

Product datasheet for **SC114166**

PHF21A (NM_016621) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PHF21A (NM_016621) Human Untagged Clone
Tag:	Tag Free
Symbol:	PHF21A
Synonyms:	BHC80; BM-006; IDDBCS; NEDMS
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_016621, the custom clone sequence may differ by one or more nucleotides

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ATGGAGTTGCAGACTCTACAGGAGGCTCTTAAAGTGGAAATTGAGTTCCACCAGAACTGGTTGCTCAA
TGAAGCAGGATCCACAGAATGCTGACTTAAAGAAACAGCTTCATGAACTCCAAGCCAAAATCACAGCTTT
GAGTGAGAAACAGAAAAGAGTAGTTGAACAGCTACGGAAGAACCCTGATAGTAAAGCAAGAACAACCGGAC
AAGTTCCAAATACAGCCATTGCCACAATCTGAAAACAAAACACAAACAGCACAGCAGCAACCACTACAGC
AACTACAACAACAGCAGCAGTACCACCACCACCACGCCAGCAGTCAGCTGCAGCCTCTCCCAACCTGAC
TGCTTCACAGAAGACTGTAACACTACAGCTTCTATGATTACCACAAAAGACTACCTCTCGTCTTGAAGCA
GCAACTGCGACCATGCCTGCCTCTGTGGTGGGCCAGAGACCTACCATTGCTATGGTGACCGCCATCAACA
GTCAGAAGGCTGTGCTCAGCACTGATGTGCAGAACACACCAGTCAACCTCCAGACGTCTAGTAAGGTCAC
TGGGCCTGGGCGAGAGGCTGTCCAAATTGTGGCAAAAACACAGTCACTCTGCAGGTTCCAGCAACACCT
CCTCAGCCATCAAAGTACCACAGTTTATCCCCCTCCTAGACTCACTCCAGTCCAAACTTTCTCCAC
AGGTTTCGACCCAAAGCCTGTGGCCAGAATAACATTCTATTGCCCCAGCACACCTCCCATGCTCGCAGC
TCCTCAGCTTATCCAGAGGCCCGTCATGCTGACCAAGTTCACCCCAACACCTTCCCACATCCCAGAAT
TCCATCCACCCCGTCCGTGTCGTCATGGGCAGACTGCAACCATAGCCAAAACGTTCCCATGGCCGAGC
TCACCAGCATTGTGATAGCTACTCCAGGGACCAGACTCGCTGGACCTCAAAGTGTACAGCTTAGCAAGCC
AAGTCTTGAAAAACAGACAGTTAAATCTCACACAGAAACAGATGAGAAACAAAACAGAGAGCCGACCATC
ACCCCACTGTGACCCAAACAAAACGGGAGGAGAACCTCAGAAACTTGCTTCATGGTGTCTCTAG
GGTTGGTAACACATGACCATCTAGAAGAAATCCAAAGCAAGAGGCAAGAGCGAAAAAGAAGAACAACAGC
AAATCCGGTCTACAGTGGAGCAGTCTTTGAGCCAGAGCGTAAGAAGAGTGCAGTGACATACCTAACAGC
ACAATGCACCCCTGGGACCCGGAAGAGAGCCAATGAGGAACACTGGCCAAAGGGTGATATTCATGAGGATT
TTTGACGCGTTTTGCAGAAAAAGTGGCCAGTTACTGATGTGCGACACATGTTCCCGTGATATCATTGGGA
CTGCTTAGACCCCTCTGAAAACAATTCCCAAGGCATGTGGATCTGTCCAGATGTCAGGACCAGATG
CTGAAGAAGGAAGAAGCAATTCCATGGCCTGGAACCTTAGCAATTGTTTCATTCTATATTGCCTACAAA
GAGCAAAAAGAAGAAGAGAAAACAGAAAGTTACTTAAATGGAGTTCAGATTTAAAAACAAGAACGAGAACA
AGAGCAAAAGGTGAAACAGCTCAGCAATCCATAAGTAAATGCATGGAATGAAGAACACCATCCTGGCC
CGGCAGAAAGGAGATGCACAGCTCCCTGGAGAAGGTAAAACAGCTGATTCGCTCATCCACGGCATCGACC
TCTCAAACCTGTAGACTCTGAGGCCACTGTGGGGCCATCTCCAATGGCCCGGACTGCACCCCTCTGC
CAATGCCGCCACCTCCACGCCGCCCTTCCCCCTCCTCCAGAGCTGCACAGCGAACTGTAAACCAGGGG
GAAGAGACTAAATAA
    
