

## Product datasheet for RC215946

### H2BC1 (NM\_170610) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	H2BC1 (NM_170610) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	H2BC1
Synonyms:	bA317E16.3; H2BFU; HIST1H2BA; hTSH2B; STBP; TH2B; TSH2B; TSH2B.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215946 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)  TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC  ATGCCGGAGGTGTCATCTAAAGGTGCTACCATTCCAAGAAGGGCTTTAAGAAAGCTGTCGTTAAGACCCAGAAAAAGGAAGGCAAAAAGCGCAAGAGGACCCGTAAGGAGAGTTATTCTATTTACATTTACAAAGTGCTAAAGCAGTCCATCCGGACTGGCATCTCTCGAAAGCTATGAGCATTGAATTCTTTGTCCTGATATCTTTGAGCGTATAGCGAGCGAGGCATCACGTTGGCTCACTACAGCAAGCGCTCCACCATTTCTCCAAGAGATTGAGAGCAGTGCCTTGCTACTGCCGGGAGAGCTGGCTAACATGCTGTGTCTGAGGGCACCAAGGCTGCTACTAAGTACACCAGCTCCAAA  ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA  >RC215946 protein sequence Red=Cloning site Green=Tags(s)  MPEVSSKGATISKKGFKKAVVKTQKKEGKRRKRTRKESYSIYIYKVLKQVHPDTGISSKAMSIMNSFVTDIFERIASEASRLAHYSKRSTISSREIQTAVRLLLPGELAKHAVSEGTKAVTKYTSSK  TRTRPLEQKLISEEDLAANDILDYKDDDDKV  Chromatograms: <a href="https://cdn.origene.com/chromatograms/mk6455_c04.zip">https://cdn.origene.com/chromatograms/mk6455_c04.zip</a> Restriction Sites: SgfI-MluI



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**Cloning Scheme:**


**ACCN:** NM\_170610

**ORF Size:** 381 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\\_170610.3](#)

**RefSeq Size:** 437 bp

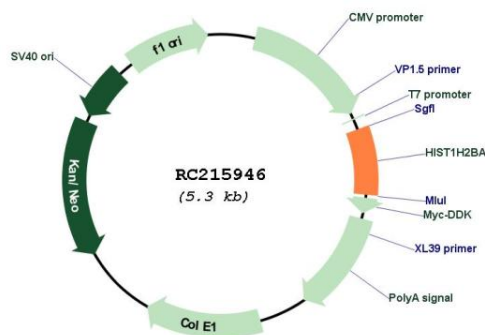
**RefSeq ORF:** 384 bp

**Locus ID:** 255626  
**UniProt ID:** [Q96A08](#)  
**Cytogenetics:** 6p22.2

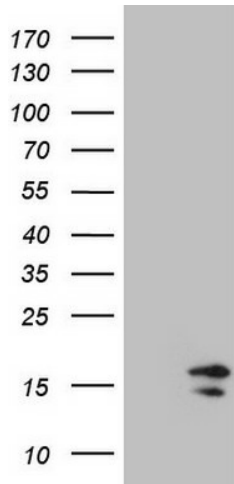
**Protein Pathways:** Systemic lupus erythematosus  
**MW:** 14.2 kDa

**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 testis/sperm-specific member of the histone H2B family. Transcripts from this gene contain a palindromic termination element. [provided by RefSeq, Aug 2015]

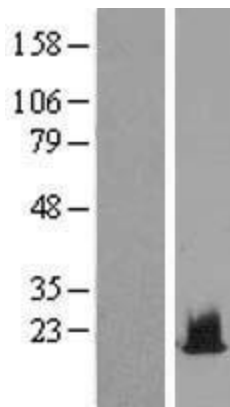
**Product images:**



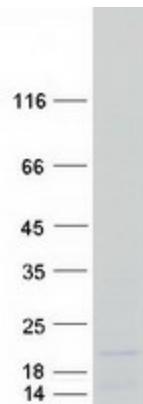
Circular map for RC215946



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HIST1H2BA (Cat# RC215946, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-HIST1H2BA (Cat# [TA808271])(1:2000). Positive lysates [LY406917] (100ug) and [LC406917] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY406917]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215946 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HIST1H2BA protein (Cat# [TP315946]). The protein was produced from HEK293T cells transfected with HIST1H2BA cDNA clone (Cat# RC215946) using MegaTran 2.0 (Cat# [TT210002]).