

Product datasheet for **RC221894**

PHF19 (NM_015651) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PHF19 (NM_015651) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PHF19
Synonyms:	MTF2L1; PCL3; TDRD19B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC221894 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGAATCGAGCTCTGGATCCAGGGACTCGGGACTCCTATGGTGCCACCAGCCACCTCCCAACAAGG
 GGGCCCTGGCGAAGGTCAAGAACAACCTCAAAGACTTGATGTCCAACTGACGGAGGGCCAGTATGTGCT
 GTGCCGGTGGACAGATGGCCTGTACTACCTCGGGAAGATCAAGAGGGTCAGCAGCTCTAAGCAAAGCTGC
 CTCGTGACTTTTGAAGATAAATCCAAATACTGGGTCTATGGAAGGACATACAGCATGCCGGTGTCCAG
 GAGAGGAGCCCAAGTGAACATCTGCCTAGGGAAGACATCAGGGCCGCTGAATGAGATCCTCATCTGCGG
 GAAGTGTGGCCTGGGTTACCACCAGCAGTGCCACATCCCATAGCGGGCAGTGCTGACCAGCCCCTGCTC
 ACACCTTGGTTCTGCCGACGCTGCATCTTCGCACTGGCTGTGCGAAAGGCGGCGCTGAAGAAGGGCG
 CCATCGCCAGGACGCTGCAGGCCGTGAAGATGGTGTCTACCAGCCCAGGAGCTCGAGTGGGACTC
 GCCCATCGCACCAACCAGCAGCAATGCTACTGCTACTGCGGCGGGCCCGGAGAATGGTACTGCGGATG
 CTGCAATGTTACCGGTGCAGGCAGTGGTCCACAGGCCTGCACCCAGTGCCTCAATGAGCCCATGATGT
 TTGGAGACCGGTTTTACCTGTTCTTCTGCTCCGTGTGAACCAGGGCCAGAGTACATCGAGAGGCTGCC
 CCTGCGATGGGTGGATGTGGTTCACCTGGCCCTCTATAATCTGGGGGTACAGAGCAAGAAGAAGTACTTT
 GACTTTGAGGAGATTCTGGCCTTGTCAACCACCCTGGGAGCTCCTGCAGCTTGGAAGCTCACCAGCA
 CCCAGTGACAGATCGAGGACCACATCTCTCAACGCTCTGAACAGTTATAAAAGCCGGTTCCTCTGCGG
 CAAGGAGATCAAGAAGAAGAAGTGCATCTTCCGCTGCGCATCCGCGTCCCACCAACCCGCCAGGGAAG
 CTGCTGCCTGACAAGGACTGCTGCCAATGAGAAGCAGCGCTCCTCTGAGCTGCGTAAGAGAGGAAAGA
 CGAAGCCTGGTTGTTGCTCACGAATCCAGCAGCAGAAAAGGGCAGTTTATAGAAGAAAAGATCAAA
 GTTTTGCTGGAAGATGCTATCCAGTAGTGACTTCACCTCAGCCTGGAGCACCAACCACCACCTGGCT
 AGCATATTTGACTTCACGCTGGATGAAATTCAAAGTTAAAAAGTGCCAGCTCAGGCCAGACCTTCTTCT
 CAGATGTCGACTCCACCGACGCTGCCAGCACCTCTGGCTCTGCCTCCACCAGCCTCTCTATGACTCCAG
 ATGGACAGTGGGCAGCCGAAAGAGGAAGCTGGCAGCCAAGGCATACATGCCCTGCGGGCAAAGCGGTGG
 GCAGCTGAGCTGGATGGACGCTGCCCTCGACAGCAGTGCAGAGGGGGTTCAGTCCCCGAGCGGCCAG
 ACGAAGGCATTGACAGCCACACATTTGAGAGCATCAGTGAAGTACTCATCCCTGTCCCACCTCAAGTC
 ATCTATCACCAACTACTTTGGTGCAGCTGGCGGTTGGCCTGTGGGGAGAAGTACCAGGTGTTGGCTCGG
 AGGGTCACACCTGAGGGCAAGGTTACGTACCTGGTGGAGTGGGAAGGGACCACCCCTTAC

ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC221894 protein sequence
 Red=Cloning site Green=Tags(s)

MENRALDPGTRDSYGATSHLPNKGALAKVKNFVKDLMSKLTGQYVLCRWDGLYYLGIKRVSSSKQSC
 LVTFEDNSKYVWLWKDIQHAGVPGEEPKNICLGTSGPLNEILICGKCGLYGHQCHIPIAGSADQPLL
 TPWFCRRCIFALAVRKGKALKKGAARTLQAVKMLVSYQPEELEWDSPHRTNQQQCYCYCGGPGEWYLRM
 LQCYRCRQWFHEACTQCLNEPMMFGDRFYLFCSVCNQGPEYIERLPLRWVDVVHLALYNLGVQSKKKYF
 DFEEILAFVNHHEWELLQGLKLTSTPVTDGPHLLNALNSYKSRFLCGKEIKKKKIFRLRIRVPPNPPGK
 LLPDKGLLPNENSASSELRKRGKSKPGLLPHEFQQKRRVYRRKRSKFLLEDAIPSSDFTSAWSTNHHLA
 SIFDFTLDEIQSLKSASSGQTFSDVDSTDAASTSGSASTSLSYDSRWTVGSRKRKLAAKAYMPLRAKRW
 AAELDGRCPDSSAEGASVPERPDEGIDSHTFESISEDDSSLHLKSSITNYFGAAGRLACGEKYQVLAR
 RVTPEGKVQYLVEWEGTPY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6562_f05.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_015651

ORF Size: 1740 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_015651.3](#)

RefSeq Size: 4310 bp

RefSeq ORF: 1743 bp

Locus ID: 26147

UniProt ID: [Q5T6S3](#)

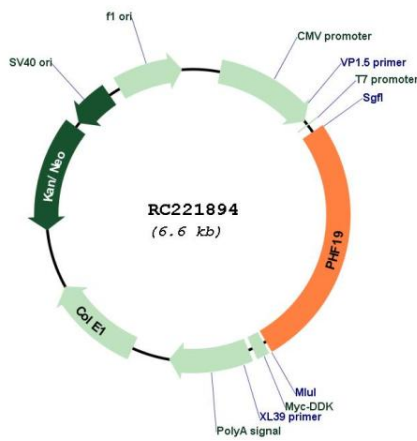
Cytogenetics: 9q33.2

Protein Families: Druggable Genome

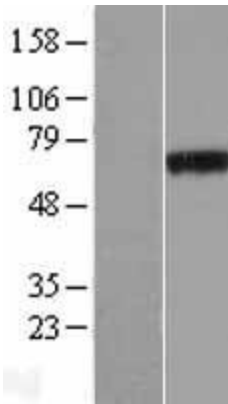
MW: 65.6 kDa

Gene Summary: Polycomb group (PcG) that specifically binds histone H3 trimethylated at 'Lys-36' (H3K36me3) and recruits the PRC2 complex. Probably involved in the transition from an active state to a repressed state in embryonic stem cells: acts by binding to H3K36me3, a mark for transcriptional activation, and recruiting H3K36me3 histone demethylases RIOX1 or KDM2B, leading to demethylation of H3K36 and recruitment of the PRC2 complex that mediates H3K27me3 methylation, followed by de novo silencing. Recruits the PRC2 complex to CpG islands and contributes to embryonic stem cell self-renewal. Also binds dimethylated at 'Lys-36' (H3K36me2). Isoform 1 and isoform 2 inhibit transcription from an HSV-tk promoter. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC221894



Western blot validation of overexpression lysate (Cat# [LY414412]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221894 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).