGTGTCCCCACGCCGTTGTACGGGCACGTGGGTCGCGGAGCCTTCCGCGACGTGTACG AGCCAGCGGAGGACACGTTCCTGTTACTGGACGCGCCCCAGGCGGCGGCCGAGCTAGCAGGAGTGGA AATATGCCTTGAAGTAGGAGCAGGATCTGGTGTGGTG
	ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAG GTTTAA
Protein Sequence:	>MR201062 protein sequence Red=Cloning site Green=Tags(s)
	MAAPSVPTPLYGHVGRGAFRDVYEPAEDTFLLLDALEAAAAELAGVEICLEVGAGSGVVSAFLASMIGPR ALYMYTDINPEAAACTLETARCNRVHVQPVITDLVHGLLPRLKGKVDLLVFNPPYVVTPPEEVRLTTELS LCSQLFHETK
	TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Restriction Sites:	Sgfl-Mlul



This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

Cloning Scheme:



* The last codon before the Stop codon of the ORF

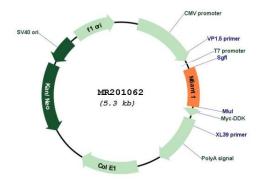
ACCN:	BC098330
ORF Size:	450 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <u>More info</u>
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:	 Centrifuge at 5,000xg for 5min. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. Close the tube and incubate for 10 minutes at room temperature. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 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

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

	N6amt1 (BC098330) Mouse Tagged ORF Clone – MR201062
MW:	16.1 kDa
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 MR201062

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US