

## **Product datasheet for RC205064**

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## H4-16 (NM\_175054) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** H4-16 (NM 175054) Human Tagged ORF Clone

Tag: Myc-DDK Symbol: H4-16

**Synonyms:** H4/p; H4C1; H4C2; H4C3; H4C4; H4C5; H4C6; H4C8; H4C9; H4C11; H4C12; H4C13; H4C14;

H4C15; HIST4H4

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >RC205064 representing NM\_175054

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGTCTGGGCGAGGTAAAGGTGGCAAGGGGCTGGGTAAGGGAGGCGCCAAGCGCCACCGGAAGGTGCTGCGGGACATATCCAAGGCATTACAAAGCCGGCGATTCGCCGTCTCGCCCGACGTGGGGGCGTCAAGCGCATTCTGGTCTCATCTACGAGGAGACCCGGGGAGTCCTCAAAGTCTTCCTGGAGAACGTGATCCGTGACGCGGTGACTTACACGGAGCACGCCAAGCGCAAGACCGTCACGGCCATGGATGTGGTGTACGCGCTGAAACGCC

AGGGTCGCACCCTTTATGGTTTCGGCGGT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC205064 representing NM\_175054

Red=Cloning site Green=Tags(s)

MSGRGKGGKGLGKGGAKRHRKVLRDNIQGITKPAIRRLARRGGVKRISGLIYEETRGVLKVFLENVIRDA

VTYTEHAKRKTVTAMDVVYALKRQGRTLYGFGG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mk6439">https://cdn.origene.com/chromatograms/mk6439</a> f08.zip

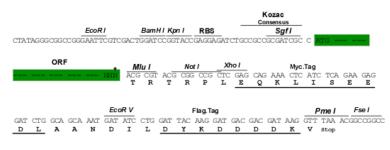
**Restriction Sites:** Sgfl-Mlul





#### **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_175054

ORF Size: 309 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: <u>NM 175054.2</u>, <u>NP 778224.1</u>

RefSeq Size: 412 bp RefSeq ORF: 312 bp



 Locus ID:
 121504

 UniProt ID:
 P62805

 Cytogenetics:
 12p12.3

**Protein Pathways:** Systemic lupus erythematosus

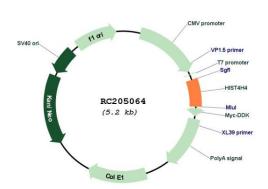
**MW:** 11.2 kDa

**Gene Summary:** Histones are basic nuclear proteins that are responsible for the nucleosome structure of the

chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. This gene is intronless and encodes a replication-dependent histone that is a member of the histone H4 family. Transcripts from this gene lack polyA tails; instead, they

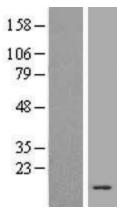
contain a palindromic termination element. [provided by RefSeq, Aug 2015]

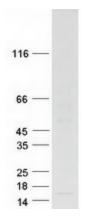
# **Product images:**



Circular map for RC205064







Western blot validation of overexpression lysate (Cat# [LY406378]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205064 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified HIST4H4 protein (Cat# [TP305064]). The protein was produced from HEK293T cells transfected with HIST4H4 cDNA clone (Cat# RC205064) using MegaTran 2.0 (Cat# [TT210002]).