

Product datasheet for RC231078L4

OriGene Technologies, Inc.

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SUV39H2 (NM_001193426) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: SUV39H2 (NM_001193426) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: SUV39H2

Synonyms: KMT1B

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

Sgfl-Mlul

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC231078).

Sequence:

1-----

Restriction Sites: Cloning Scheme:



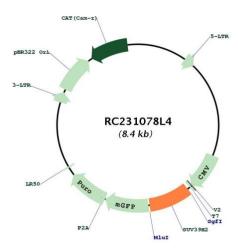


 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.





Plasmid Map:



ACCN: NM_001193426

ORF Size: 690 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: <u>NM 001193426.1, NP 001180355.1</u>

RefSeq ORF: 693 bp **Locus ID:** 79723



SUV39H2 (NM_001193426) Human Tagged Lenti ORF Clone - RC231078L4

UniProt ID: Q9H5I1

Cytogenetics: 10p13

Protein Families: Druggable Genome
Protein Pathways: Lysine degradation

MW: 26.8 kDa

Gene Summary: 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]