

Product datasheet for **RC229337**

SETMAR (NM_006515) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SETMAR (NM_006515) 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)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC229337 representing NM_006515
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTTTCGGGAAGCGGCAAAGACGACACGGCCTTGTGGATGGCGGAGTTTAAGGAGAAGCCTGAGGCC
 CGACTGAGCAGCTGGATGTCGCGTGCAGGCAAGAACTTGCCGGTGGCGCGTGGCCCCGGGGCCGC
 GCCGGCGCCCTTCCAGTACACTCCTGATCATGTAGTTGGACTGGAGCAGACATTGATCCCACTCAAATA
 ACCTTTCCCGGATGCATTTGTGTCAAACCTCCCTGCCTCCCTGGCACTTGCTCCTGTCTCCGCCATGGAG
 AGAACTATGATGATAACTCATGCCTTAGAGATATAGGATCTGGAGGAAAGTATGCAGAGCCTGTTTTGA
 ATGCAATGTCCTGTGCCGATGCAGTGACCACTGCAGAAACAGAGTGGTCCAGAAAGGTCTACAGTCCAC
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 CTGTCCGAATTGACTCAATGGTACCTAAGTTGGCACTTTTTGCAGCCAAAGATATTGTGCCAGAAGAAGA
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 GGGAAACTAAGGAAACCTTGTTACTGTGGTGCCAAATCATGTAAGTCTTCTGCCTTTTACAGTTCTC
 TGTAAGTCCCGTAGAAAAGTCGAACATCAGTTGTGAAATGAGAAGGAACCCAGCATGTGTGGCTCAGC
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 ATTCGAGCAATTTCTTATTGAGTTCAAATGGGTCGTAAGCAGCAGAAAACACTCGCAACATCAACA
 ATGCATTTGGCCAGGAACTGCTAACGAACGTACAGTGCAGTGGTGGTTCAAGAAGTTTTGCAAAGGAGA
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 CGGATTGTGACGTGTGATGAAAAGTGGATTTATATGACAACCGGCGACGATCAGCTCAGTGGTTGGATC
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 AATCCCAAAGCACGGATTTTACGCTACAGGAATAAACCAACTTATTTCTCGTTGGCAAAAATGTGTTGA
 TTGTAATGGTTCCTATTTTGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC229337 representing NM_006515
 Red=Cloning site Green=Tags(s)

MFAEAAKTRPCGMAEFKEKPEAPTEQLDVACGQENLPVGAWPPGAAPAFQYTPDHVVGPADIDPTQI
 TFPGCICVKTPCLPGTCSCLRHHGENYDDNSCLRDIGSGGKYAEPVFECNVLCRCSDHCRNRVVQKGLQFH
 FQVFKTHKKGWGLRTELEFIPKGRFVCEYAGEVLGFSEVQRRIHLQTKSDSNYIIAIREHVYNGQVMETFFV
 DPTYIGNIGRFLNHSCEPNLLMIPVRIDSMVPKLLALFAAKDIVPEEELSYDYSGRYLNLTVSEDKERLDH
 GKLRKPCYCGAKSCTAFLPFSSLYCPVEKSNISCGNEKPSMCGSAPSVFPCKRLTLETMMMLDKKQ
 IRAIFLFEFKMGRKAAETTRNINNAFGPGTANERTVQWWFKFKCGDESLEDEERSGRPSEVDNDQLRAI
 IEADPLTTTREAELNVNHSTVVRHLKQIGKVKKLDKWPHEL TENQKNRRFEVSSSLILRNHNEPFLD
 RIVTCDEKWILYDNRSSAQWLDQEEAPKHFPKPKILHPKKVMVTIWWAAGLIHYSFLNPGETITSEKYA
 QEIDEMNQKLQRLQLALVNRKGPILLHDNARPHVAQPTLQKLNELGYEVLPHPPYSPDLLPTNYHVFKHL
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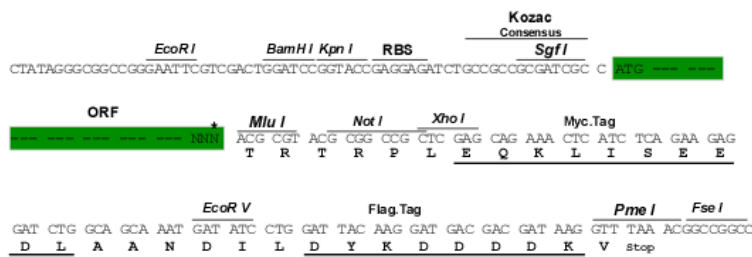
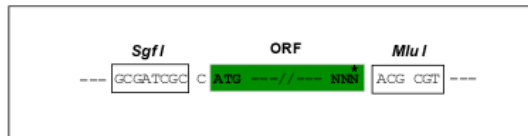
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8035_c07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_006515

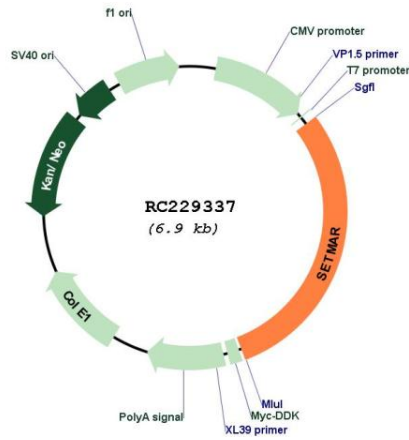
ORF Size: 2052 bp

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](#)

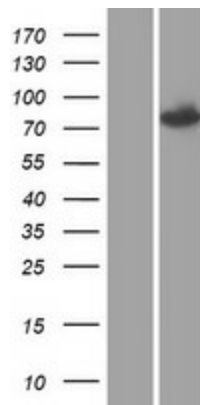
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<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:	<u>NM_006515.3</u> , <u>NP_006506.3</u>
RefSeq ORF:	2055 bp
Locus ID:	6419
UniProt ID:	<u>Q53H47</u>
Cytogenetics:	3p26.1
Domains:	SET, Transposase_1, PreSET, Pre-SET
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Lysine degradation
MW:	77.9 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]

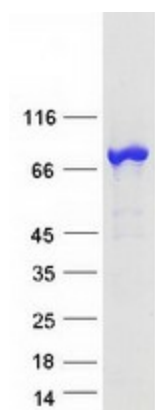
Product images:



Circular map for RC229337



Western blot validation of overexpression lysate (Cat# [LY432352]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229337 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SETMAR protein (Cat# [TP329337]). The protein was produced from HEK293T cells transfected with SETMAR cDNA clone (Cat# RC229337) using MegaTran 2.0 (Cat# [TT210002]).