

## Product datasheet for **SC123715**

### SETMAR (BC008931) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SETMAR (BC008931) Human Untagged Clone
Tag:	Tag Free
Symbol:	SETMAR
Synonyms:	METNASE; SET domain and mariner transposase fusion; SET domain and mariner transposase fusion gene
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None
Fully Sequenced ORF:	>OriGene sequence for BC008931 edited

```
GGCACGAGGGGCAAAGACGACACGGCCTTGTGGGATGGCGGAGTTTAAGGAGAAGCCTGA
GGCCCCGACTGAGCAGCTGGATGTCGCGTGCGCCAGGAAAACCTGCCGGTGGCGCGTG
GCCCCCGGGGGCGCGCGCGCCCTTCCAGTTCTCTGTACTGCCCGTAGAAAAGTCGA
ACATCAGTTGTGAAATGAGAAGGAACCCAGCATGTGTGGCTCAGCCCCTTCTGTGTTCC
CCTCCTGCAAGCGATTGACCCCTGAGACTATGAAAATGATGTTAGACAAAAAGCAAATTC
GAGCAATTTTCTATTTCGAGTTCAAAATGGGTCGTAAAGCAGCAGAAAACCACTCGCAACA
TCAACAATGCATTTGGCCAGGAAGTCTAACGAACGTACAGTGCAGTGGTGGTTCAAGA
AGTTTTGCAAAGGAGATGAGAGCCTTGAAGATGAGGAGCGTAGTGGCCGCCATCAGAAG
TTGACAACGACCAGTTGAGAGCAATCATCGAAGCTGATCCCCTTACAACACACGAGAAG
TTGCTGAAGAAGTCAATGTCAACCATTCTACGGTCGTTTCGACATTTGAAGCAAATGGAA
AGGTGAAAAAGCTCGATAAGTGGTGCCTCATGAGCTGACTGAAAATCAAAAAATCGTC
GTTTTGAAGTGTCATCTTCTTATTCTACGCAACCACAACGAACCATTCTCGATCGGA
TTGTGACGTGTGATGAAAAGTGGATTTTATATGACAACCGCGCAGCATCAGCTCAGTGGT
TGGATCAAGAAGAAGCTCCAAAGCACTCCCAAAGCCAACTTGCACCCAAAAAAGGTCA
TGGTCACTATTTGGTGGTCTGCTGCTGGTCTGATCCACTACAGCTTTCTGAATCCCGGTG
AAACCATTACATCTGAGAAGTATGCTCAGGAAATCGATGAGATGAACCAAAAACTGCAAC
GCCTGCAGCTGGCATTGGTCAACAGAAAGGGCCCAATTTCTCCACGACAATGCCCGAC
CGCATGTTGCACAACCCACACTTCAAAGTTGAATGAATTGGGCTATGAAGTTTTGCCTC
ATCCACCGTATTACCTGACCTCTTGCCAACCACTACCAGTCTTTAAGCATCTCAACA
ACTTTTTGCAGGGAAAACGCTTCCACAACCAGCAGGATGCAGAAAATGCTTTCCAAGAGT
TCGTCGAATCCCAAAGCACGGATTTTTACGCTACAGGAATAAACCAACTTATTTCTCGTT
GGCAAAAATGTGTTGATTGTAATGGTTCCTATTTTGATTAATAAAAAATGCGTTGAGCCTA
AAAAAAAAAAAAAAAAAAAA
```



[View online »](#)

<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for BC008931 unedited TCAGAATTTGTAATACGACTCTACTATAGGCGGCCGACGAATTCGCACGAGGGCAAAGAC GATACGGCCTTGTGGGATGGCGGAGTTTAAGGAGAAGCCTGAGGCCCGACTGAGCAGCT GGATGTCGCGTGCAGGAACTTGCCTGGTGGCGCGTGGCCCCGGGGCCGCGCC GGCGCCCTCCAGTCTCTGTACTGCCCGTATAAAAGTCGAACATCAGTTGTGAAATG AGAAGGAACCCAGCATGTGTGGCTCAGCCCTTCTGTGTTCCCTCCTGCAAGCGATTGA CCCTTGAGACTATGAAAATGATGTTAGACAAAAAGCAAATTCGAGCAATTTTCTTATTCCG AGTTCAAATGGGTCGTAAGCAGCAGAAACAACCTCGCAACATCAACAATGCATTTGGCC CAGGAAGTCTAACGAACGTACAGTGCAGTGGTGGTTCAAGAAGTTTTGCAAAGGAGATG AGAGCCTTGAAGATGAGGAGCGTAGTGGCCGGCCATCAGAAGTTGACAACGACCAGTTGA GAGCAATCATCGAAGCTGATCCCCTTACAACACTACAGAGAAGTTGCTGAAGAACTCAATG TCAACCATTCTACGGTCGTTGACATTTGAAGCANATTGGANAGGTGAAAAAGCTCGATA AGTGGGTGCCTCATGAGCTGACTGAGAATCANANAAATCGTCGTTTTGAAGTGCATCTT CTCTTATTCTACGCAACCACAACGAACCTTTCTCGATCGGATTGTGACGTGTGATGAAA AGTGGATTATATGACAACCGGCGACGATCAGCTCANTGGTTGGATCAAGAAGAAGCTGC AAGCACTCCNNAACNNATCTGCACCCAAAAAAGTCATGGTCACTATTNGTGGTCTCG TGCTGGTCTGATCACTACANCTTCTGAATCCGGTGAACCATACTCTGAGAAT
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	BC008931
<b>Insert Size:</b>	1338 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">BC008931.1</a> , <a href="#">AAH08931.1</a>
<b>RefSeq Size:</b>	1338 bp
<b>Locus ID:</b>	6419
<b>Cytogenetics:</b>	3p26.1
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>Protein Pathways:</b>	Lysine degradation

**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]