

Product datasheet for RC214442

H2BC7 (NM_003522) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: H2BC7 (NM_003522) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: H2BC7
Synonyms: H2B/g; H2BC4; H2BC6; H2BC8; H2BC10; H2BFG; HIST1H2BF
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC214442 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCTGAACCTGCTAAGTCCGCTCCTGCTCCAAAAAGGGCTCCAAAAAGGCGGTACCAAGGCGCAGA
 AGAAGGATGGTAAGAAGCGCAAGCGTAGCCGCAAGGAGAGCTATTCGTGTACGTGTACAAGGTGCTAAA
 GCAGGTCCACCCGACCCGGCATCTCATCCAAGGCCATGGGCATCATGAACTCCTTCGTCACGATATC
 TTCGAGCGCATCGCTGGCGAGGCTTCCCGCTGGCGCATTACAACAAGCGCTCCACCATCACCTCCAGGG
 AGATCCAGACGGCCGTACGCCTGCTGCTGCCCGGGAGCTGGCTAAGCACGCCGTGTCAGAGGGCACCAA
 GGCCGTCACCAAGTACACCAGCTCTAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC214442 protein sequence
 Red=Cloning site Green=Tags(s)
 MPEPAKSAPAPKKGSKKAVTKAQKKGKRRSRKESYSVYVYKVLKQVHPDTGISSKAMGIMNSFVNDI
 FERIAGEASRLAHYNKRSTITSREIQTAVRLLLPGELAKHAVSEGTKAVTKYTSSK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6451_d06.zip

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_003522

ORF Size: 378 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_003522.4](#)

RefSeq Size: 430 bp

RefSeq ORF: 381 bp

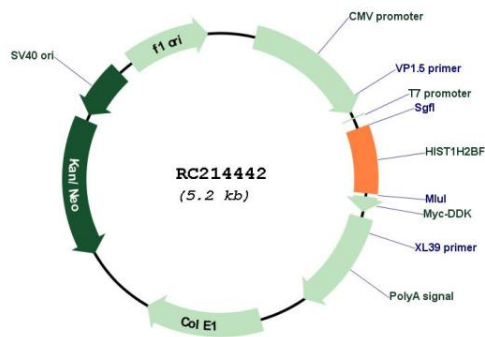
Locus ID: 8343

UniProt ID: [P62807](#)

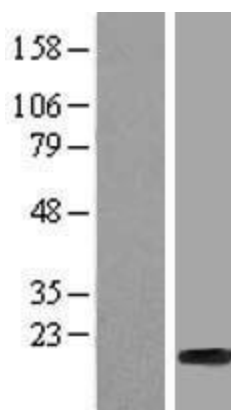
Cytogenetics: 6p22.2
Domains: H2B, histone
Protein Pathways: Systemic lupus erythematosus
MW: 13.9 kDa

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 H2B family. The protein has antibacterial and antifungal antimicrobial activity. Transcripts from this gene lack polyA tails but instead contain a palindromic termination element. This gene is found in the large histone gene cluster on chromosome 6. [provided by RefSeq, Aug 2015]

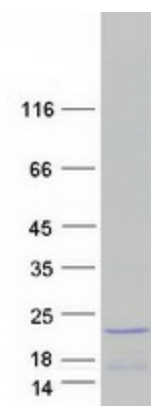
Product images:



Circular map for RC214442



Western blot validation of overexpression lysate (Cat# [LY418610]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214442 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified H2BC7 protein (Cat# [TP314442]). The protein was produced from HEK293T cells transfected with H2BC7 cDNA clone (Cat# RC214442) using MegaTran 2.0 (Cat# [TT210002]).