

## **Product datasheet for RC211272**

## OriGene Technologies, Inc.

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## HIST1H2AK (HIST1H2AL) (NM\_003511) Human Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: HIST1H2AK (HIST1H2AL) (NM 003511) Human Tagged ORF Clone

Tag:Myc-DDKSymbol:HIST1H2AK

**Synonyms:** dJ193B12.9; H2A.i; H2A/i; H2AC11; H2AC13; H2AC15; H2AC17; H2AFI; HIST1H2AL

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC211272 ORF sequence

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

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

GCCCAAGAAGACCGAGAGTCACCACAAGGCCAAAGGCAAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAG**GTTTAA** 

**Protein Sequence:** >RC211272 protein sequence

Red=Cloning site Green=Tags(s)

MSGRGKQGGKARAKAKTRSSRAGLQFPVGRVHRLLRKGNYAERVGAGAPVYLAAVLEYLTAEILELAGNA

ARDNKKTRIIPRHLQLAIRNDEELNKLLGKVTIAQGGVLPNIQAVLLPKKTESHHKAKGK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mk6010">https://cdn.origene.com/chromatograms/mk6010</a> d03.zip

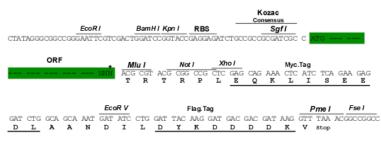
**Restriction Sites:** Sgfl-Mlul





#### **Cloning Scheme:**





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

**ACCN:** NM\_003511

ORF Size: 390 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.

**RefSeg:** NM 003511.3

 RefSeq Size:
 470 bp

 RefSeq ORF:
 393 bp

 Locus ID:
 8332

 UniProt ID:
 P0C0S8



Cytogenetics: 6p22.1

**Domains:** H2A, histone

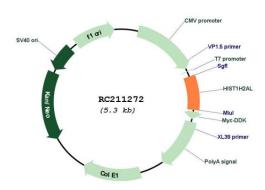
**Protein Pathways:** Systemic lupus erythematosus

**MW:** 14.1 kDa

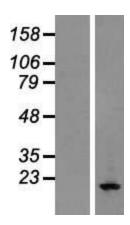
**Gene Summary:** Histones are basic nuclear proteins that are responsible for the nucleosome structure of the

chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and functions in the compaction of chromatin into higher order structures. This gene is intronless and encodes a replication-dependent histone that is a member of the histone H2A family. Transcripts from this gene lack polyA tails but instead contain a palindromic termination element. This gene is found in the small histone gene cluster on chromosome 6p22-p21.3. [provided by RefSeq, Aug 2015]

# **Product images:**



Circular map for RC211272



Western blot validation of overexpression lysate (Cat# [LY418635]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211272 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).