

## Product datasheet for RC231216

### SUV39H2 (NM\_001193424) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** SUV39H2 (NM\_001193424) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** SUV39H2  
**Synonyms:** KMT1B  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC231216 representing NM\_001193424  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGGCGCGGTCGGGGCCGAGGCGCGAGGAGCTTGGTGTGTGCCTTGCCTAGTTTCACTTGATACTTTC  
AGGAATTATGTAGAAAAGAAAAGCTCACATGTAATCGATTGGAATCACCAAAGGAATCTAAACAATTA  
TGAGGTGGAATACTTGTGTGACTACAAGGTAGTAAAGGATATGGAATATTATCTTGTAAAATGGAAAGGA  
TGCCAGATTCTACAAACTTTGGGAACCTTTGCAAAATCTGAAGTGCCCGTTACTGCTTCAGCAATTCT  
CTAATGACAAGCATAATTATTTATCTCAGGTAAGAAAGGCAAAGCAATAACTCCAAAAGACAATAACAA  
AACTTTGAAACCTGCCATTGCTGAGTACATTGTGAAGAAGGCTAAACAAAGGATAGCTCTGCAGAGATGG  
CAAGATGAACTCAACAGAAGAAAGAATCATAAAGGAATGATATTTGTTGAAAATACTGTTGATTTAGAGG  
GCCACCTTCAGACTTCTATTACATTAACGAATACAAACCAGCTCCTGGAATCAGCTTAGTCAATGAAGC  
TACCTTTGGTTGTTATGCACAGATTGCTTCTTTCAAAAATGTTGCTGCTGAAGCTGGAGTTCTTTTG  
GCTTATAATAAAAACCAACAAATTAATAATCCACCTGGTACTCCCATCTATGAATGCAACTCAAGGTGTC  
AGTGTGGTCTGATTGTCCCAATAGGATTGTACAAAAGGCACACAGTATTCGCTTTGCATCTTTTCGAAC  
TAGCAATGGACGTGGCTGGGTGTAAGACCCTTGTGAAGATTAAGAATGAGTTTTGCATGGAATAT  
GTTGGAGAGGTAATCACAAGTGAAGAAGCTGAAAGACGAGGACAGTTCTATGACAACAAGGGAATCACGT  
ATCTCTTTGATCTGGACTATGAGTCTGATGAATTCACAGTGGATGCGGCTCGATACGGCAATGTGTCTCA  
TTTTGTGAATCACAGCTGTGACCCAAATCTTCAGGTGTTCAATGTTTTTCATTGATAACCTCGATACTCGT  
CTTCCCGAATAGCATTGTTTTCCACAAGAACCATAAATGCTGGAGAAGAGCTGACTTTTGATTATCAAA  
TGAAAGTTCTGGAGATATCTTCAGATTCTATTGACCACAGCCAGCCAAAAAGAGGGTCAGAACAGT  
ATGTAATGTGGAGCTGTGACTTCAGAGGTTACCTCAAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >RC231216 representing NM\_001193424  
Red=Cloning site Green=Tags(s)

MAAVGAEARGAWCVPLVSLDTLQELCRKEKL TCKSIGITKRNLNNEYVEYL CDYKVVKDMEYLVKWKG  
 WPDSTNTWEPLQNLKCPLLLQQF SNDKHNYLSQVKKGKAITPKDNNKTLKPAIAEYIVKKAKQRIALQRW  
 QDELNRRRNKHKGMIFVENTVDLEGPPSDFYYINEYKPAIGISLVNEATFGCSDTCDFQKCCPAEAGVLL  
 AYNNKQQIKIPPGTPIYECNSRCQCGPDCPNRI VQKGTQYSLCIFRTSNGRGGWVKTLVKIKRMSFVMEY  
 VGEVITSEEAERRGQFYDNKGITYLFDLDYSEDEF TVDAARYGNVSHFVNHSCDPNLQVFNVYIDNLDTR  
 LPRIALFSTR TINAGEELTFDYQMKGSGDISSDSIDHSPAKKRVRTVCKCGAVTCRGYLN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8057\\_h12.zip](https://cdn.origene.com/chromatograms/mk8057_h12.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001193424

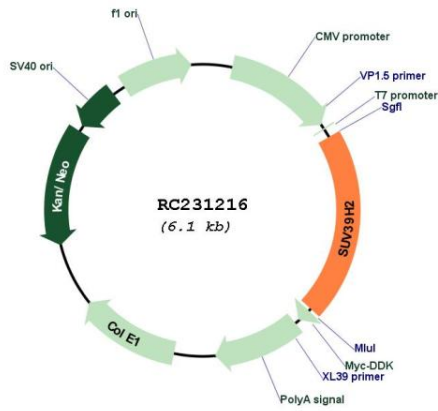
**ORF Size:** 1230 bp

**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](mailto: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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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="#">NM_001193424.2</a>
<b>RefSeq ORF:</b>	1233 bp
<b>Locus ID:</b>	79723
<b>UniProt ID:</b>	<a href="#">Q9H5I1</a>
<b>Cytogenetics:</b>	10p13
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Lysine degradation
<b>MW:</b>	47.1 kDa
<b>Gene Summary:</b>	Histone methyltransferase that specifically trimethylates 'Lys-9' of histone H3 using monomethylated H3 'Lys-9' as substrate. H3 'Lys-9' trimethylation represents a specific tag for epigenetic transcriptional repression by recruiting HP1 (CBX1, CBX3 and/or CBX5) proteins to methylated histones. Mainly functions in heterochromatin regions, thereby playing a central role in the establishment of constitutive heterochromatin at pericentric and telomere regions. H3 'Lys-9' trimethylation is also required to direct DNA methylation at pericentric repeats. SUV39H1 is targeted to histone H3 via its interaction with RB1 and is involved in many processes, such as cell cycle regulation, transcriptional repression and regulation of telomere length. May participate in regulation of higher-order chromatin organization during spermatogenesis. Recruited by the large PER complex to the E-box elements of the circadian target genes such as PER2 itself or PER1, contributes to the conversion of local chromatin to a heterochromatin-like repressive state through H3 'Lys-9' trimethylation.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC231216