

Product datasheet for **SC112257**

PHF1 (NM_024165) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PHF1 (NM_024165) Human Untagged Clone
Tag:	Tag Free
Symbol:	PHF1
Synonyms:	hPHF1; MTF2L2; PCL1; PHF2; TDRD19C
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC112257 sequence for NM_024165 edited (data generated by NextGen Sequencing)

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ATGGCGCAGCCCCCGGCTGAGCCGCTCTGGTGCCTCCTCACTTTGGGACCCAGCTTCT
CCTGCTCCACCTCTGGCCCCAGGCCTCGGCTTTGGGAGGGTCAAGATGTGCTGGCCAGA
TGGACTGATGGGCTGCTATACTTGGGTACCATCAAAAAGTGGACAGTGTAGGGAGGTG
TGTCTGGTCCAGTTTGAGGATGATTCGCAGTTTCTGGTTCTATGGAAGACATTAGCCCT
GCTGCCCTCCCTGGAGAGGAACCTCTGTTGTGTCTGTCGCTCTGAGACTGTGGTCCCT
GGGAACCGGCTGGTCAGCTGTGAGAAAGTGTGCCATGCTTATCACCAGGACTGCCATGTT
CCCAGGGCTCCAGCCCTGGAGAGGGAGAGGGCACATCCTGGGTATGCCGCCAGTGTGTC
TTTGCGATCGCCACCAAGAGGGGAGGTGCCCTGAAGAAGGGCCCTATGCCGGGCCATG
CTGGGTATGAAGCTTTCTCTGCCATATGGACTGAAGGGGCTGGACTGGGATGCTGGACAT
CTGAGCAACCGACAGCAGAGTTACTGTTACTGTGGTGGCCCTGGGGAGTGGAACTGAAA
ATGCTGCAGTGCCGGAGCTGCCTGCAGTGGTCCATGAGGCCTGCACCCAGTGTCTGAGC
AAGCCCCCTCTATGGGACAGGTTCTATGAATTTGAATGCTGTGTGTGTCGCGGGGGC
CCTGAGAAAGTCCGGAGACTACAGCTTCGCTGGGTGGATGTGGCCATCTTGCTCTGAT
CACCTCAGTGTTGCTGTAAAGAAGAAACTTTGATTTTGATCGTGAGATCCTCCCTTC
ACTTCTGAGAATTGGGACAGTTTCTCCTGGGGAGCTTTCAGACACCCCAAAGGAGAA
CGTTCTTCCAAGCTCCTCTCTGCTTTAACAGCCACAAGGACCGTTTCATTTAGGGAGA
GAGATTAAGAAGAGGAAATGTTTGGTCTCCATGCTCGGATGCCCTCCCTGTGGAG
CCCCCTACTGGAGATGGAGCACTACCAGCTTCCCTTCAGGGCAGGGCCCTGGGGAGGG
GTCTCACGTCCCCTGGGAAGCGCCGGAGGCCAGAGCCCTGAGGAGGAGGCAG
AAGGGAAAGTGGAGGAGCTGGGGCCACCCTCAGCAGTGCGAATCAGCCGAGCCCCAG
GAGCAGAGGGGAGCGGCTCATCTGCAGAGGGCACTGCAGGCCCTCAGTGTCTCCACCATCC
CCAGCCCTAACCAAGAGTTACCAGGGCAGCAGCGGCTACAACCTCCGGCCACAGATGCC
CGCTGCCTGCCAGCAGCCCATCCGGATGTTTGTCTTCCACCTTCTGCCAGCACC
GCAGGGACCTCTGGGACAGTGGACCCCCAGACAGGTCACCCCTGGAACCTCACATTGGT
TTCCCCACAGACATCCCTAAAAGTGCCCCCACTCGATGACTGCCTCATCTTCTCAGTT
TCATCCCCATCCCAGGCTTCTTAGACGCTCAGCACCCTTCTCCCCTGTGCCGTAGT
TTGTCTCCTGGGACTGGGGAGGAGTCCGAGGTGGGGTTGGTTACCTGTCCCAGGGGAC
CCTGTCCGGGTCCTTGTCTCGGAGAGTACGGCTGATGGCTCTGTGCAGTACCTGGTTGAG
TGGGGAGGAGGGGCATCTTCTGA
    
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Clone variation with respect to NM_024165.2