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_016621 unedited

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GGGGTTCGAATTTGTATACGACTCCTATAGCGGCCGCGNAATCGGCACGAGGCACATCC
CANAAATCCATCCACCCCGTCCGTGTCGTCATGGGCAGACTGCAACCATAGCCAAAACG
TTCCCATGGCCAGCTCACCAGCATTGTGATAGCTACTCCAGGGACCAGACTCGCTGGA
CCTCAAACGTACAGCTTAGCAAGCCAAGTCTTAAAAACAGACAGTTAAATCTCACACA
GAAACAGATGAGAAAACAAACAGAGAGCCGACCATCACCCACCTGCTGCACCCAAAACCA
AAACGGGAGGAGAACCTCAGAACTTGCTTCATGGTGTCTCTAGGTTGGTAACACAT
GACCATCTAGAAGAAATCCAAAGCAAGAGGCAAGAGCGAAAAAGAAGAACAACAGCAAT
CCGGTCTACAGTGGAGCAGTCTTTGAGCCAGAGCGTAAGAAGAGTGCAGTGACATACCTA
AACAGCACAATGCACCTGNGACCCGGAAGAGAGCCAATGAGGAACACTGGCCAAAGGGT
GATATTCATGAGGATTTTGCAGCGTTTGCAGAAAAAGTGGCCAGTTACTGATGTGCGAC
ACATGTTCCCGTGATATCATTGGACTGCTTAGACCCCTCTGAAAACAATTCCCAAG
GGCATGTGNGATCTGTCCAGATGTCAGGACCAGATGCTGAAGAAGGAAGAAGCAATTCC
ATGGCCTGGAACCTTAGCAATTGTTTCATTCCTATATTGCCTACAAAGCCGANNAGAAGA
AGAGAAACAGAAGTTACTTAAATGGAGTTCAGATTTANACAAGAACGAGAACCCTAGAG
CANAGGTGAAACAGCTCAGCATTCCATAGTAAATGCATGGAATGAAGACACCATCCTGNN
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_016621 unedited ACCGCGGCCGCAATCTAAAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTCCCA GTTTTGACACCTTTTTAATAAAAACACTGTTTTAGGAAACAAATAGCACTTTTGTAAAT TTTTTTACAATGTTTCTTACCTTGATCTTAATTTAAGTAACACTAGGAAAACCTCAATA TCTTTATTTTCCTTTTTAATTTAAAAAAAAGTTTTTTTCCCAAAATACAAAAATTTT GCCCTTGATAAAAAACAGTGCCCGAACGATGACCCATGGACTCACAAAACTTATGGG ACCTCACTGACACTATGATTCCCTACCCTACCATGCAAGGCTTGGCTACCCTTATTGGA CTGTCACCCTGAAAAACAGCTTTTCATATCCCTTATTCAAGCACTGGTTCCCAAAAAGCC ACATGAACAGTCAAATAAACTTTTTCTTATAGAAAATTAGAACCAACCCTTAACTGTTA GATAGACAAACGACACGCTCCATTTAAATACACACCACACCTGGGTCGCGGGCTGTTTA TCTCAACATCTTTTCTTCTTTATAAATCTACAAAAGGGAAGGACCTTGTTTTAAGTAAAA TCCTGGTCCACCTTTTTCTTCTCCGGGACCCACCCATCCCTTTTTCCCTGCCTTGGG CAACGGGCACAGGGCCCCGGGCTTTCGTTTGCCTCGTACAGGAAACACGGGGACACCAC TAAAAATGGCTAACCCACACACCAAGTGAGGAAGAATACCTGCATCCTTTCAGAACGATT GGTCCCTCCCGGACCCTCCATGGCAATAAACCCCTGGTTGTTTTGGGGTAAACATTA CCTTTGACATGCCCCCAAGAGGGTCTATTGCTTTTTATAAACTGCCACCCCTGGT CCTTTGACCATTCTTTCTTTTGGGACCGGGAGGAGN
Restriction Sites:	NotI-NotI
ACCN:	NM_016621
Insert Size:	2680 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_016621.1 , NP_057705.1
RefSeq Size:	7194 bp
RefSeq ORF:	7194 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]

Transcript Variant: This variant (2) uses an alternate in-frame splice site in the mid-coding region, and includes an alternate in-frame exon in the 3' coding region, but lacks a different alternate in-frame exon in the 3' coding region, compared to variant 1. The resulting protein (isoform b) is shorter than isoform a. Variants 2, 6, and 7 all encode the same isoform (b).