

Product datasheet for **SC319503**

SUV39H1 (NM_003173) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SUV39H1 (NM_003173) Human Untagged Clone
Tag:	Tag Free
Symbol:	SUV39H1
Synonyms:	H3-K9-HMTase 1; KMT1A; MG44; SUV39H
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF: >OriGene sequence for NM_003173.2
 CGCGAGGCCGGCTAGGCCGAATGTCGTTAGCCGTGGGGAAAGATGGCGGAAAATTTAAA
 AGGCTGCAGCGTGTGTTGCAAGTCTTCTTGAATCAGCTGCAGGACCTGTGCCGCTGGC
 CAAGCTCTCCTGCCCTGCCCTCGGTATCTTAAGAGGAACCTCTATGACTTTGAAGTCGA
 GTACCTGTGCGATTACAAGAAGATCCGCGAACAGGAATATTACCTGGTGAATGGCGTGG
 ATATCCAGACTCAGAGAGCACCTGGGAGCCACGGCAGAATCTCAAGTGTGTGCGTATCCT
 CAAGCAGTTCCACAAGGACTTAGAAAGGGAGCTGCTCCGGCGGCACCACCGGTCAAAGAC
 CCCCCGGCACCTGGACCCAAGCTTGGCCAACCTACCTGGTGCAGAAGGCCAAGCAGAGGCG
 GGCCTCCGTCGCTGGGAGCAGGAGCTCAATGCCAAGCGCAGCCATCTGGGACGCATCAC
 TGTAGAGAATGAGGTGGACCTGGACGGCCCTCCGCGGGCCTTCGTGTACATCAATGAGTA
 CCGTGTGGTGGAGGGCATCACCTCAACCAGGTGGCTGTGGGCTGCGAGTGCCAGGACTG
 TCTGTGGGCACCCACTGGAGGCTGCTGCCCGGGGCGTCACTGCACAAGTTTGCCTACAA
 TGACCAGGGCCAGGTGCGGCTTCGAGCCGGGCTGCCATCTACGAGTGCAACTCCCCTG
 CCGCTGCGGCTATGACTGCCAAATCGTGTGTACAGAAGGTATCCGATATGACCTCTG
 CATCTTCCGCACGGATGATGGGCGTGGTGGGGCTCCGCACCCTGGAGAAGATTGCAA
 GAACAGCTTCGTATGGAGTACGTGGGAGAGATCATTACCTCAGAGGAGGCAGAGCGGGC
 GGGCCAGATCTACGACCTCAGGGCGCCACCTACCTCTTTGACCTGGACTACGTGGAGGA
 CGTGTACACCGTGGATGCCGCTACTATGGCAACATCTCCCACTTTGTCAACCACAGTTG
 TGACCCCAACCTGCAGGTGTACAACGTCTTCATAGACAACCTTGACGAGCGGCTGCCCG
 CATCGCTTTCTTTGCCACAAGAACCATCCGGGCAGGCGAGGAGCTCACCTTTGATTACAA
 CATGCAAGTGGACCCCGTGGACATGGAGAGCACCCGCATGGACTCCAACCTTTGCCCTGGC
 TGGGCTCCCTGGTCCCCTAAGAAGCGGGTCCGTATTGAATGCAAGTGTGGGACTGAGTC
 CTGCCGCAAATACCTCTTCTAGCCCTTAGAAGTCTGAGGCCAGACTGACTGAGGGGGCT
 GAAGCTACATGCACCTCCCCACTGCTGCCCTCCTGTGCGAGAATGACTGCCAGGGCTCG
 CCTGCCTCCACCTGCCCCACCTGCTCCTACCTGCTCTACGTTACGGGCTGTGGCCGTGG
 TGAGGACCGACTCCAGGAGTCCCCTTTCCCTGTCCCAGCCCCATCTGTGGGTTGCACTTA
 CAAACCCCAACCCACCTCAGAAATAGTTTTTCAACATCAAGACTCTCTGTGTTGGGAT
 TCATGGCCTATTAAGGAGGTCCAAGGGGTGAGTCCAACCCAGCCCCAGAATATATTTGT
 TTTTGCACCTGCTTCTGCCTGGAGATTGAGGGGTCTGCTGCAGGCCTCCTCCCTGCTGCC
 CCAAAGGTATGGGAAGCAACCCAGAGCAGGCAGACATCAGAGGCCAGAGTGCCTAGCC
 CGACATGAAGCTGTTTCCCAACCACAGAACTTTGTAAGTAAAGAAAGGGGTCCC
 TGGGCTACGGGCTGAGGCTGTTTCTGCTCGTGTACAGTGTGGGTAGTGTGGCCCT
 AAGAGCTGTAGGGTCTCTTCTCAGGGTGCATATCTGAGAAGTGGATGCCACATGCCA
 CTGGAAGGGAAGTGGGTGCCATGGGCCACTGAGCAGTGAGAGGAAGGCAGTGCAGAGCT
 GGCCAGCCCTGGAGGTAGGCTGGGACCAAGCTCTGCCTTACAGTGCAGTGAAGTACCT
 AGGGCTCTTGGGAGCTCTGCGGTTGCTAGGGCCCTGACCTGGGGTGTATGACCCTGA
 CACCACTCAGAGCTGGAACCAAGATCTAGATAGTCCGTAGATAGCACTTAGGACAAGAAT
 GTGCATTGATGGGGTGGTGTAGAGTGCCAGGCACTGGGTAGAGCACCTGGTCCACGTGG
 ATTGCTCAGGGAAGCCTTGAAAACACGGAGGTGGATGCCAGGAAAGGGCCCATGTGGC
 AGAAGGCAAAGTACAGGCCAAGAATTGGGGTGGGGGAGATGGCTTCCCCACTATGGGAT
 GACGAGGCGAGAGGGAAGCCCTTGTGCTGCCATTCCCAGACCCAGCCCTTTGTGCTC
 ACCCTGGTTCCACTGGTCTCAAAGTCACTGCCTACAAATGTACAAAAGGCGAAGGTTT
 TGATGGCTGCCTTGTCTTGTCCCCACCCCTGTGAGGACTTCTTAGGAAGTCCTT
 CCTGACTACCTGTGCCAGAGTGCCCTACATGAGACTGTATGCCCTGCTATCAGATGCC
 AGATCTATGTGTCTGTGTGTCCATCCCGCCGACCCCAAGACTAACCTCCAGGCAT
 GGACTGAATCTGGTTCTCCTCTTGTACACCCCTCAACCCTATGCAGCCTGGAGTGGGCAT
 CAATAAATGAACTGTGACTGAAAAAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: Please inquire

ACCN: NM_003173

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_003173.2](#), [NP_003164.1](#)

RefSeq Size: 2745 bp

RefSeq ORF: 1239 bp

Locus ID: 6839

UniProt ID: [O43463](#)

Cytogenetics: Xp11.23

Domains: CHROMO, SET, PreSET, PostSET, Pre-SET

Protein Families: Druggable Genome

Protein Pathways: Lysine degradation

Gene Summary:

This gene encodes an evolutionarily-conserved protein containing an N-terminal chromodomain and a C-terminal SET domain. The encoded protein is a histone methyltransferase that trimethylates lysine 9 of histone H3, which results in transcriptional gene silencing. Loss of function of this gene disrupts heterochromatin formation and may cause chromosome instability. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2013]

Transcript Variant: This variant (2) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation at an alternate start codon, compared to variant 1. The encoded isoform (2) is shorter and has a distinct N-terminus, compared to isoform 1.