

## Product datasheet for **RC202906**

### PHF1 (NM\_024165) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PHF1 (NM_024165) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PHF1
Synonyms:	hPHF1; MTF2L2; PCL1; PHF2; TDRD19C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>RC202906 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC  
GCC

ATGGCGCAGCCCCCGGCTGAGCCGCTCTGGTGCCCTCTCACTTTGGGACCCAGCTTCTCTGCTCCCA  
CCTCTGGCCCCAGGCCTCGGCTTTGGGAGGGTCAAGATGTGCTGGCCAGATGGACTGATGGGCTGCTATA  
CTTGGGTACCATCAAAAAGGTGGACAGTCTAGGGAGGTGTGTCTGGTCCAGTTTGAGGATGATTCGCAG  
TTTCTGGTTCTATGAAAAGACATTAGCCCTGCTGCCCTCCCTGGAGAGGAACTCCTCTGTGTGTCTGTC  
GCTCTGAGACTGTGGTCCCTGGGAACCGGCTGGTCACTGTGAGAAGTGTGCCATGCTTATCACCAGGA  
CTGCCATGTTCCAGGGCTCCAGCCCTGGAGAGGGAGAGGGCACATCTGGGTATGCCGCCAGTGTGTC  
TTTGCATCGCCACCAAGAGGGGAGGTGCCCTGAAGAAGGGCCCTATGCCCGGCCATGCTGGGTATGA  
AGCTTTCTCTGCCATATGGACTGAAGGGCTGGACTGGGATGCTGGACATCTGAGCAACCCACAGCAGAG  
TACTGTACTGTGGTGGCCCTGGGAGTGAACCTGAAAATGCTGCAGTGCCGGAGCTGCCTGCAGTGG  
TTCCATGAGGCCTGCACCCAGTGTCTGAGCAAGCCCTCCTCTATGGGGACAGGTTCTATGAATTTGAAT  
GCTGTGTGTGTCGCGGGGCCCTGAGAAAAGTCCGGAGACTACAGCTTCGCTGGGTGGATGTGGCCCATCT  
TGTCTGTATCACCTCAGTGTGTTGCTGTAAAGAAAATACTTTGATTTTGATCGTGAGATCCTCCCTTC  
ACTTCTGAGAATTGGGACAGTTTCTCTGGGGAGCTTTCAGACACCCCAAGGAGAAGCTTCTTCCA  
AGCTCCTCTCTGCTCTTAACAGCCACAAGGACCGTTTCATTTTCAGGGAGAGAGATTAAGAAGAGGAAATG  
TTTGTGGTCTCCATGCTCGGATGCCTCCCTGTGGAGCCCTACTGGAGATGGAGCACTCACCAGC  
TTCCCTTCAGGGCAGGGCCCTGGGGAGGGTCTCACGTCCCTGGGAAGCGCCGGAGGCCGAGCCAG  
AGCCCCGAGGAGGAGGAGAAGGGGAAAGTGGAGAGCTGGGGCCACCCTCAGCAGTGCGAATCAGCC  
CGAGCCCCAGGACAGAGGGAGCGGGCTCATCTGCAGAGGGCACTGCAGGCCTCAGTGTCTCCACCATCC  
CCCAGCCCTAACAGAGTTACCAGGGCAGCAGCGGCTACAACCTCCGGCCACAGATGCCCGCTGCCTGC  
CCAGCAGCCCCATCCGGATGTTTCTCTCCACCTTCTGCCAGCACCGCAGGGACCTCTGGGGACAG  
TGGACCCCCAGACAGGTCACCCCTGGAACCTCACATTGGTTTCCCACAGACATCCCTAAAAGTGGCCCC  
CACTCGATGACTGCCTCATCTTCTCAGTTTCATCCCATCCCAGGTCTTCTAGACGCTCAGCACCC  
CTTCTCCCTGTCCGTAGTTTGTCTCTGGGACTGGGGAGGAGTCCGAGGTGGGGTGGTTACCTGTC  
CCGAGGGGACCCTGTCCGGTCTTGTCTCGGAGACTACGGCTGATGGCTCTGTGCAGTACCTGGTTGAG  
TGGGGAGGAGGGGCATCTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

## Protein Sequence:

>RC202906 protein sequence  
Red=Cloning site Green=Tags(s)

MAQPPRLSRGASSLWDPASPAPTSGRPRRLWEGQDVLARWTDGLLYLGTIKKVDSAREVCLVQFEDDSQ  
FLVLWKDISPAALPGEELLCCVCRSETVVPGNRLVSCEKCRHAYHQDCHVPRAPAPGEGEGTSWVCRQCV  
FAIATKRGGALKKGPYARAMLGMKLSLPYGLKGLDWDAGHLSNRQQSYCYCGGPEWNLKMLQCRSLQW  
FHEACTQCLSKPLLYGDRFYEFECVCRGGPEKVRRLQLRWVDVAHLVLYHLVVCCKKYDFDFREILPF  
TSENWDSLLL GELSDTPKGERSSKLLSALNSHKDRFISGREIKKRKCLFGLHARMPPPVEPPTGDGALTS  
FPSGGQGGVSRPLGKRRRPEPEPLRRRQKGVKVEELGPPSAVRNQPPEPQERERAHLQALQASVSPPS  
PSPNQSYQGSSGYNFRPTDARCLPSSPIRMFASFHPSASTAGTSGDSGPPDRSPLLEHIGFPTDIPKSAP  
HSMTASSSSVSSPGLPRRSAPPSPLCRSLSPGTGGGVRGGVGYLSRGDPVVRVLAARRVRPDGVSQYLVE  
WGGGGIF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

## Chromatograms:

[https://cdn.origene.com/chromatograms/mk6801\\_a08.zip](https://cdn.origene.com/chromatograms/mk6801_a08.zip)

## Restriction Sites:

AscI-MluI

**Cloning Scheme:**


**ACCN:** NM\_024165

**ORF Size:** 1701 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\\_024165.2](#)

**RefSeq Size:** 2312 bp

**RefSeq ORF:** 1704 bp

**Locus ID:** 5252

**UniProt ID:** [O43189](#)

**Cytogenetics:** 6p21.32

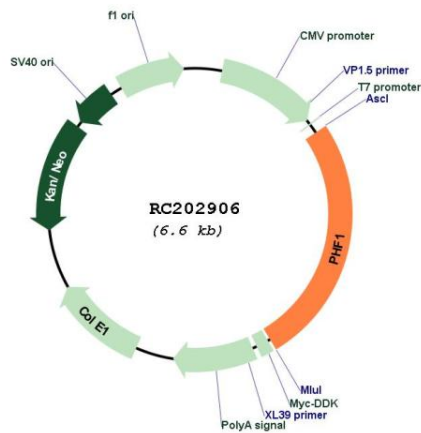
**Domains:** PHD, TUDOR

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

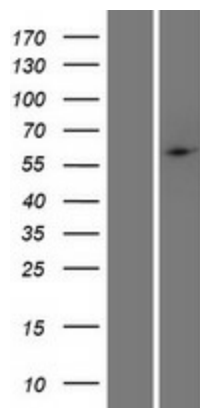
**MW:** 62.1 kDa

**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]

**Product images:**



Circular map for RC202906



Western blot validation of overexpression lysate (Cat# [LY411331]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202906 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).