

Product datasheet for **RG221894**

PHF19 (NM_015651) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PHF19 (NM_015651) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PHF19
Synonyms:	MTF2L1; PCL3; TDRD19B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG221894 representing NM_015651
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGAATCGAGCTCTGGATCCAGGGACTCGGGACTCCTATGGTGCCACCAGCCACCTCCCAACAAGG
 GGGCCCTGGCGAAGGTCAAGAACAACCTCAAAGACTTGATGTCCAACTGACGGAGGGCCAGTATGTGCT
 GTGCCGGTGGACAGATGGCCTGTACTACCTCGGGAAGATCAAGAGGGTCAGCAGCTCTAAGCAAAGCTGC
 CTCGTGACTTTTGAAGATAAATCCAAATACTGGGTCTATGGAAGGACATACAGCATGCCGGTGTCCAG
 GAGAGGAGCCCAAGTGAACATCTGCCTAGGGAAGACATCAGGGCCGCTGAATGAGATCCTCATCTGCGG
 GAAGTGTGGCCTGGGTTACCACCAGCAGTGCCACATCCCATAGCGGGCAGTGCTGACCAGCCCCTGCTC
 ACACCTTGGTTCTGCCGACGCTGCATCTTCGCACTGGCTGTGCGAAAGGCGGCGCTGAAGAAGGGCG
 CCATCGCCAGGACGCTGCAGGCCGTGAAGATGGTGTCTACCAGCCCAGGAGCTCGAGTGGGACTC
 GCCCATCGCACCAACCAGCAGCAATGCTACTGCTACTGCGGGCGGCCCGGAGAATGGTACTGCGGATG
 CTGCAATGTTACCGGTGCAGGCAGTGGTCCACAGGCGCTGCACCCAGTGCCTCAATGAGCCCATGATGT
 TTGGAGACCGGTTTTACCTGTTCTTCTGCTCCGTGTGAACCAGGGCCAGAGTACATCGAGAGGCTGCC
 CCTGCGATGGGTGGATGTGGTTCACCTGGCCCTCTATAATCTGGGGGTACAGAGCAAGAAGAAGTACTTT
 GACTTTGAGGAGATTCTGGCCTTGTCAACCACCCTGGGAGCTCCTGCAGCTTGGAAGCTCACCAGCA
 CCCAGTGACAGATCGAGGACCACATCTCTCAACGCTCTGAACAGTTATAAAAGCCGGTTCCTCTGCGG
 CAAGGAGATCAAGAAGAAGAAGTGCATCTTCCGCTGCGCATCCGCGTCCCACCAACCCGCCAGGGAAG
 CTGCTGCCTGACAAGGACTGTGCCAAATGAGAACAGCGCTCCTCTGAGCTGCGTAAGAGAGGAAAGA
 CGAAGCCTGGTTTGTGCCTCACGAATCCAGCAGCAGAAAAGGGCAGTTTATAGAAGAAAAAGATCAAA
 GTTTTGTGCTGGAAGATGCTATTTCCAGTAGTGACTTCACCTCAGCCTGGAGCACCAACCACCACTGGCT
 AGCATATTTGACTTCACGCTGGATGAAATTCAAAGTTAAAAAGTGCCAGCTCAGGCCAGACCTTCTTCT
 CAGATGTCGACTCCACCAGCCTGCCAGCACCTCTGGCTCTGCCTCCACCAGCCTCTCTATGACTCCAG
 ATGGACAGTGGGCAGCCGAAAGAGGAAGCTGGCAGCCAAGGCATACATGCCCTGCGGGCAAAGCGGTGG
 GCAGCTGAGCTGGATGGACGCTGCCCTCGGACAGCAGTGCAGAGGGGGTTCAGTCCCCGAGCGGCCAG
 ACGAAGGCATTGACAGCCACACATTTGAGAGCATCAGTGAAGATGACTCATCCCTGTCCCACCTCAAGTC
 ATCTATCACCAACTACTTTGGTGCAGCTGGCGGTTGGCCTGTGGGGAGAAGTACCAGGTGTTGGCTCGG
 AGGGTCACACCTGAGGGCAAGGTTACGTACCTGGTGGAGTGGGAAGGGACCACCCCTTAC

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG221894 representing NM_015651
 Red=Cloning site Green=Tags(s)

MENRALDPGTRDSYGATSHLPNKGALAKVKNFKDLMMSKLTGQYVLCRWTGGLYYLGIKRVSSSKQSC
 LVTFEDNSKYVWLWKDIQHAGVPGPEPKNICLGKTSGLNEILICGKCLGYHQQCHIPIAGSADQPLL
 TPWFCRRCIFALAVRKGKALKKGAARTLQAVKMLVSYQPEELEDWSPHRTNQQCYCYCGGPGEWYLRM
 LQCYRCRQWFHEACTQCLNEPMMFGDRFYLFCSVCNQGPYIERLPLRWVDVVHLALYNLGVQSKKYYF
 DFEEILAFVNHHEWELLQLGKLTSTPVTDGRPHLLNALNSYKSRFLCGKEIKKKKCFRLRIRVPPNPPGK
 LLPDKGLLPNENSASSELRKRKSKPGLLPHEFQQKRRVYRRKRSKFLLEDAIPSSDFTSAWSTNHHLA
 SIFDFTLDEIQSLKSASSGQTFSDVDSTDAASTSGSASTSLSYDSRWTVGSRRKRKLAAKAYMPLRAKRW
 AAELDGRCPDSSAEGASVPERPDEGIDSHTFESISEDDSSLHLKSSITNYFGAAGRLACGEKYQVLAR
 RVTPEGKVQYLVEWEGTTPY

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

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: 4287 bp

RefSeq ORF: 1743 bp

Locus ID: 26147

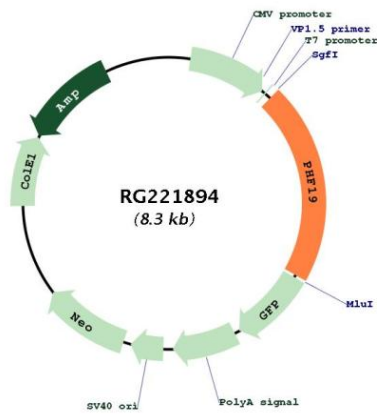
UniProt ID: [Q5T6S3](#)

Cytogenetics: 9q33.2

Protein Families: Druggable Genome

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 RG221894