

Product datasheet for RC214879

H3FA (HIST1H3A) (NM_003529) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: H3FA (HIST1H3A) (NM_003529) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: H3FA
Synonyms: H3/A; H3C2; H3C3; H3C4; H3C6; H3C7; H3C8; H3C10; H3C11; H3C12; H3FA; HIST1H3A
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC214879 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTCGCACTAAGCAAAGTCTCGGAAGTCTACTGGTGGCAAGGCGCCACGCAAACAGTTGGCCACTA
 AGGCAGCCCGCAAAGCGCTCCGGCCACCGCGGCGTGAAAAAGCCCCACCGCTACCGGCCGGGCACCGT
 GGCTCTGCGGAGATCCGCCGTTATCAGAAGTCCACTGAAGTCTTATTCGTAACACTACCTTTCCAGCGC
 CTGGTGCAGGAGATTGCGCAGGACTTTAAACAGACCTGCGTTTCCAGAGCTCCGCTGTGATGGCTCTGC
 AGGAGGCGTGCGAGGCCTACTTGGTAGGGCTATTTGAGGACACTAACCTGTGCGCCATCCACGCCAAGCG
 CGTCACTATCATGCCCAAGGACATCCAGCTCGCCCGCCGATCCGCGGAGAGAGGGCG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC214879 protein sequence
 Red=Cloning site Green=Tags(s)
 MARTKQTARKSTGGKAPRKQLATKAARKSAPATGGVKKPHRYRPGTVALREIRRYQKSTELLIRKLPFQR
 LVREIAQDFKTLRFQSSAVMALQEACEAYLVGLFEDTNLCAIHAKRVTIMPKDIQLARRIRGERA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6455_b09.zip

Restriction Sites: SgfI-MluI



[View online »](#)

Cloning Scheme:

ACCN:

NM_003529

ORF Size:

408 bp

OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_003529.3](#)

RefSeq Size: 469 bp

RefSeq ORF: 411 bp

Locus ID: 8350

UniProt ID: [P68431](#)

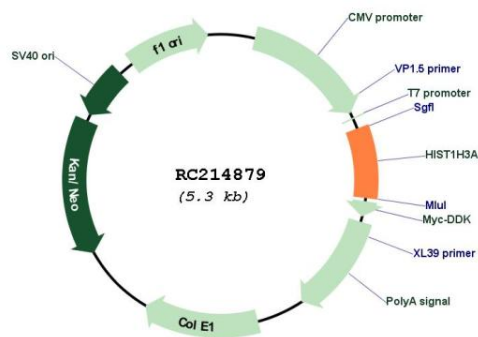
Cytogenetics: 6p22.2

Protein Pathways: Systemic lupus erythematosus

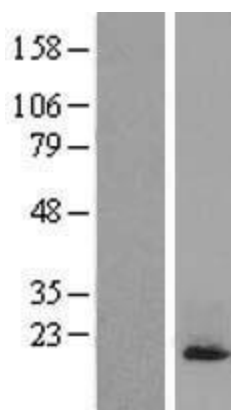
MW: 15.4 kDa

Gene Summary: Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped around a nucleosome, an 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 H3 family. Transcripts from this gene lack polyA tails; instead, they contain a palindromic termination element. This gene is found in the large histone gene cluster on chromosome 6p22-p21.3. [provided by RefSeq, Aug 2015]

Product images:



Circular map for RC214879



Western blot validation of overexpression lysate (Cat# [LY418617]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214879 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).