

Product datasheet for MC209897

Trmt10c (NM_029092) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Trmt10c (NM_029092) Mouse Untagged Clone
Tag: Tag Free
Symbol: Trmt10c
Synonyms: 1300018J16Rik; D16Ertd454e; Rg9mtd1; Rnmtd1
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC209897 representing NM_029092
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAATGTGACTGTCCGTTTCTTAAGACCTTTTGCCAGATGTCTGGTGCCATATACCTTTCATAGGAAGA
 GAAGTCATTTATATTCAGGAGTTCTGCAGAGATACATGTCCTCCAAGCACCTTCTTTGTCTTGTCATAA
 TAAGGACAGTGCATCCCCTCCTGAGCAGCTAGAATTGGATGGGTGAAAGCTACAATGAAGTCGAGCATT
 CAAGAAGATGGTGTTCAGAGGTCTCAGACAAAGATGAAGATTCCTCGCCTCAACCAGAGAACAATTG
 AGATGTGGAGATTGCTTGCCAAAGAAGTACCAGAACATATTACTGAAGAAGATCTCAAAACCTTATGGA
 ATGTGCCTCTAAATCAGCCAAGAAGAAATACTTACGGTATCTGTATGGGAAGGAAAAGGCCGAAAAAGCT
 AAGCAGGTAAAGAAGGAGATGAAAGCGGAGGCCAGGGAAGAAGCAAAAAGGCCAGGTTGCTAGAGACCA
 CCGCAGAAGAACAACAGCAAGACTTCATGTTTCTCGACTATGGGATCGACAGATCAACATTGCACTGGG
 TTGGAAGGGTGTCCAGGCTATGCAGTTTGGACAGCCTTTGGTTTTGACATGGCCTATGATAATTACATG
 AAACCAAGTGAAGTGCAGAATACTGTTTCTCACTTTTAGAAAGTGAAGGATGGAACAGAAGAAATGTTG
 ATCCTTTCCACATTTATTTCTGCAATCTTAAATAGATAGTGCTTATCATAGAGAATTAGTTAAACGTTA
 TAGAGAAAAATGGGACAAATTGCTCTTAACAGCAACAGAAAAAGTCTCCTGTTGATTATTTCCAAAGGAC
 AGTATTATATATTTAACTGCAGATTCTCCAATGTTATGACTACCTTCAAGCATGATAAAATTTATATAA
 TTGGATCATTTGTTGATAAAAAATACACAGACAGGAACATCCTTAGCCAAGGCCAAACGGTTAAACATAGC
 AACAGAGTGCCTTCCACTAGATAAATTTTACAATGGGAAATTGGTAACAAAAATCTCACCTTAGATCAG
 ATGATCCGAATTTTGTCTGCCTGAAAAACTGGTAAGTGGGAAGAGGCTCTCAAGTTTGTCCCAGGA
 GAAAGCATACTGGTTATTTAGAGTTTCTGAGCAATCTCAGGAACCTGTTAGGAAACTGAAGAAGACAAA
 GACTTTAAATTCATTTGAAAAGGCTCCTTAAATGTGCGCACGTGAAAAGGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



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Restriction Sites:	Sgfl-Mlul
ACCN:	NM_029092
Insert Size:	1245 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none">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:	NM_029092.3 , NP_083368.1
RefSeq Size:	1846 bp
RefSeq ORF:	1245 bp
Locus ID:	52575
UniProt ID:	Q3UFY8
Cytogenetics:	16 33.79 cM
Gene Summary:	<p>Mitochondrial tRNA N(1)-methyltransferase involved in mitochondrial tRNA maturation. Component of mitochondrial ribonuclease P, a complex composed of TRMT10C/MRPP1, HSD17B10/MRPP2 and MRPP3, which cleaves tRNA molecules in their 5'-ends. Together with HSD17B10/MRPP2, forms a subcomplex of the mitochondrial ribonuclease P, named MRPP1-MRPP2 subcomplex, which displays functions that are independent of the ribonuclease P activity. The MRPP1-MRPP2 subcomplex catalyzes the formation of N(1)-methylguanine and N(1)-methyladenine at position 9 (m1G9 and m1A9, respectively) in tRNAs; TRMT10C/MRPP1 acting as the catalytic N(1)-methyltransferase subunit. The MRPP1-MRPP2 subcomplex also acts as a tRNA maturation platform: following 5'-end cleavage by the mitochondrial ribonuclease P complex, the MRPP1-MRPP2 subcomplex enhances the efficiency of 3'-processing catalyzed by ELAC2, retains the tRNA product after ELAC2 processing and presents the nascent tRNA to the mitochondrial CCA tRNA nucleotidyltransferase TRNT1 enzyme. In addition to tRNA N(1)-methyltransferase activity, TRMT10C/MRPP1 also acts as a mRNA N(1)-methyltransferase by mediating methylation of adenosine residues at the N(1) position of MT-ND5 mRNA.[UniProtKB/Swiss-Prot Function]</p>