5' Read Nucleotide Sequence: >OriGene 5' read for NM_024165 unedited

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AAACGTCTTCATTTGTATACGACTCACTATAGGGCGGCCGGAATTCGCACGAGGGCTGC
TGCGTCATACGCCCCAAAGCCCGGGACGGAGGGGCTGGGCTGGGACCCCCGGCCT
CCGCCTGCACGCCCCACGCCCGGACGTGCCCTCTCCGCGGGGGACTCGCCTAGGT
CTCCTACGTCTGCCCTGCCCGGCTCCCGCGGCCCCAGCTGTCACCGGCCCCCCAGGA
TGCAATGGCGCAGCCCCCGGCTGAGCCGCTCTGGTGCCTCCTCACTTTGGGACCCAGC
TTCTCCTGCTCCACCTCTGGCCCCAGGCTCGGCTTTGGGAGGGTCAAGATGTGCTGGC
CAGATGGACTGATGGGCTGCTATACTTGGGTACCATCAAAAAGTGGACAGTGTAGGGA
GGTGTGTCTGGTCCAGTTTGAGGATGATTCGCAGTTTCTGGTTCTATGGAAGACATTAG
CCCTGCTGCCCTCCCTGGAGAGGAACCTCTGTTGTGTCTGTCGCTCTGAGACTGTGGT
CCCTGGGAACCGGCTGGTCAGCTGTGAGAAAGTGTGCCATGCTTATCACCAGGACTGCCA
TGTTCACAGGGCTCCACCCCTTGAAGAGGGAGAGGGCACATCCTGGGGATGCCGCCAG
TGTGTCTTTGCGATCGCCACCCAGAGGGGAGTGCCTGNAGAAGGGCCCTATGCCCGG
GCCATGCTGGGTATGAAAGCTTTCTCTGCCATATGGACTGAAAGGGCTGGACTGGGATGC
TTGACATCTGAGCAACCGACAGCAGAGTTACTGTTACTGGGGTGGCCCTGGGGAGTGGGA
CCTGAAAAGCTGCAATGCCCGGACTGCCTGCANTGGTTTCATGGAGCCCTGACCCCATGG
CC
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_024165 unedited NAAGCTGCATCATGGTACTCTGCCGCCTCNANGATCGAGTTT TTTTTTTTTTTGTTTATTTCTCTTTATTTCAATCATACAGAGTCCGGGATCCCTTATCAT CCTCCCTCCTCAGTCTCTGCCCCAGGGGTTAAATAATTTTAAAAAATTTTAAAAAGCT GTAACAAAATAACCTCAAAGGAAATGGGAAGGATGGGAGGGTCAAGAATCATGAAGGAG GGTAGAGAAGAGGGCCTTTCCCACTCCCACTCTTGGATTCCAGCCTGGGCAGTAGGG AGAATACCCCTATCTCTCCAGGTACATCCCACTGTAGTGAAGTCAAAGTCAAGGT ATGAAAGTGCCGGTGTGTGAATGGGGAGCTGGGCAAAAGCAGGCTGTTCAAAAATGC CCCCTCTCCCACTCAACCAGGTACTGGACAGGCCATCAAGCCGTACTCTCCGAGCAA GGACCCGGACAGGGTCCCTCGGGACAGGTAACCAACCCACCTCGGACTCTCCCCAG TCCCAGGAGACAACTCGGGCCAAGGGGATTATTGGGGTGCCTGAGCGTCTAGGAAGAC CTGGGGATGGGGATGAACTCGAGAAGATGAGGCAGTCATCGAGTGGGGGCACCTTTAA GGATGTCTGTGGGAAACCAATGTGAAGTTCCAGGGGTGACCTGTCTGGGGTCCACTG TTCCCAGAGTCCCTGCGGTGCTTGCAAAAAGGTGGGAAGGACCAACATCCGGATGGGC CTGCTTGCAAGGCACGGCATTGTGGGCCCGAAATTGTACCCTGCTGCCCCGGTAA CTCTGGGTAGGCTGGGGATTGTG
Restriction Sites:	NotI-NotI
ACCN:	NM_024165
Insert Size:	2350 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none"> 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:	<u>NM_024165.1</u> , <u>NP_077084.1</u>
RefSeq Size:	2260 bp
RefSeq ORF:	1704 bp
Locus ID:	5252
UniProt ID:	<u>O43189</u>
Cytogenetics:	6p21.32
Domains:	PHD, TUDOR
Protein Families:	Druggable Genome, Transcription Factors

Gene Summary:

This gene encodes a Polycomb group protein. The protein is a component of a histone H3 lysine-27 (H3K27)-specific methyltransferase complex, and functions in transcriptional repression of homeotic genes. The protein is also recruited to double-strand breaks, and reduced protein levels results in X-ray sensitivity and increased homologous recombination. Multiple transcript variants encoding different isoforms have been found for this gene.

[provided by RefSeq, May 2009]

Transcript Variant: This variant (2), also called variant PHF2, represents the longest transcript and encodes the longer isoform (b).