

## Product datasheet for RC211182

### KDM4C (NM\_015061) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	KDM4C (NM_015061) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KDM4C
Synonyms:	GASC1; JHDM3C; JMJD2C; TDRD14C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC211182 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGAGGTGGCCGAGGTGGAAAGTCTCTGAACCCAGCTGTAAGATAATGACCTTCAGACCCTCCATGGAGGAGTCCGGGAGTTCAACAAATACCTTGATACATGGAGTCTAAAGGAGCCCATCGTCCGGTCTTGC AAAGGTGATTCTCCTAAGGAGTGAAGCAAGACAGTGTATGATGACATTGATAATTTGCTCATTCCAGCACAATTCAGCAGATGGTACAGGGCAGTCAAGACTGTTCACTCAGTACAACATCCAGAAAAAGCGA TGACTGTGAAGGAGTTCAGGCAGCTGGCCAACAGTGGCAATATTGTAAGTCAAGATACTTGGATTACGA AGATTTGGAGCGCAAGTACTGGAAGAACTTAACCTTTGTGGCACCTATCTATGGTGCAGATTAATGGG AGCATATATGATGAGGGTGTGGATGAATGGAACATAGCTCGCCTCAATACAGTCTTGGATGTGGTTGAAG AAGAGTGTGGCATTCTATTGAGGGTGTAAATACCCCATATCTCTATTTGGCATGTGGAAGACCAGTT TGCATGGCACACCGAAGACATGGACCTCTATAGCATTAAATATCTCCACTTTGGAGAGCCCAAGTCTTGG TATGCTATACCTCCGGAGCATGGAAAACGACTTGAAGACTAGCTCAAGGTTTTTCCCAAGCAGCTCCC AAGGGTGTGATGCATTTCTTCGCCACAAGATGACATTGATTTCTCCATCAGTATTGAAGAAATATGGTAT TCCCTTTGACAAGATAACCCAGGAGGCTGGAGAATTCATGATCACTTTCCCATATGGCTACCATGCTGGT TTTAATCATGGTTCAACTGTGCAGAATCTACAAATTTTGCTACTGTCAGATGGATTGACTATGGAAAAG TTGCCAAATTGTCACTTGCAGGAAAGACATGGTGAAGATTTCAATGGATATCTTTGTGAGGAAATTTCA GCCAGACAGATATCAGCTTTGAAAACAAGGAAAGGATATACACCATTGATCACACGAAGCCTACTCCA GCATCCACCCCTGAAGTAAAAGCATGGCTGCAGAGGAGGAGGAAAGTAAAGAAAAGCATCCCGAAGCTTCC AGTGTGCTAGGTCTACCTCTAAAAGGCCTAAGGCTGATGAGGAAGAGGAAGTGTGATGAGAGTGTGAGG GGCAGAGGTCCCTAACCCGACTCAGTACAGATGACCTCAAGGTCAGTAAAAGTCAAGAGCAGCAGTGA AAGCTGAGGAACACAGAAGCATCTTCAGAAGAAGTCACTGCTAGCAGGATGCAGGTGGAGCAGAATT TATCAGATCATATCAAATCTCAGGAAACAGCTGCTTAAGTACATCTGTAACAGAAGACATAAAAATGA GGATGACAAAGCTTATGCATATAGAAGTGTACCTCTATATCCAGTGGAGCTGATGATTCCATTCCATTG



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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC211182 protein sequence  
 Red=Cloning site Green=Tags(s)

