

Product datasheet for **SC310486**

SETD7 (NM_030648) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SETD7 (NM_030648) Human Untagged Clone
Tag:	Tag Free
Symbol:	SETD7
Synonyms:	KMT7; SET7; SET7/9; SET9
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL6</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_030648, the custom clone sequence may differ by one or more nucleotides

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ATGGATAGCGACGACGAGATGGTGGAGGAGCGGTGGAAGGGCACCTGGACGATGACGGATTACCGCACG
GGTTCTGCACAGTCACCTACTCCTCCACAGACAGATTTGAGGGAACTTTGTTCCACGGAGAAAAGAACGG
ACGGGGGAAGTTCTTCTTTGATGGCAGCACCTGGAGGGTATTATGTGGATGATGCCTTGACGGGC
CAGGGAGTTTACACTTACGAAGATGGGGGAGTTCTCCAGGGCACGTATGTAGACGGAGAGCTGAACGGTC
CAGCCCAGGAATATGACACAGATGGGAGACTGATCTTCAAGGGGCAGTATAAAGATAACATTCGTCATGG
AGTGTGCTGGATATATTACCCAGATGGAGGAAGCCTTGTAGGAGAAGTAAATGAAGATGGGGAGATGACT
GGAGAGAAGATAGCCTATGTGTACCCTGATGAGAGGACCGCACTTATGGGAAATTTATTGATGGAGAGA
TGATAGAAGGCAAACCTGGCTACCCTTATGTCCACTGAAGAAGGGAGGCCTCACTTTGAACCTGATGCCTGG
AAATTCAGTGTACCACTTTGATAAGTCGACTTCATCTTGCAATTTCTACCAATGCTCTTCTCCAGATCCT
TATGAATCAGAAAGGGTTTATGTTGCTGAATCTCTATTTCCAGTGCTGGAGAAGGACTTTTTTCAAAGG
TAGCTGTGGGACCTAATACTGTTATGTCTTTTATAATGGAGTTCGAATTACACCAAGAGGTTGACAG
CAGGGACTGGGCCCTAATGGGAACACCCTCTCCCTTGATGAAGAAACGGTCATTGATGTGCCTGAGCCC
TATAACCACGTATCCAAGTACTGTGCCTCCTGGGACACAAGGCAAACTACTCCTCACTCCAAACTGCA
TCTACGATATGTTTGTCCACCCCGTTTTGGGCCCATCAAATGCATCCGCACCCTGAGAGCAGTGGAGGC
CGATGAAGAGCTCACCGTTGCCTATGGCTATGACCACAGCCCCCGGGAAGAGTGGGCCTGAAGCCCT
GAGTGGTACCAGTGGAGCTGAAGGCCTTCCAGGCCACCCAGCAAAAGTGA
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Restriction Sites:	NotI-NotI
ACCN:	NM_030648



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OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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: The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.

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_030648.2](#), [NP_085151.1](#)

RefSeq Size: 7012 bp

RefSeq ORF: 1101 bp

Locus ID: 80854

UniProt ID: [Q8WTS6](#)

Cytogenetics: 4q31.1

Domains: SET, MORN

Protein Families: Druggable Genome

Protein Pathways: Lysine degradation

Gene Summary:

Histone methyltransferase that specifically monomethylates 'Lys-4' of histone H3. H3 'Lys-4' methylation represents a specific tag for epigenetic transcriptional activation. Plays a central role in the transcriptional activation of genes such as collagenase or insulin. Recruited by IPF1/PDX-1 to the insulin promoter, leading to activate transcription. Has also methyltransferase activity toward non-histone proteins such as p53/TP53, TAF10, and possibly TAF7 by recognizing and binding the [KR]-[STA]-K in substrate proteins. Monomethylates 'Lys-189' of TAF10, leading to increase the affinity of TAF10 for RNA polymerase II. Monomethylates 'Lys-372' of p53/TP53, stabilizing p53/TP53 and increasing p53/TP53-mediated transcriptional activation.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.