

Product datasheet for RC210691

H2A.Z (H2AFZ) (NM_002106) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: H2A.Z (H2AFZ) (NM_002106) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: H2A.Z
Synonyms: H2A.z; H2A.Z-1; H2A/z; H2AFZ; H2AZ
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC210691 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCTGGCGGTAAGGCTGGAAGGACTCCGAAAGGCCAAGACAAAGCGGTTTCCCGCTCGCAGAGAG
CCGGCTTGCAGTCCCAGTGGCCGTATTCATCGACACCTAAAATCTAGGACGACCAGTCATGGACGTGT
GGGCGCGACTGCCGCTGTGTACAGCGCAGCCATCCTGGAGTACCTCACCGCAGAGGTAAGTGAAGTGA
GAAATGCATCAAAGACTTAAAGGTAAGCGTATTACCCCTCGTCACTTGAACCTGCTATTTCGTGGAG
ATGAAGAATTGGATTCTCTCATCAAGGCTACAATTGCTGGTGGTGTGTCATTCCACACATCCACAATC
TCTGATTGGGAAGAAAGGACAACAGAAGACTGTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC210691 protein sequence
Red=Cloning site Green=Tags(s)
MAGGKAGKDSGKAKTKAVSRSQRAGLQFPVGRHRLKSRRTSHGRVATAAVYSAAILEYLTAEVLELA
GNASKDLKVKRITPRHLQLAIRGDEELDSLKATIAGGGVIPHIHKSLLIGKKGQKTV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6003_c12.zip

Restriction Sites: SgfI-MluI



[View online »](#)

Cloning Scheme:


ACCN: NM_002106

ORF Size: 384 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_002106.4](#)

RefSeq Size: 951 bp

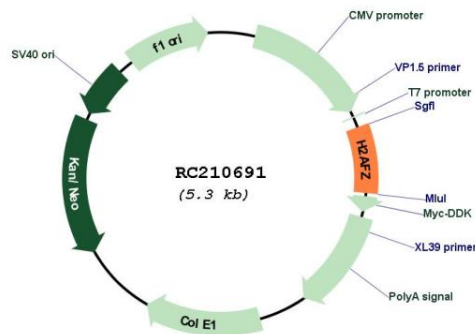
RefSeq ORF: 387 bp

Locus ID: 3015
UniProt ID: [P0C0S5](#)
Cytogenetics: 4q23

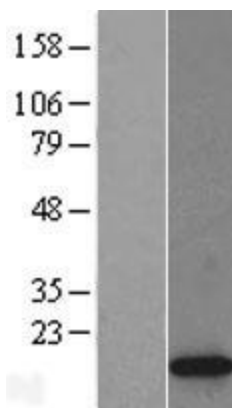
Domains: H2A, histone
Protein Families: Druggable Genome
Protein Pathways: Systemic lupus erythematosus
MW: 13.6 kDa

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 encodes a replication-independent member of the histone H2A family that is distinct from other members of the family. Studies in mice have shown that this particular histone is required for embryonic development and indicate that lack of functional histone H2A leads to embryonic lethality. [provided by RefSeq, Jul 2008]

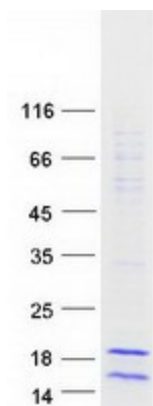
Product images:



Circular map for RC210691



Western blot validation of overexpression lysate (Cat# [LY419524]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210691 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified H2AFZ protein (Cat# [TP310691]). The protein was produced from HEK293T cells transfected with H2AFZ cDNA clone (Cat# RC210691) using MegaTran 2.0 (Cat# [TT210002]).