

Product datasheet for **RG219244**

SETD7 (NM_030648) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SETD7 (NM_030648) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SETD7
Synonyms:	KMT7; SET7; SET7/9; SET9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG219244 representing NM_030648 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGATAGCGACGACGAGATGGTGGAGGAGGCGGTGGAAGGGCACCTGGACGATGACGGATTACCGCACG
GGTTCTGCACAGTCACCTACTCCTCCACAGACAGATTTGAGGGAACTTTGTTCCACGGAGAAAAGAACGG
ACGGGGGAAGTTCTTCTTTGATGGCAGCACCTGGAGGGTATTATGTGGATGATGCCTTCAGGGC
CAGGGAGTTTACACTTACGAAGATGGGGAGTTCTCCAGGGCACGTATGTAGACGGAGAGCTGAACGGTC
CAGCCCAGGAATATGACACAGATGGGAGACTGATCTTCAAGGGCAGTATAAAGATAACATTCGTCATGG
AGTGTGCTGGATATATTACCCAGATGGAGGAAGCCTTGTAGGAGAAGTAAATGAAGATGGGAGATGACT
GGAGAGAAGATAGCCTATGTGTACCCTGATGAGAGGACCGCACTTATGGGAAATTTATTGATGGAGAGA
TGATAGAAGGCAAACCTGGCTACCCTTATGTCCACTGAAGAAGGGAGGCGCTCACTTTGAACTGATGCCTGG
AAATTCAGTGTACCCTTTGATAAGTCCGACTTCATCTTGCAATTTCTACCAATGCTCTTCTCCAGATCCT
TATGAATCAGAAAGGTTTATGTTGCTGAATCTTATTTCCAGTGTGGAGAAGGACTTTTTTCAAAGG
TAGCTGTGGGACCTAATACTGTTATGTCTTTTTATAATGGAGTTCGAATTACACACCAAGAGGTTGACAG
CAGGGACTGGGCCCTTAATGGGAACACCCTCTCCCTTGATGAAGAAACGGTCATTGATGTGCCTGAGCCC
TATAACCACGTATCCAAGTACTGTGCCTCCTTGGGACACAAGGCAAATCACTCCTTCACTCCAAACTGCA
TCTACGATATGTTTGTCCACCCCGTTTTGGGCCCATCAAATGCATCCGCACCCTGAGAGCAGTGGAGGC
CGATGAAGAGCTCACCGTTGCCTATGGCTATGACCACAGCCCCCGGGAAGAGTGGGCCTGAAGCCCT
GAGTGGTACCAGGTGGAGCTGAAGGCCTTCCAGGCCACCCAGCAAAG

ACCGGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG219244 representing NM_030648
 Red=Cloning site Green=Tags(s)

MDSDEMVEEAVEGHLDDDGLPHGFCTVTYSSTDRFEGNFVHGEKNGRGKFFFDGSTLEGYYVDDALQG
 QGVYTYEDGGVLQGTYYDDELNGPAQEYDTDGRLIFKGQYKDNIRHGVCWIIYYPDGGSLVGEVNEDEGEMT
 GEKIAYVYPDERTALYGKFIGDEMIEGKLATLMSTEEGRPHFELMPGNSVYHFDKSTSSCISTNALLPDP
 YESERVVVAESL ISSAGEGLFSKVAVGPNTVMSFYNGVRITHQEVDSRDWALNGNTLSLDEETVIDVPEP
 YNHVSKYCASLGHKANHSFTPNCIYDMFVHPRFGPIKCIRTLRAVEADEELTVAYGYDHSPPGKSGPEAP
 EWYQVELKAFQATQQK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_030648

ORF Size: 1098 bp

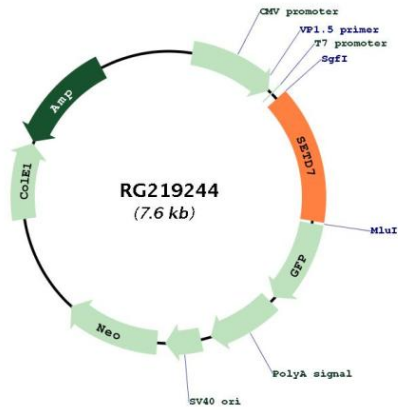
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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: 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:	NM_030648.3
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:	<p>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]</p>

Product images:



Circular map for RG219244