

Product datasheet for **RG221971**

PHF1 (NM_002636) Human Tagged ORF Clone

Product data:

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|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | PHF1 (NM_002636) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | PHF1 |
| Synonyms: | hPHF1; MTF2L2; PCL1; PHF2; TDRD19C |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>RG221971 representing NM_002636
 Red=Cloning site Blue=ORF Green=Tags(s)

GACGTTGTATACGACTCCTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGGCGCGCC

ATGGCGCAGCCCCCGGCTGAGCCGCTCTGGTGCCTCCTCACTTTGGGACCCAGCTTCTCTGCTCCCA
 CCTCTGGCCCCAGGCCTCGGCTTTGGGAGGGTCAAGATGTGCTGGCCAGATGGACTGATGGGCTGCTATA
 CTTGGGTACCATCAAAAAGGTGGACAGTCTAGGGAGGTGTGTCTGGTCCAGTTTGGAGTATTGCGAG
 TTTCTGGTTCTATGAAAAGACATTAGCCCTGCTGCCCTCCCTGGAGAGGAACTCCTCTGTGTGTCTGTC
 GCTCTGAGACTGTGGTCCCTGGGAACCGGCTGGTCACTGTGAGAAGTGTGCGCATGCTTATCACCAGGA
 CTGCCATGTTCCAGGGCTCCAGCCCTGGAGAGGGAGAGGGCACATCCTGGGTATGCCGCCAGTGTGTC
 TTTGCGATCGCCACCAAGAGGGGAGGTGCCCTGAAGAAGGGCCCTATGCCCGGCCATGCTGGGTATGA
 AGCTTTCTCTGCCATATGACTGAAGGGCTGGACTGGGATGCTGGACATCTGAGCAACCCAGACGAGAG
 TTAAGTGTACTGTGGTGGCCCTGGGAGTGGAACTGAAAATGCTGCAGTGCCGGAGCTGCCTGCAGTGG
 TTCCATGAGGCCCTGCACCAAGTGTCTGAGCAAGCCCTCCTCTATGGGGACAGGTTCTATGAATTTGAAT
 GCTGTGTGTGTCGCGGGGCCCTGAGAAAAGTCCGGAGACTACAGCTTCGCTGGGTGGATGTGGCCCATCT
 TGTCTGTATCACCTCAGTGTGTTGCTGTAAGAAGAAATACTTTGATTTTGATCGTGAGATCCTCCCTTC
 ACTTCTGAGAATTGGGACAGTTTGTCTCTGGGGAGCTTTCAGACACCCCAAGGAGAAGCTTCTTCCA
 AGCTCCTCTCTGCTCTTAACAGCCACAAGGACCGTTTCATTTAGGGAGAGAGATTAAGAAGAGGAAATG
 TTTGTTGGTCTCCATGCTCGGATGCCTCCCTGTGGAGCCCTACTGGAGATGGAGCACTCACCAGG
 GCAGGGCCCTGGGGAGGGTCTCACGTCCCCTGGGAAGCGCCGGAGCCGGAGCCAGCCCTGAGG
 AGGAGGCAGAAGGGGAAAGTGGAGGAGCTGGGGCCACCTCAGCAGTGCCTCAATCAGCCCGAGCCCAAG
 AGCAGAGGGAGCCGGCTCATCTGACAGAGGGCACTGCAGCAGCCCATCCGGATGTTTGTCTCCTCCACC
 CTCTGCCAGCACCGCAGGGACCTCTGGGGACAGTGGACCCAGACAGGTCACCCTGGAATTCACAT
 TGGTTTCCCACAGACATCCCTAAAAGTCCCCCACTCGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG221971 representing NM_002636
 Red=Cloning site Green=Tags(s)

MAQPPRLSRGASSLWDPASPAPTSGRPRRLWEGQDVLARWTDGLLYLGTIKKVDSAREVCLVQFEDDSQ
 FLVWLKDISPAALPGEELLCCVCRSETVVPGNRLVSCEKCRHAYHQDCHVPRAPAGEGEGTSWVCRQCV
 FAIATKRGGALKKGPYARAMLGMKLSLPYGLKGLDWDAGHLSNRQQSYCYCGPGEWNLKMLQCRSCLQW
 FHEACTQCLSKPLLYGDRFYEFECVCVRGGPEKVRRLQLRWVDVAHLVLYHLVSVCKKKYDFDREILPF
 TSENWDSLGLGELSDTPKGERSSKLLSALNSHKDRFISGREIKKRKCLFGLHARMPPPVEPPTGDGALTR
 AGPWGRGLTSPGEAPEAGARAPEEEAEGESSGAGATLSSAQ SARAPGAEGAGSSAEGTAAAPSGCLLPST
 LLPAPQGPLGTVDPQTGHPWNFTLVSPQTSCLKVPPTR

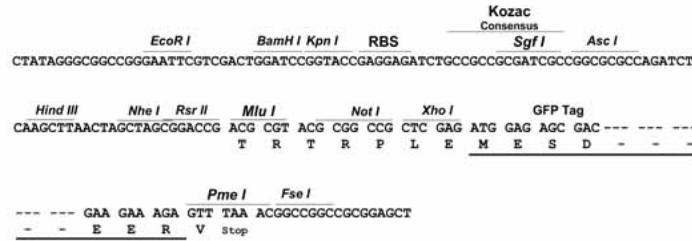
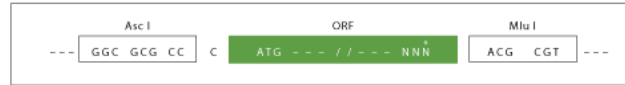
TRTRPLE - GFP Tag - V

Restriction Sites:

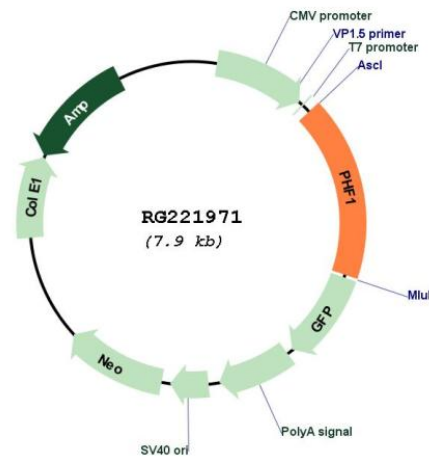
Ascl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_002636

ORF Size: 1371 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.

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| 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: | NM_002636.4 |
| RefSeq Size: | 2008 bp |
| RefSeq ORF: | 1374 bp |
| Locus ID: | 5252 |
| UniProt ID: | O43189 |
| 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] |