

## Product datasheet for **RC203678**

### **C14orf169 (NM\_024644) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	C14orf169 (NM_024644) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	C14orf169
Synonyms:	C14orf169; hsNO66; JMJD9; MAPJD; NO66; ROX; URLC2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RC203678 representing NM\_024644  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGATGGGCTCCAGGCCAGTGCAGGGCCGTTGAGGCGGGCGGCCGAAGCGCCGGCGCAAGCCCCAGC  
CACACAGCGGGTCGGTCCTGGCCCTGCCCTTGAGGTCCAGGAAGATACGAAAGCAGCTGCGAAGTGTGT  
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CCCGTCGGCGCGCTGGTCCCGCTTCCGCGCCGCCCGCGCGCTGGTGGAGGTGCCCGCCGCGCCGGTC  
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CTGCGACGGCGTGGGGCCGAGGTGGATAACACGGGTGGGAGCCGGCCTGGGACTCCCGCTGCGGGC  
CGTCTTGCCGAGCTGAACCGCATCCCCAGCAGCCGGCGGCGAGCGGCCCGCCTCTTTGAGTGGCTCATC  
GGCCCATGCCGACAGATCACTTTTACCGCGCCTATGGGAGCGCGAGGCGGTGCTGGTGGCGCGGCAAG  
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GTTTCGGCCAGATTTGGACGCCGCTCGCTACATCAACGGACGACGCGAGACCCTGAACCCACCCGGCCGC  
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TTACCTCAGCCCCCTAACTCGCAGGGCTTTGCCCCCACTACGACGACATCGAGGCCTTCGTGCTGCAG  
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TGACTGATAGGGAGAGGGCACTAAGTGTTCACGGCTTCCAATTCGCTGGGAGGCTGGAGAACCTGTAAA  
CGTGGGGGCCAGTTGACAACAGAAACAGAAGTCCATATGCTTCAGGATGGGATAGCTCGGCTGGTGGGT  
GAGGGGGCCATTGTTTCTCTATTACACAGTGGAAAACCTCCCGTGTGTATCATCTGGAAGAACCAAGT  
GCTTGAAATATACCCCAAGCAAGCTGATGCCATGGAACCTGTTGCTTGGTTCTTATCCAGAGTTTGTGAG  
AGTGGGGGACCTGCCCTGTGACAGTGTGGAGGACCAGCTGTCCTTGGCAACCACGTTGTATGATAAGGGG  
CTGCTGCTCACTAAGATGCCTCTAGCCCTAAAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC203678 representing NM\_024644  
Red=Cloning site Green=Tags(s)

```
MDGLQASAGPLRRGRPKRRRKQPQPHSGSVLALPLRSRKIRKQLRSVVSMAALRTQTLPSENSESRVES
TADDLGDALPGGA AVA AVPDAARREPYGHLGPAELLEASPAARSLQTPSARLVPASAPPARLVEVPAAPV
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APMPDPHFYRRLWEREAVLVRDQDHTYYQGLFSTADLDSMLRNEEVQFGQHLDAARYINGRRETLPNGR
ALPAAAWSLYQAGCSLRLLCPQAFSTTVWQFLAVLQEFGSMAGSNVYLTPPNSQGFAPHYDDIEAFVLQ
LEGRKLWRVYRPRVPTTEELALTSSPNFSQDDLGEPLVQTVLEPGDLLYFPRGFIHQAECDGVHSLHLTL
STYQRNTWGFLEAILPLAVQAAMEENVEFRRLPRDFMDYGAQHSDSKDPRRTAFMEKVRVLVARLGH
FAPVDAVADQRAKDFIHDLSLPPVLTDRERALSVMGLPIRWEAGEPVNVGAQLTTEVHMLQDGIARLVG
EGGHLFLYYTVENSRYVHLEEKCLEIYPQQADAMELLLSYPEFVRVGDLPDSDVEDQLSLATTLYDKG
LLLTKMPLALN
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8112\\_f10.zip](https://cdn.origene.com/chromatograms/mk8112_f10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_024644

**ORF Size:** 1923 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\\_024644.5](#)

**RefSeq Size:** 2463 bp

**RefSeq ORF:** 1926 bp

**Locus ID:** 79697

**UniProt ID:** [Q9H6W3](#)

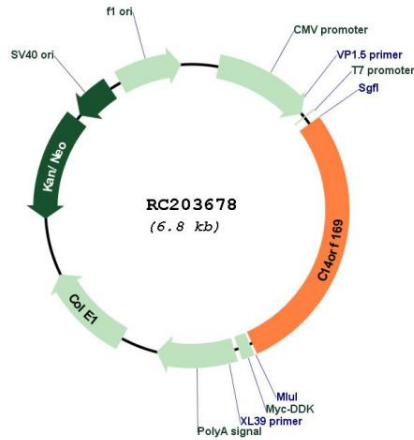
**Cytogenetics:** 14q24.3

**Protein Families:** Druggable Genome

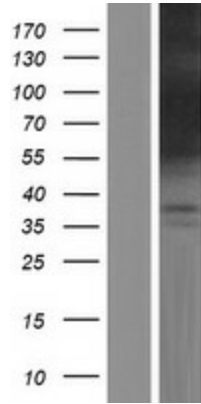
**MW:** 71.1 kDa

**Gene Summary:** Oxygenase that can act as both a histone lysine demethylase and a ribosomal histidine hydroxylase. Specifically demethylates 'Lys-4' (H3K4me) and 'Lys-36' (H3K36me) of histone H3, thereby playing a central role in histone code. Preferentially demethylates trimethylated H3 'Lys-4' (H3K4me3) and monomethylated H3 'Lys-4' (H3K4me1) residues, while it has weaker activity for dimethylated H3 'Lys-36' (H3K36me2). Also catalyzes the hydroxylation of 60S ribosomal protein L8 on 'His-216'. Acts as a regulator of osteoblast differentiation via its interaction with SP7/OSX by demethylating H3K4me and H3K36me, thereby inhibiting SP7/OSX-mediated promoter activation (By similarity). May also play a role in ribosome biogenesis and in the replication or remodeling of certain heterochromatic region. Participates in MYC-induced transcriptional activation.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC203678



Western blot validation of overexpression lysate (Cat# [LY411093]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203678 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).