

Product datasheet for **RG214381**

PHF21A (NM_016621) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PHF21A (NM_016621) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PHF21A
Synonyms:	BHC80; BM-006; IDDBCS; NEDMS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG214381 representing NM_016621
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGTTGCAGACTCTACAGGAGGCTCTTAAAGTGGAAATTCAGGTTACCAGAAAACGGTTGCTCAA
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 CAATGCCGCCACCTCCACGCCGGCCCTTCCCCCTCTCCAGAGCTGCACAGCGAACTGTAAACCAGGGG
 GAAGAGACTAAA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG214381 representing NM_016621
 Red=Cloning site Green=Tags(s)

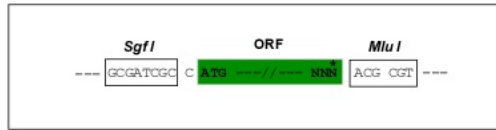
MELQTLQEALKVEIQVHQKLVQMKQDPQADLKKQLHELQAKITALSEKQKRVVEQLRKNLIVKQEQPD
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 LKKEEAIWPWGLAIVHSYIAYKAAKEEEKQLLKWSSDLKQEREQLEQKVKQLSNSISKMEMKNTILA
 RQKEMHSSLEKVKQLIRLIHGIDLKPKVDSEATVGAISNGPDCTPPANAATSTPAPSPSSQSCTANCNQ
 EETK

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_016621

ORF Size: 1902 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_016621.5](#)

RefSeq Size: 7194 bp

RefSeq ORF: 1905 bp

Locus ID: 51317

UniProt ID: [Q96BD5](#)

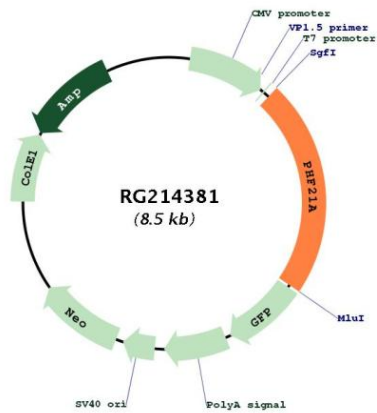
Cytogenetics: 11p11.2

Domains: PHD

Protein Families: Druggable Genome, Transcription Factors

Gene Summary: The PHF21A gene encodes BHC80, a component of a BRAF35 (MIM 605535)/histone deacetylase (HDAC; see MIM 601241) complex (BHC) that mediates repression of neuron-specific genes through the cis-regulatory element known as repressor element-1 (RE1) or neural restrictive silencer (NRS) (Hakimi et al., 2002 [PubMed 12032298]).[supplied by OMIM, Nov 2010]

Product images:



Circular map for RG214381