

## Product datasheet for **RC234399**

### SETMAR (NM\_001243723) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SETMAR (NM_001243723) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SETMAR
Synonyms:	Mar1; METNASE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC234399 representing NM\_001243723  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTTTCGCGGAAGCGGCAAAGACGACACGGCCTTGTGGATGGCGGAGTTTAAGGAGAAGCCTGAGGCC  
 CGACTGAGCAGCTGGATGTCGCGTGCAGCCAGGAAAATTGCCGGTGGGCGCGTGGCCCCGGGGCCGC  
 GCCGGCGCCCTTCCAGTACACTCCTGATCATGTAGTTGGACTGGAGCAGACATTGATCCCACTCAAATA  
 ACCTTTCCCGGATGCATTTGTGTCAAACCTCCCTGCCTCCCTGGCACTTGCTCCTGTCTCCGCCATGGAG  
 AGAACTATGATGATAACTCATGCCTTAGAGATATAGGATCTGGAGGAAAGTATGCAGAGCCTGTTTTGA  
 ATGCAATGTCCTGTGCCGATGCAGTGACCCTGCAGAAACAGAGTGGTCCAGAAAGGTCTACAGTCCAC  
 TTCCAAGTGTCAAGACGCATAAAAAAGGCTGGGACTTCGTACCTTGAATTTATACCGAAAGGAAGTT  
 CTCTGTACTGCCCGTAGAAAAGTGAACATCAGTTGTGAAATGAGAAGGAACCCAGCATGTGTGGCTC  
 AGCCCCCTTCTGTGTTCCCTCCTGCAAGCGATTGACCCTTGAGACTATGAAAATGATGTTAGACAAAAAG  
 CAAATTCGAGCAATTTCTTATTTCGAGTTCAAAATGGGTGTAAGCAGCAGAAAACAACTCGCAACATCA  
 ACAATGCATTTGGCCAGGAACTGCTAACGAACGTACAGTGCAGTGGTGGTTCAAGAAGTTTTGCAAAGG  
 AGATGAGAGCCTTGAAGATGAGGAGCGTAGTGGCCGCCATCAGAAGTTGACAACGACCAGTTGAGAGCA  
 ATCATCGAAGCTGATCCCTTACAACCTACACGAGAAGTTGCTGAAGAAGTCAATGTCAACCATTTCTACGG  
 TCGTTCGACATTTGAAGCAAATTTGAAAGGTGAAAAAGCTCGATAAGTGGGTGCCTCATGAGCTGACTGA  
 AAATCAAAAAATCGTCGTTTTGAAGTGCATCTTCTTATTCTACGCAACCACAACGAACCATTTCTC  
 GATCGGATTGTGACGTGTGATGAAAAGTGGATTTATATGACAACCGGCGACGATCAGCTCAGTGGTTGG  
 ATCAAGAAGAAGCTCAAAGCACTTCCAAAGCCAATCTTGACCCAAAAAAGGTCACTGCTACTATTTG  
 GTGGTCTGCTGCTGGTCTGATCCACTACAGCTTTCTGAATCCCGGTGAAACCATTACATCTGAGAAGTAT  
 GCTCAGGAAATCGATGAGATGAACCAAAAACTGCAACGCCTGCAGCTGGCATTGGTCAACAGAAAGGCC  
 CAATTTCTTCCACGACAATGCCCGACCGCATGTTGCACAACCCACACTTCAAAAGTTGAATGAATTGGG  
 CTATGAAGTTTTGCCTCATCCACCGTATTCACCTGACCTCTTGCCAACCACTACCACGCTTTTAAGCAT  
 CTCAACAACCTTTTGCAGGAAAACGCTTCCACAACCGCAGGATGCAGAAAATGCTTTCCAAGAGTTCCG  
 TCGAATCCCAAAGCACGGATTTTACGCTACAGGAATAAACCAACTTATTCTCGTTGGCAAAAAATGTGT  
 TGATTGTAATGGTTCCTATTTTGAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC234399 representing NM\_001243723  
 Red=Cloning site Green=Tags(s)

MFEEAAKTRPCGMAEFKEKPEAPTEQLDVACGQENLPVGAWPPGAAPAPFQYTPDHVVGPADIDPTQI  
 TFPGCICVKTPCLPGTCSCLRHHGENYDDNSCLRDIIGSGGKYAEPVFECNVLCRCSHDHCRNRVQKGLQFH  
 FQVFKTHKKGWGLRLEFIPKGSLSYCPVEKSNISCGNEKEPSMCGSAPSVFPCKRLTLETMKMMLDKK  
 QIRAIFLFEFKMGRKAAETTRNINNAFPGTANERTVQWWFKFKCKGDESLEDEERSGRPSEVDNDQLRA  
 IIEADPLTTTREVAEELNVNHSTVVRHLKQIGVKKLDKWWPHEL TENQKNRRFEVSSSLILRNHNEPFL  
 DRIVTCDEKWILYDNRSSAQWLDQEEAPKHFPKPI LHPKKVMVTIWWSAAGLIHYSFLNPGETITSEKY  
 AQEIDEMNQKLQRLQLALVNRKGPILLHDNARPHVAQPTLQKLNELGYEVLPHPPYSPDLLPTNYHVFKH  
 LNNFLQKRFHNQDAENAFQEFVESQSTDFYATGINQLISRWQKCVDCNGSYFD

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001243723

**ORF Size:** 1635 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:** [NM\\_001243723.1](#), [NP\\_001230652.1](#)

**RefSeq Size:** 1740 bp

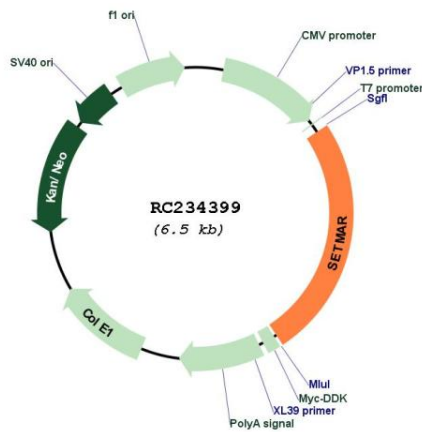
**RefSeq ORF:** 1638 bp

**Locus ID:** 6419

**UniProt ID:** [Q53H47](#)

<b>Cytogenetics:</b>	3p26.1
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>Protein Pathways:</b>	Lysine degradation
<b>MW:</b>	62.6 kDa
<b>Gene Summary:</b>	This gene encodes a fusion protein that contains an N-terminal histone-lysine N-methyltransferase domain and a C-terminal mariner transposase domain. The encoded protein binds DNA and functions in DNA repair activities including non-homologous end joining and double strand break repair. The SET domain portion of this protein specifically methylates histone H3 lysines 4 and 36. This gene exists as a fusion gene only in anthropoid primates, other organisms lack mariner transposase domain. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jan 2013]

**Product images:**



Circular map for RC234399