

Product datasheet for RC208219

KMT5A (NM_020382) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KMT5A (NM_020382) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KMT5A
Synonyms:	PR-Set7; PR/SET07; SET07; SET8; SETD8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208219 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTAGAGGCAGGAAGATGTCCAAGCCCCGCGCGGTGGAGGCGGCGGGCGGGCGGGCGGTGGCAG
CGACGGCCCCGGGCCGGAGATGGTGGAGCGGAGGGGCCGGGGAGGCCCGCACCGAGGGGAGAACGT
ATTTACCGGGCAGTCAAAGATCTATTCTACATGAGCCGAACAAATGCTCTGGAATGCGTTTCCCCCTT
CAGGAAGAGAAGTACGATTACACATCACGAAGTCAAATGCCAGGGGAAACCATTAGCCGGAATCTACAGGA
AACGAGAAGAGAAAAGAAATGCTGGGAACGCGTACGGAGCGCCATGAAGTCCGAGGAACAGAAGATCAA
AGACGCCAGGAAAGTCCCTGGTACCTTTTCCAAACCAAAAATCTGAAGCAGCAGAACCTCCAAAACCT
CCACCCTCATCTTGTGATTCCACCAATGCAAGCCATCGCCAAGCAAGCCCTGAAAAAGCCCATCAAGGGCA
AACAGGGCCCCGAAAAAAGCTCAAGGAAAAACGCAACAGAATCGCAAACCTTACGGATTCTACCCCTGT
CCGAAGGAGCTCCAGGAAGAGCAAGCCGAGCTGCAGTCTGAAGAAAGGAAAAGAATAGATGAATTGATT
GAAAGTGGGAAGGAAGAAGGAATGAAGATTGACCTCATCGATGGCAAAGGCAGGGGTGTGATTGCCACCA
AGCAGTTCTCCCGGGTGACTTTGTGGTGAATACCACGGGGACCTCATCGAGATCACCGACGCCAAGAA
ACGGGAGGCTCTGTACGCACAGGACCCTTCCACGGGCTGCTACATGTACTATTTTCAGTATCTGAGCAA
ACCTACTGCGTGGATGCAACTAGAGAGACAAATCGCCTAGGAAGACTGATCAATCACAGCAAATGTGGGA
ACTGCCAAACCAAACTGCACGACATCGACGGCGTACGTACCTCATCCTCATCGCCTCCCGAGACATCGC
GGCTGGGAGGAGCTCCTGTATGACTATGGGGACCGCAGCAAGGCTTCCATTGAAGCCCACCCGTGGCTG
AAGCAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >RC208219 protein sequence
Red=Cloning site Green=Tags(s)

MARGRKMSKPRAVEAAAAAATAATAPGPEMVERRGPRPRTDGENVFTGQSKIYSYMSPNKCSGMRFPPL
 QEENSVTHHEVKCQGKPLAGIYRKREEKRNAVRSAMKSEEQKIKDARKGPLVPFPNQKSEAAEPPKT
 PPSSCDSTNAIAKQALKKPIKGGKQAPRKAQGGKTOQNRKLTDFYPVRRSSRKSKAELQSEERKRIDELI
 ESGKEEGMKIDLIDGKGRGVIATKQF SRGDFVVEYHGDLIEITDAKKREALYAQDPSTGCYMYFFQYLSK
 TYCVDATRETNRLGRLINHSKCGNCQTKLHDIDGVRHLILIASRDIAAGEELLYDYGDRSKASIEAHPWL
 KH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6134_d04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_020382

ORF Size: 1056 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_020382.7](#)

RefSeq Size: 2765 bp

RefSeq ORF: 1059 bp

Locus ID: 387893

UniProt ID: [Q9NQR1](#)

Cytogenetics: 12q24.31

Domains: SET

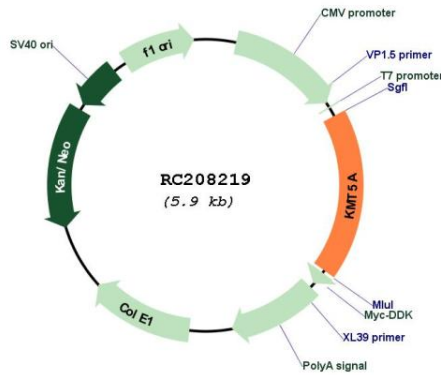
Protein Families: Druggable Genome

Protein Pathways: Lysine degradation

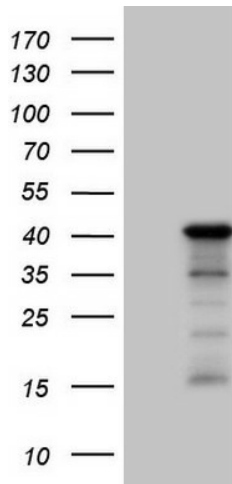
MW: 39.3 kDa

Gene Summary: The protein encoded by this gene is a protein-lysine N-methyltransferase that can monomethylate Lys-20 of histone H4 to effect transcriptional repression of some genes. The encoded protein is required for cell proliferation and plays a role in chromatin condensation. [provided by RefSeq, May 2016]

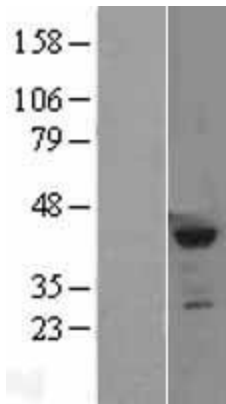
Product images:



Circular map for RC208219



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SETD8 (Cat# RC208219, 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-SETD8 (Cat# [TA808172])(1:2000). Positive lysates [LY402778] (100ug) and [LC402778] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402778]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208219 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).