

## Product datasheet for **MC216937**

### Phf10 (NM\_024250) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Phf10 (NM_024250) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Phf10
Synonyms:	1810055P05Rik; AV024533
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >MC216937 representing NM\_024250  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGCATCGCC**

ATGGCAGCGGCCGGGCCGGGGCGCGCTGCCCGGGCGGTGCGACAGCGACCCGGCCTCCCCGGAG  
CGCAGTCCCCAAAGGATGATAATGAAGATAACTCAAATGATGGGACCCATCCATGTAAAAGGAGGCGAAT  
GGGCTCAGGAGACAGCTCAAGAAGTTGTGAGACTTCAAGTCAAGATCTTAGCTTCAGTTACTACCCAGCA  
GAAAACCTAATCGAATACAAATGGCCACCTGATGAAACAGGAGAATACTATATGCTTCAGGAGCAAGTCA  
GTGAATATCTGGGTGTGACCTCCTTCAAGCGGAAATATCCAGATTTAGAGCGACGAGATTTATCTCACAA  
GGAGAACTATACCTGAGAGAATTAACGTCATCACGAAACACAGTGCACACTGGGTTTAAACAGCATTG  
CGCAGTGATGAAGTATTGACTTAATGATAAAAAGAAATATCCAGCTAAACACGCTGAATATTCGGTTATCC  
TACAAGAAAAGAACGTCAGAGAATTACAGATCATTATAAAGAGTATTCTCAAATGCAACAACAGAGTAC  
TCAGAAAGTCGAAGCCAGCAAAGTACCTGAGTACATTAAGAAAGCAGCCAAGAAGGCAGCTGAGTTCAAC  
AGCAACTTAAACCGGGAGCGCATGGAAGAAAGAAGAGCCTATTTTGACTTACAGACACATGTTATCCAAG  
TGCTCAAGGAAAGTACAAAGTGTGGCCAGACACCGAAGGTCAGTTCTACCCAGTGGCTCTCAT  
CCCGGGACAGTTCAGGAGTATTATAAGAGGTAAGTACTCACCAGATGAGCTTCGGTACTTGCCATTAACACA  
GCCCTGTATGAGCCGCCCTGGACCCAGAGCTCCCGGCACTAGATAGTGATGGAGACTCAGATGATGGCG  
AAGATGGCGGAGGGGATGAGAAGCGGAAGAATAAAGGCACTTCGGACAGCTCCTCAGGCAATGTGTCTGA  
AGGAGACAGCCCCCTGACAGCCAGGAGGACACCTTCCACGGAAGACAGAAATCAAAGACAAAATGGCC  
ACTCCAAGAAAAGACGGCTCAAACGTTCTGTACTGTCAAATCAGCTCCTGGGTACAAGCCAAAGGTC  
TTCAAATGCTCTATGTGGAATTTGTCTGAAGGGTAAGGAGTCCAACAAGAAAGGAAAGGCTGAATCACT  
TATACACTGCTCCAGTGTGATAACAGTGGCCACCCTTCTTGCTTGGATATGACCATGGAGCTTGTCTCT  
ATGATTAAGACCTACCCATGGCAGTGTATGGAATGTAAGACATGCATTATATGTGGACAGCCCCACCATG  
AAGAAGAAATGATGTTCTGTGATGTGTGTGACAGAGGTTATCATACTTTTGTGTGGCCTTGGTGTCTAT  
TCCTTCAGGTCGCTGGATTTGTGACTGTTGTCAGCGAGCTCCCCAACCCAGGAAAGTGGGCAGAAGG  
GGGAAAAACAGCAAAGAGGGGTAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-MluI

**ACCN:** NM\_024250

**Insert Size:** 1494 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:**

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\\_024250.4](#), [NP\\_077212.3](#)

**RefSeq Size:** 1665 bp

**RefSeq ORF:** 1494 bp

**Locus ID:** 72057

**UniProt ID:** [Q9D8M7](#)

**Cytogenetics:** 17 A2

**Gene Summary:** Involved in transcription activity regulation by chromatin remodeling. Belongs to the neural progenitors-specific chromatin remodeling complex (npBAF complex) and is required for the proliferation of neural progenitors. During neural development a switch from a stem/progenitor to a post-mitotic chromatin remodeling mechanism occurs as neurons exit the cell cycle and become committed to their adult state. The transition from proliferating neural stem/progenitor cells to post-mitotic neurons requires a switch in subunit composition of the npBAF and nBAF complexes. As neural progenitors exit mitosis and differentiate into neurons, npBAF complexes which contain ACTL6A/BAF53A and PHF10/BAF45A, are exchanged for homologous alternative ACTL6B/BAF53B and DPF1/BAF45B or DPF3/BAF45C subunits in neuron-specific complexes (nBAF). The npBAF complex is essential for the self-renewal/proliferative capacity of the multipotent neural stem cells. The nBAF complex along with CREST plays a role regulating the activity of genes essential for dendrite growth. [UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) encodes the longer isoform (1).