

## Product datasheet for **RC233886**

### SETMAR (NM\_001276325) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** SETMAR (NM\_001276325) 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)  
**ORF Nucleotide Sequence:** >RC233886 representing NM\_001276325  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTTTCGCGGAAGCGGCAAAGACGACACGGCCTTGTTGGGATGGCGGAGTTTAAGGAGAAGCCTGAGGCC  
CGACTGAGCAGCTGGATGTCGCGTGGCCAGGAAACTTGCCGGTGGCGCGTGGCCCCGGGGCCGC  
GCCGGCCCTTCCAGTACACTCCTGATCATGTAGTTGGACCTGGAGCAGACATTGATCCCACTCAAATA  
ACCTTTCCGGATGCATTTGTGCAAACTCCCTGCCTCCCTGGCACTTGCTCCTGTCTCCGCCATGGAG  
AGAACTATGATGATAACTCATGCCTTAGAGATATAGGATCTGGAGAAAGTATGCAGAGCCTGTTTTTGA  
ATGCAATGTCCTGTGCCGATGCAGTGACCACTGCAGAAACAGAGTGGTCCAGAAAGTCTACAGTCCAC  
TTCCAAGTGTTCAAGACGCATAAAAAAGGCTGGGACTTCGTACCTTGAATTTATACCGAAAGGAAGGT  
TTGTCTGTGAATATGCTGGTGAGGTTTTAGGATTCCTGAAGTTCAGAGAAGAATCACTTACAAACAAA  
ATCCGACTCCAATTACATTATAGCCATCAGGGAACATGTTTATAATGGGCAGGTAATGGAACATTTGTT  
GACCTACTTATATAGGAAATTTGGAAGATTCCTAATCATTCTGTGAGCCAAACCTTTTGATGATTC  
CTGTCCGAATTGACTCAATGGTACCTAAGTTGGCACTTTTGCAGCCAAAGATATTGTGCCAGAAGAAGA  
ACTCTCTATGATTATTCAGGAAGATATCTTAATCTAACAGTCAGTGAAGACAAAGAAAGGCTAGATCAT  
GGGAACTAAGGAAACCTTGTTACTGTGGTGCCAAATCATGTACTGCTTTCTGCCTTTTGACAGTTCTC  
TGTAAGTCCCGTAGAAAAGTCGAACATCAGTTGTGGAATGAGAAGGAACCCAGCATGTGTGGCTCAGC  
CCCTTCTGTGTTCCCTCCTGCAAGCGATTGACCTTGAGGTGAGTCTGTTTCAGTGATAAGCAGCTTGCC  
CCTCCCTATAGTGAAGACAGTGGTTGGCTAGCTTTACCTCTGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC233886 representing NM\_001276325  
 Red=Cloning site Green=Tags(s)

MFAEAAKTRPCGMAEFKEKPEAPTEQLDVACGQENLPVGAWPPGAAPAPFYTPDHVVGPGADIDPTQI  
 TFPGCICVKTPLPGTCSCLRHGENYDDNSCLRDIGSGGKYAEPVFECNVLCRCSDHCRNRVVQKGLQFH  
 FQVFKTHKKGWLRTLEFIPKGRFVCEYAGEVLGFSEVQRRIHLQTKSDSNYIIAIREHVYNGQVMETFV  
 DPTYIGNIGRFLNHSCEPNLLMIPVRIDSMVPKLLALFAAKDIVPEEELSYDYSGRYLNLTVSEDKERLDH  
 GKLRKPCYCGAKSCTAFLPFDDSSLYCPVEKSNISCGNEKEPSMCGSAPSVFPCKRLTLEVSFLSDKQLA  
 PPYSGRQWLASFTSA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001276325

**ORF Size:** 1095 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\\_001276325.1](#), [NP\\_001263254.1](#)

**RefSeq Size:** 1775 bp

**RefSeq ORF:** 1098 bp

**Locus ID:** 6419

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

**Cytogenetics:** 3p26.1

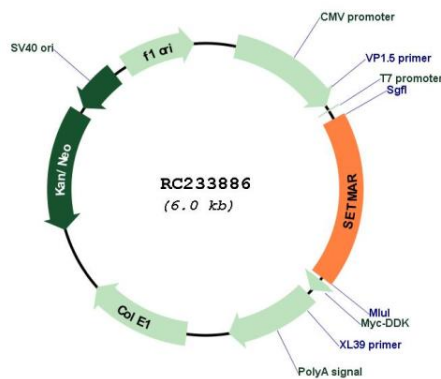
**Protein Families:** Druggable Genome, Transcription Factors

**Protein Pathways:** Lysine degradation

**MW:** 41 kDa

**Gene Summary:** 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 RC233886