

Product datasheet for **MC221742**

Phf8 (NM_177201) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Phf8 (NM_177201) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Phf8
Synonyms:	9830141C09Rik; mKIAA1111
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

Fully Sequenced ORF: >MC221742 representing NM_177201
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCTCGGTGCCTGTGTATTGCCTCTGTGACTGCCTTATGATGTGACCCGCTTCATGATCGAGTGTG
 ACATGTGCCAGGACTGGTTTACGGCAGTTGTGTTGGTGTGAGGAGGAGAAGGCTGCTGATATTGATCT
 TTACCACTGCCCTAACTGTGAGGCTTACATGGACCTTCCATTATGAAAAACGTCGTGGATCTTCCAAA
 GGACATGATAATCACAAGGGGAAGCCACTGAAGACTGGAAGCTCTATGTTTATCCGAGAAGCTTCGGGGCA
 GAAGCTTTTACAGCTCAGATGAAGTATTCTGAAGCCACTGGAAGTCAGCTGACTGTGGAATTCTTGGGA
 AGAGAATAGCTTCAGCGTGCCTATCCTTGTCTTGAAGAAGGATGGGTTGGGGATGACATTACCTCTCCA
 TCATTCAGTGTGAGGGATGTGGAACACTATGTTGGTCTGACAAAGAGATTGATGTGATTGATGTGGCCC
 GCCAGGCTGACTGCAAGATGAACTCGGTGATTTTGTCAAATACTATTACAGTGGGAAGAGGGAAAAAGT
 CCTCAATGTCATTAGTTTGAATTCTCCGATACCAGGCTTCAAACCTCGTGGAAACACCCAGGATTGTT
 CGCAAGCTGTCATGGGTGGAGAAGTGTGGCCAGAGGAATGTGTCTTTGAGAGACCAATGTGCAGAAGT
 ACTGCCTCATGAGTGTGCGGGATAGCTATACAGATTTTACATTGACTTTGGTGGGACCTCAGTTTGGTA
 CCATGTGCTTAAGGGTGAGAAGATCTTCTACCTGATCCGCCAACAAATGCTAATCTGACTCTCTTTGAG
 TGCTGGAGTAGCTCCTCAATCAGAACGAGATGTTCTTTGGTGACCAAGTGGAAAAGTGCTACAAGTGT
 CTGTGAAGCAAGGACAAACACTGTTTATCCTACAGGATGGATACATGCTGTGTTAACACCCGTGGACTG
 CTTAGCATTCCGGAGGAACTTCTTACACAGTCTTAACATTGAAATGCAACTCAAGGCTTATGAAATTGAG
 AAGAGGCTGAGCACAGCAGACCTTTTCAAGTTTCCCAACTCGAGACCATCTGTTGGTATGTGGGAAAAC
 ATATTCTGGACATCTTTGAGGCTTACGAGAAAATAGAAGACCCCTGCCTCCTACCTGGTCCATGGTGG
 TAAAGCTCTGAACCTTGGCATTAGAGCTTGGACAAAGAAAGAAGCTTTGCCAGACCACGAGGATGAGATC
 CCAGAGACAGTGCAGACTGTACAGCTCATTAAAGATCTGGCTAGGGAGATCCGTCTGGTTGAATTCAACA
 TGAGTGGTACCAGCTTGAATGATTAGATGATGACTCAGCAGACATGGACCTTGTGGCAGTGAGAACCC
 TCTGGCCCTGTTGATGGCTAATGGCAGTACGAAGAGGATGAAGAGTGTATCCAAATCTCGGAGAGCCAAA
 ATTGCAAAGAAGGTAGACAGTGAAGACTGGTAGCAGAACAGGTCATGGGAGATGAATTTGACTTGGATT
 CAGATGATGAGCTGCAGATTGACGAGAGATTGGGAAAGGAAAAGGCGAACCTGTTAATAAGATCAAATT
 TCCCCGGAAGTTGCCCGTGCAAAACCTTGCTCTGACCCCAACCGAATTCGTGAACCTGGAGAAGTTGAG
 TTTGACATTGAGGAGGACTATACCACAGATGAGGACATGGTGGAAAGGGTTGAAAGCAAGCTTGGGAATG
 GGAGTGGAGCCGGTGAATTCTTGATCTACTTAAGGCCAGCAGGACAGGTGGGGGGACCTGACTATGCTGC
 CCTCACTGAGGCCCCAGCCTCCCCAGCACTCAAGAGGCCATCCAGGGCATGTTGTGTATGGCAACCTG
 CAGTCTCATCATCCTCACCACTACCTCCAGTCTGCAGGCTTGGTGGACTGGAGGGCAAGAAAAGAGCA
 GCGGGAGCTCCAGCAGTGGCCTGGGCACTGTGTCTAGTAGTCTGCTTCCAGCGCACCCAGGGGAAGCG
 GCCCATCAAGAGGCCAGCATACTGGA AAAACGAGAGTGAAGAGGAGGAGAATGCCAGTCTTGATGAGCAA
 GACAGCTTGGGAGCATGCTTCAAGGATGCTGAGTATATCTATCCATCTCTGGAGTCTGATGATGACC
 CTGCTTTGAAATCTCGACCCAAGAAAAAGAAGAATTGAGATGATGCTCCATGGAGTCTTAAAGCCCGTGT
 GACTCCAACCCATCCCAAGCAGGACCGTCTGTTCTGAGGGGACCAGAGTTGCCTCCATTGAGACAGGC
 TTGGCTGCAGCAGCTGCAAAGCTTGCCAGCAGGTAAGAGTTGACACCCAGCTGGTGGCCCTGCTACTGA
 TGACT**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul
ACCN: NM_177201
Insert Size: 2388 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_177201.5 , NP_796175.1
RefSeq Size:	3732 bp
RefSeq ORF:	2388 bp
Locus ID:	320595
UniProt ID:	Q80TJ7
Cytogenetics:	X F3
Gene Summary:	<p>Histone lysine demethylase with selectivity for the di- and monomethyl states that plays a key role cell cycle progression, rDNA transcription and brain development. Demethylates mono- and dimethylated histone H3 'Lys-9' residue (H3K9Me1 and H3K9Me2), dimethylated H3 'Lys-27' (H3K27Me2) and monomethylated histone H4 'Lys-20' residue (H4K20Me1). Acts as a transcription activator as H3K9Me1, H3K9Me2, H3K27Me2 and H4K20Me1 are epigenetic repressive marks. Involved in cell cycle progression by being required to control G1-S transition. Acts as a coactivator of rDNA transcription, by activating polymerase I (pol I) mediated transcription of rRNA genes. Required for brain development, probably by regulating expression of neuron-specific genes. Has activity toward H4K20Me1 only when nucleosome is used as a substrate and when not histone octamer is used as substrate. May also have weak activity toward dimethylated H3 'Lys-36' (H3K36Me2), however, the relevance of this result remains unsure in vivo. Specifically binds trimethylated 'Lys-4' of histone H3 (H3K4me3), affecting histone demethylase specificity: has weak activity toward H3K9Me2 in absence of H3K4me3, while it has high activity toward H3K9me2 when binding H3K4me3. [UniProtKB/Swiss-Prot Function]</p>