MEVAEVESPLNPSCIMTFRPSMEEFREFNKYLAYMESKGAHRAGLAKVIPPKEWKPRQCYDDIDNLLIP  
 APIQQMVTGQSLFTQYNIQKKAMTVKEFRQLANSKGYCTPRYLDYEDLERYWKNLTFVAPIYGADING  
 SIYDEGVDEWNIARLNTVLDVVEEECGISIEGVNTPYL YFGMWKTTFAWHTEDMDLYSINLHFGEPSW  
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 AEGENKTSKSWRHPLSRPPARSPMTLVKQQAPSDEELPEVLSIEEEVEETESWAKPLIHLWQTKSPNFAA  
 EQEYNATVARMKPHCAICTLLMPYHKPDSNEENDARWETKLDEVVTSEGKTKPLIPEMCFIYSEENIEY  
 SPPNAFL EEDGTSLLISCAKCCVRVHASCYGIPSHEICDGLWCARCKRNAWTAECCLCNLRGGALKQTKN  
 NKWAHVMAVAVPEVRF TNVPERTQIDVGRIPLQRLKLCIFCRHRVKRVSGACIQCSYGRCPASFHVTC  
 AHAAGVLM EPDDWPYVVNITCFRHKVNPVSKACEKVISVGQTVITKHNTRYYSRVMVTSQTFYEV  
 MFDDGSFSRDTFPEDIVSRDCLKLGPPAEGEVVQVQKWPDKLYGAKYFGSNI AHMYQVEFEDGSQIAMKR  
 EDIYTLDEELPKRVKARFSTASDMRFEDTFYGADIIQGERKQRVLRSSRFKNEYVADPIYRTFLKSSQK  
 KCQKRQ

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6141\\_e04.zip](https://cdn.origene.com/chromatograms/mk6141_e04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_015061

**ORF Size:** 3168 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\\_015061.6](#)

**RefSeq Size:** 4687 bp

**RefSeq ORF:** 3171 bp

**Locus ID:** 23081

**UniProt ID:** [Q9H3R0](#)

**Cytogenetics:** 9p24.1

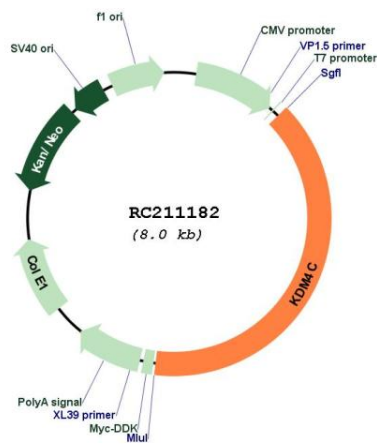
**Domains:** PHD, TUDOR, JmjC, JmjN

**Protein Families:** Druggable Genome, Transcription Factors

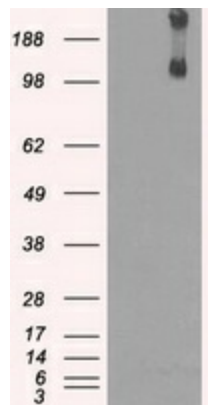
**MW:** 120 kDa

**Gene Summary:** This gene is a member of the Jumonji domain 2 (JMJD2) family. The encoded protein is a trimethylation-specific demethylase, and converts specific trimethylated histone residues to the dimethylated form. This enzymatic action regulates gene expression and chromosome segregation. Chromosomal aberrations and changes in expression of this gene may be found in tumor cells. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2015]

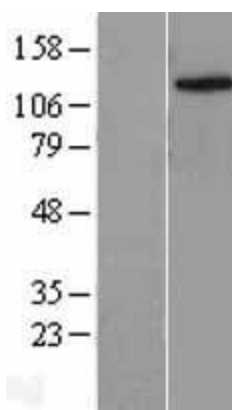
**Product images:**



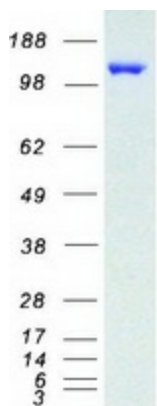
Circular map for RC211182



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY KDM4C (Cat# RC211182, 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-KDM4C(Cat# [TA500567]). Positive lysates [LY402405] (100ug) and [LC402405] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402405]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211182 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KDM4C protein (Cat# [TP311182]). The protein was produced from HEK293T cells transfected with KDM4C cDNA clone (Cat# RC211182) using MegaTran 2.0 (Cat# [TT210002]).