

## Product datasheet for **SC117927**

### **H2BC21 (NM\_003528) Human Untagged Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	H2BC21 (NM_003528) Human Untagged Clone
Tag:	Tag Free
Symbol:	H2BC21
Synonyms:	GL105; H2B; H2B.1; H2BE; H2BFQ; H2BGL105; H2BQ; HIST2H2BE
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC117927 sequence for NM_003528 edited (data generated by NextGen Sequencing) ATGCCTGAACCGCAAAATCCGCTCCGGCCCCTAAAAAGGGCTCCAAGAAAGCCGTCACC AAAGCCCAGAAGAAAGACGGCAAGAAGCGCAAGCGCAGCCGCAAAGAGAGCTACTCCATC TACGTGTACAAGGTGCTGAAGCAGGTCCACCCGACACCGGCATCTCGTCCAAGGCCATG GGCATCATGAACTCCTTCGTCAACGACATCTTCGAGCGCATCGCGGGAGAGGCTTCCCGC CTGGCGCACTACAACAAGCGCTCCACCATCACATCCC GCGAGATCCAGACGGCCGTGCGC CTGCTGCTGCCCGGCGAGCTGGCCAAGCAGCCGTGTCCGAGGGCACCAAGGCGGTCAACC AAGTACACCAGCTCCAAGTGA

Clone variation with respect to NM\_003528.2



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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_003528 unedited  
 AAGTTGGATTTGTAACCGACTTACTGATAGGGCGGCCGCAATTCGCACGAGGCGCGTT  
 TGTAAGTGTGTTTACCATGCCTGAACCGGCAAAATCCGCTCCGGCCCTAAAAGGGCTCC  
 AAGAAAGCCGTACCAAAGCCCAGAAGAAAGACGGCAAGAAGCGCAAGCGCAGCCGCAAA  
 GAGAGTACTCCATCTACGTGTACAAGGTGCTGAAGCAGGTCCACCCGACACCGGCATC  
 TCGTCCAAGGCCATGGGCATCATGAATCCTTCGTCAACGACATCTTCGAGCGCATCGCG  
 GGAGAGGCTTCCGCTGGCGCACTACAACAAGCGCTCCACCATCACATCCCGCGAGATC  
 CAGACGGCCGTGCGCCTGCTGCTGCCCGCGAGCTGGCCAAGCACGCGGTGTCGAGGGC  
 ACCAAGGCGGTACCAAGTACACCAGCTCCAAGTGAAGTCCCTGCCGGGACCTGGCGCTCG  
 CTCGCTCGAGTCGCCGGCTGCTTGAATCCTTTCAGAGCCACCCACCTAATC  
 ACTAGAAAAGAGCTTGTTCACCTTATCCCTTAGTTTCTTTTCATAAAGTAAGTTATTTTA  
 GTGTGAAGGTCATGGAAATGGCATACGTAGCTTTTTAACTATTTGGAATCGAGGTCCC  
 CAGTGCCTCATTGGATTTGCTTTTGAATCTAGAGCGTGTCTTACTCATTGTGCTGCTTA  
 GCCTTCCCAGGAGTCGGTTCGAATTAGGCTGTTGGGAATCCGCCTTTTACCCGCCNC  
 ACTCCCGCCACACGCGCCTGGTGGCTCCTTGGGTCTGTTTCATTCTAAACGAAGTGGC  
 TGAGTTCCGGTGTCAATTTAGAGACTNCANGACACAATTCAGCCCGGGTCCGCANACAC  
 TCGTA

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_003528 unedited  
 CCGCGGGCGCAATCTANAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAAATTAATTG  
 GTAACCTTTATTAATAACAATAGCATCTATACACATTTGGAAAACACACATGGTAGGAGAC  
 AGTTAAGATCTATTCAGTCTGTGATAATGTCTAGAGCTCATTGGATTCAAAACCCT  
 GCCATCAGCTCCAAAAGCCCTTAGCCAAAACAGCTGAATCACTCATCAAACCATCAGTG  
 TCTTCTCGGCAGAAATCAAGGGTTGGACAGAAAGAGTAAATATTCTGCACCTCCAAAA  
 TAAAATAAAATGCAATTGCTCTGCATCTGAGAATACAAGGGTGGACAGTATGAGCTGCA  
 TGACTGTGAACCAATGAGGCTTCTCTTGGCCTCATTGTAAAAAGGAGATTAACCTGTA  
 GTCCCGCCTATATTGCATGGCCTCCAGAAAAGCAAATGAGGTGGTAAGTGTAAATAAAA  
 GCTCCTCTCCTTAAGAGGGGAACACCATGAGGGGAGAGTAAGAAAAGGAGAAGGAAAAG  
 GCTCTTCCAGTGACCAACACGCTGAATTTGATGAAAATCCATAAGAGGTTATGCTAAAC  
 TGAGAAGCATAAGGGTGGATCTACCATTGCCACCTCCTCTTTGTAGCAAAAAAATCTTA  
 ACACGGCCCCCTCCAGCTGTTGCACTGAGGTGACTAAGGATACATTTTGAGGAAGTGC  
 TCCAAGAACATTTNCATTTTCACTGTGCCNTCACATACATCTAATGGAAATGAACAGCAC  
 CCTTCATCCATCCACGGAAGCGATTAAGAAAAGGGTGGGATGGNAAAAATTACCCAACAA  
 TATTAGATCAATACGTAGTATTTAAAGTGTCCATATGTGCCAGCTGANAATGCCGGNAA  
 ACCACACTANCCGGTCTGTGAGGGGCTGAAAATACCATAAACAGAAA

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_003528

**Insert Size:**

2380 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](mailto: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](#)

**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\\_003528.2](#), [NP\\_003519.1](#)

**RefSeq Size:** 2223 bp

**RefSeq ORF:** 381 bp

**Locus ID:** 8349

**UniProt ID:** [Q16778](#)

**Cytogenetics:** 1q21.2

**Domains:** H2B, histone

**Protein Pathways:** Systemic lupus erythematosus

**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 encodes a replication-dependent histone that is a member of the histone H2B family, and generates two transcripts through the use of the conserved stem-loop termination motif, and the polyA addition motif. The protein has antibacterial and antifungal antimicrobial activity. [provided by RefSeq, Aug 2015]