

## Product datasheet for RC214996

### hSET1 (SETD1A) (NM\_014712) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	hSET1 (SETD1A) (NM_014712) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	hSET1
Synonyms:	EPEDD; KMT2F; NEDSID; Set1; Set1A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC214996 representing NM_014712 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
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CGCATCGAGATGCTGCTGAAGGAGCAGCGCTCCAAGTTTTCTTCTTGGCCTCTGACACAGAGGAGGAGG  
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**Protein Sequence:**

>RC214996 representing NM\_014712  
Red=Cloning site Green=Tags(s)

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FPLEDNKIPCLCGTESCRGSLN

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8027\\_g09.zip](https://cdn.origene.com/chromatograms/mk8027_g09.zip)

**Restriction Sites:**

Sgfl-MluI

## Cloning Scheme:



**ACCN:** NM\_014712

**ORF Size:** 5121 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\\_014712.3](#)

**RefSeq Size:** 6447 bp

**RefSeq ORF:** 5124 bp

**Locus ID:** 9739

**UniProt ID:** [O15047](#)

**Cytogenetics:** 16p11.2

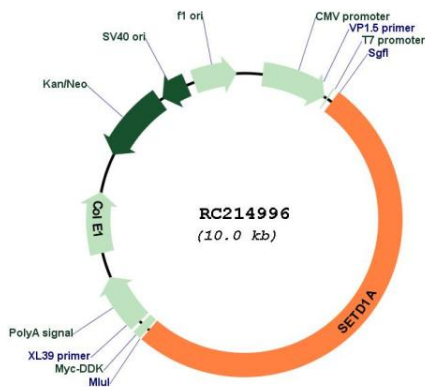
**Protein Families:** Druggable Genome

**Protein Pathways:** Lysine degradation

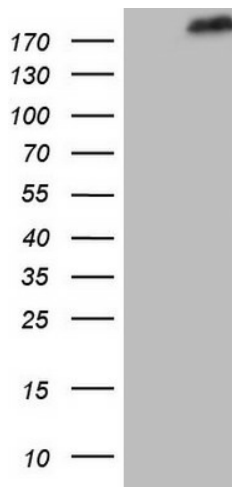
**MW:** 185.9 kDa

**Gene Summary:** The protein encoded by this gene is a component of a histone methyltransferase (HMT) complex that produces mono-, di-, and trimethylated histone H3 at Lys4. Trimethylation of histone H3 at lysine 4 (H3K4me3) is a chromatin modification known to generally mark the transcription start sites of active genes. The protein contains SET domains, a RNA recognition motif domain and is a member of the class V-like SAM-binding methyltransferase superfamily. [provided by RefSeq, Dec 2016]

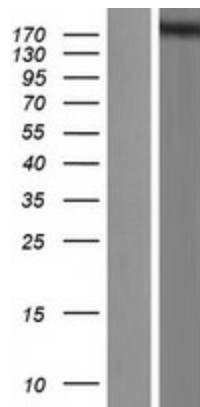
## Product images:



Circular map for RC214996



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SETD1A (Cat# RC214996, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SETD1A(Cat# [TA805877]). Positive lysates [LY415047] (100ug) and [LC415047] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY415047]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214996 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).