

## Product datasheet for **SC115632**

### HP1 gamma (CBX3) (NM\_007276) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HP1 gamma (CBX3) (NM_007276) Human Untagged Clone
Tag:	Tag Free
Symbol:	HP1 gamma
Synonyms:	HECH; HP1-GAMMA; HP1Hs-gamma
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_007276, the custom clone sequence may differ by one or more nucleotides

```
ATGGCCTCCAACAAAACACTACATTGCAAAAAATGGGAAAAAACAGAATGGAAAGAGTAAAAAAGTTGAAG
AGGCAGAGCCTGAAGAATTTGTCGTGGAAAAAGTACTAGATCGACGTGTAGTGAATGGGAAAGTGAATA
TTTCCTGAAGTGAAGGGATTTACAGATGCTGACAATACTTGGGAACCTGAAGAAAATTTAGATTGTCCA
GAATTGATTGAAGCGTTTCTTAACCTCTCAGAAAGCTGGCAAAGAAAAAGATGGTACAAAAAGAAAATCTT
TATCTGACAGTGAATCTGATGACAGCAAATCAAAGAAGAAAAGAGATGCTGCTGACAAACCAAGAGGATT
TGCCAGAGGTCTTGATCCTGAAAGAATAATTGGTGCCACAGACAGCAGTGGAGAATTGATGTTTCTCATG
AAATGGAAAGATTGAGTGGCAGACTTGGTGTGGCGAAAGAGGCAAATATGAAGTGCCTCAAATTG
TAATTGCTTTTTATGAAGAGAGACTAAGTGGCATTCTTGTCCAGAAGATGAAGCTCAATAA
```



[View online »](#)

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_007276 unedited  
 GTGTACACCTTTTGTATACGACTCACTATAGCGGCCGCGAATCGCACGAGGGCGGAGGGC  
 CCGAGACGCTGCAGACCCGCGACCCGGAGCAGCTCGGAGGCGGTGAATAATAGCTCTTCA  
 AGTCTGCAATAAAAAAGGCTCCAACAAAACACTACATTGCAAAAAATGGGAAAAAACAGA  
 ATGGAAAGAGTAAAAAGTTGAAGAGGCAGAGCCTGAAGAATTTGTCGTGGAAAAAGTAC  
 TAGATCGACGTGTAGTGAATGGGAAAGTGAATATTTCTGAAGTGAAGGGATTACAG  
 ATGCTGACAATACTTGGGAACCTGAAGAAAATTTAGATTGTCCAGAATTGATTGAAGCGT  
 TTCTTAACCTCTCAGAAAGCTGGCAAAGAAAAGATGGTACAAAAAGAAAATCTTTATCTG  
 ACAGTGAATCTGATGACAGCAAATCAAAGAAGAAAAGAGATGCTGCTGACAAACCAAGAG  
 GATTTGCCAGAGGTCTTGATCCTGAAAGAATAATTGGTCCACAGACAGCAGTGGAGAAT  
 TGATGTTTCTCATGAAATGGAAAGATTCAGATGAGGCAGACTTGGTGTGGCGAAAGAGG  
 CAAATATGAAGTGCCTCAAATTGTAATTGCTTTTTATGAAGAGAGACTAACTTGGCATT  
 CTTGTCCAGAAGATGAAGCTCAATAATTGNTCACATTGNTCTTTATATATATTTATATA  
 TATATATATAAAAATTGGCTCTTAGATTTTGATTTACTAGTGTGACAAAATACTACATNC  
 CTATGAAAATCAAGTTTGATATGTTTGTGTTTGAAGTANCGCTGNAAGATTGTNTGGGG  
 TTTTTTGCATCCATAGCACTGGTTACTTTGAACCAATAAATAAAGCCTTCTGTAGNTGC  
 TCCCTTCATCG

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_007276 unedited  
 GACCGCGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTGCATAAAGGAATATA  
 AACTATTTATTAACCACTGTTCCACAGTATTTACAATAAAGTAAACAATATACAGTTGGA  
 TAACATTTTGATTACTACAAAGTTGTTCTTCTGGCTTTTGTGTAACCAGTAAAGCAAAC  
 TCAAGATTGAGCCTCCATGTAATGAATTGGGGTAAAGAAAAACATGCAGGTCAATAGGT  
 TAGGTTACAAAAGTTGTTCCACACATTTATGACAGCAGGTCTAAACTGCCAACACCTCT  
 AACCATCTGATTAGGTTTCTATGAGCCAAGTCTTACATATTCATTTCATCATGACCTTTT  
 AGTCAATGTAGCAACAGGGATTCCAACATTTTGCTAAGGAATGGCCCGCTAGGGAAACTT  
 TTAAATGTTCAATTAACCTAGTTTTGTTTAGCTAGTTAAAACACACTAGCATTTGTCTAG  
 TTTCTCATCTGGATGAGGAAACCTGCTGTGATGGCAGTGATAAAATTTTCTTTTAGG  
 AATTTTGCAAATAAACCACTGCAATTATAGACACTTTAAAATTTCAATTTAAATTGTC  
 CTATCTAGAATTACTTATTTCACTTGAATGTATGGTTTCAGGAAAATTTCAATTTAAC  
 TTGAAGGGATTATCTTATTTTCTTGAATAATGGCATCTCAGAAACATGGGTTTACC  
 TGTGATTTTTTTGTTGGGTGAATGCTTAAAAACAAAAAAATTACATATGCATTTTATG  
 GATACACACACACACACACACACACACACACAAAAACACGTAATAAATCTAGAATG  
 GTCCTTTAGCTCATGAGAACACCAGTTTACTGAGTATGACTATGGACTTTTCCCAAAAT  
 TAAAAAGCT

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_007276

**Insert Size:**

1910 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\\_007276.3](#), [NP\\_009207.2](#)

**RefSeq Size:** 1837 bp

**RefSeq ORF:** 552 bp

**Locus ID:** 11335

**UniProt ID:** [Q13185](#)

**Cytogenetics:** 7p15.2

**Domains:** CHROMO

**Protein Families:** Druggable Genome, Transcription Factors

**Gene Summary:**

At the nuclear envelope, the nuclear lamina and heterochromatin are adjacent to the inner nuclear membrane. The protein encoded by this gene binds DNA and is a component of heterochromatin. This protein also can bind lamin B receptor, an integral membrane protein found in the inner nuclear membrane. The dual binding functions of the encoded protein may explain the association of heterochromatin with the inner nuclear membrane. This protein binds histone H3 tails methylated at Lys-9 sites. This protein is also recruited to sites of ultraviolet-induced DNA damage and double-strand breaks. Two transcript variants encoding the same protein but differing in the 5' UTR, have been found for this gene. [provided by RefSeq, Mar 2011]

Transcript Variant: This variant (1) contains an alternate 5' exon but encodes the same protein as transcript variant 2.