

Product datasheet for **MR223342**

Phf21a (NM_001109691) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Phf21a (NM_001109691) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Phf21a
Synonyms:	80kDa; Bhc; Bhc80; D030065N23Rik; PFTF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR223342 representing NM_001109691
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGTTGCAGACTCTACAGGAGGCTCTTAAAGTGGAAATTCAGGTTACCAGAAAAGTGGTGGCCAAA
 TGAAGCAGGATCCACAGAATGCTGACTTAAAGAAACAGCTTCATGAACTCCAAGCCAAAATCACAGCTTT
 GAGTGAGAAAACAGAAAAGAGTAGTTGAGCAGCTGCGCAAGAACCTGATAGTCAAACAAGAGCAGCCGGAC
 AAGTTCAGATACAGCCATTGTACAGTCTGAAAACAAACACAAACAGCACAGCAGCAGCCACTACAGC
 CACTGCAGCAGCAGCAACCGCAGCAACCGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGC
 AGCAGCAGCACCCGCTAGTCTAACTGCATCACAGCAGGTTCAAGCAACACCTCCTCAGCCATCAAAGTA
 CCACAGTTTATCCCTCCTAGACTCACTCCAGCCCAAACCTCCTTCCACAGGTTGACCCAAGCCTG
 TGGCCAGAATAACATTCTATCGCTCCAGCGCCTCCTCCATGCTTGCAGCTCCTCAGCTTATCCAGAG
 GCCTGTATGCTGACCAAGTTTACACCCACAACCTCCCCACATCCAGAATTCCATCCACCTGTCCGT
 GTTGTCAATGGACAGACTGCAACCATAGCCAAAACGTTCCCATGGCCAGCTCACCAGCATTGTATAG
 CTACTCCAGGGACCAGACTCCCTGGACCTCAGACTGTACAGCTTAGCAAACCAAGCCTGGAGAAAACAGAC
 AGTTAAATCCCACCCAGAAGCAGAGGAAAAACAAGCAGAGAGCCGTACCGTTACCCACCTGCTGCACCA
 AAACAAAACGAGAAGAGAACCCTCAGAAAATTGCCTTCAATGGTGTCTCTAGGGTTGGTAACACATGACC
 ATCTAGAAGAAAATCCAAAGCAAGAGGCAGGAAAGAAAGAGAAGAACAACAGCAAACCCGGTGTACAGTGG
 GGCTGTCTTTGAGCCAGAGCGTAAGAAGAGTGCAGTCACTTACCTAACAGCACAATGCATCCTGGGACG
 CGGAAGAGAGGTCGTCTCCAAAATAAATGCGGTGCTGGGTTTGGAGCCCTTACCCCAACATCCCCC
 CATCCAGTCATCCGACTCCCTGAAAAAGAAAAGACAGAGACCACATTCACTTTCCCTGCACCTGTTCA
 GCCTGTGTCTTTGCCAGCCCACTCCACAGCGGTGATATCCATGAGGATTTTTGCAGTGTTCGAGA
 AAAAGTGGCCAGTTGCTGATGTGTGACACGTGTTCCCGTGTGATCATCTGGACTGCTTAGAGCCGCCCC
 TGAAAACAATTCCAAGGGCATGTGGATCTGTCCAGATGTCAGGACCAGATGCTAAAGAAGGAAGAAGC
 AATTCTTGGCCTGGAACCTTAGCCATTGTTTCTTCTACATCGCTACAAAGCAGCAAAAGAAGAGGAG
 AAACAGAAGCTACTTAAGTGGAGTTCAGATTTAAACAGGAGCGGGAACAACCTGGAGCAGAAGGTCAAAG
 AGCTCAGCAGTCTATAAGTAAATGTATGGAGATGAAGAGCAGCATCCTGGCGCGCAGAAGGAGATGCG
 CAGCTCCCTGGACAAGGTGAAGCGGCTCATCCGCTTGTGCATGGCGTCGACCTCTGCAGACCTGTGGAC
 TCAGAGGCCACGGCGGGGCCCTCTCAATGGCCAGACTGCACTCCCCCTGCCAACGCCGCTCCACAC
 CGCCCCCTCCCCCTCCTCGCAGAGCTGCACAGCGAACTGTAACCAGGGGAAGAGACTAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR223342 representing NM_001109691
 Red=Cloning site Green=Tags(s)

MELQTLQEALKVEIQVHQKLVAQMKQDPQNADLKKQLHELQAKITALSEKQKRVVEQLRKNLIVKQEPPD
 KFQIQPLSQSENKLQTAQQPLQPLQQQPQQPQQQQQQQHAQQSAAAPPSLTASQQVQATPPQPIKV
 PQFI PPPRLTPRPNFLPQVRPKPVAQNNIPIAPAPPMLAAPQLIQRPVMLTKFTPTTLPTSQNSIHPVR
 VVNGQTATIAKTFPMAQLTSIVIATPGTRLPGPQTVQLSKPSLEKQTVKSHPEAEEKQAESRTVTPPAAP
 KPKREENPQKLAFMVSLGLVTHDHLEEIQSKRQERKRRTANPVVYSGAVFEPERKKSAVTYLNSTMHPGT
 RKRGRPPKYNAVLGFGALTPSPSSHPDSPENEKTETTFPAPVQPVSLPSPSTDGDIHEDFCSVCR
 KSGQLMCDTCSRVIHLDCLEPPLKTI PKGMWICPRCQDQMLKKEEAIWPWGLAI VHSYIAYKAAKEEE
 KQKLLKWSDDLKQEREQLEQKVKELESSISKMEMKSSILARQKEMRSSLDKVKRLIRLVHGVLDLCPVD
 SEATAGALSNGPDCTPPANAASTPAPSPSSQSCTANCNQGEETK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001109691

ORF Size: 1812 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_001109691.1](#), [NP_001103161.1](#)
RefSeq Size: 6484 bp

RefSeq ORF: 1815 bp

Locus ID: 192285

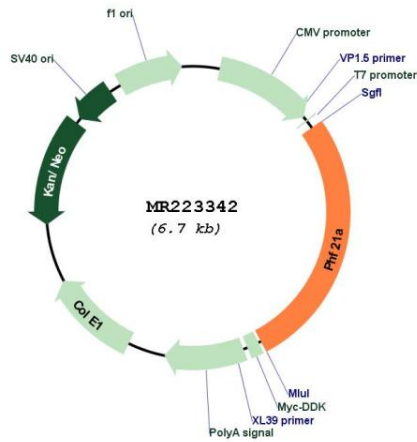
UniProt ID: [Q6ZPK0](#)

Cytogenetics: 2 E1

MW: 67.5 kDa

Gene Summary: Component of the BHC complex, a corepressor complex that represses transcription of neuron-specific genes in non-neuronal cells. The BHC complex is recruited at RE1/NRSE sites by REST and acts by deacetylating and demethylating specific sites on histones, thereby acting as a chromatin modifier. In the BHC complex, it may act as a scaffold. Inhibits KDM1A-mediated demethylation of 'Lys-4' of histone H3 in vitro, suggesting a role in demethylation regulation (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR223342