

Product datasheet for **MG224824**

Phf21a (NM_001109690) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Phf21a (NM_001109690) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Phf21a
Synonyms:	80kDa; Bhc; Bhc80; D030065N23Rik; PFTF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG224824 representing NM_001109690
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGTTGCAGACTCTACAGGAGGCTCTTAAAGTGGAAATTCAGGTTACCAGAAAACCTGGTTGCCCAA
 TGAAGCAGGATCCACAGAATGCTGACTTAAAGAAACAGCTTCATGAACTCCAAGCCAAAATCACAGCTTT
 GAGTGAGAAACAGAAAAGAGTAGTTGAGCAGCTGCGCAAGAACCTGATAGTCAAACAAGAGCAGCCGGAC
 AAGTTCAGATACAGCCATTGTACAGTCTGAAAACAAACACAAACAGCACAGCAGCAGCCACTACAGC
 CACTGCAGCAGCAACCGCAGCAACCGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGC
 AGCAGCAGCACCGCTAGTCTAACTGCATCACAGAAGACTGTAACACAGCTTCTATGATTACCACAAAAG
 AACTACCTCTCGTCTTGAAAGCAGCAACTGCGACCATGCCTGCCTCTGTGTGGCCAGAGACCTACCA
 TTGCTATGGTGACCGCCATCAACAGCCAGAAGGCTGTGCTCAGCACTGATGTGCAGAACACACCAGTCAA
 CCTCCAGACGTCTAGTAAGGCTACTGGGCTGGGGCAGAGGCTGTCCAAATTGTGGCAAAAAACACAGTC
 ACTCTGCAGGTTCAAGCAACACCTCCTCAGCCCATCAAAGTACCACAGTTTATCCCTCCTCTAGACTCA
 CTCCACGCCAAAACCTTCCCTCCACAGGTTGACCCAAGCCTGTGGCCAGAATAACATTCCTATCGTCC
 AGCGCCTCCTCCCATGCTTGAGCTCCTCAGCTTATCCAGAGGCTGTGATGCTGACCAAGTTTACACCC
 ACAACCTCCCCACATCCAGAATTCCATCCACCTGTCCGTGTTGCAATGGACAGACTGCAACCATAG
 CCAAAACGTTCCCATGGCCAGCTCACCAGCATTGTGATAGCTACTCCAGGGACAGACTCCCTGGACC
 TCAGACTGTACAGCTTAGCAAACCAAGCCTGGAGAAACAGACAGTTAAATCCCACCCAGAAGCAGAGGAA
 AAACAAGCAGAGAGCCGTACCGTTACCCACCTGCTGCACAAAACCAAAACGAGAAGAGAACCCTCAGA
 AACTTGCCTTCATGGTGTCTCTAGGGTTGGTAACACATGACCATCTAGAAGAAATCCAAAGCAAGAGGCA
 GGAAAGAAAGAGAAGAACAACAGCAAACCCGGGTACAGTGGGGCTGTCTTTGAGCCAGAGCGTAAGAAG
 AGTGACGTCACTTACCTAACAGCACAATGCATCCTGGGACGCGGAAGAGAGGTCGCTCCAAAATACA
 ATGCGGTGCTGGGGTTGGAGCCCTTACCCCAACATCCCCCATCCAGTCATCCCGACTCCCCTGAAAA
 TGAAAAGACAGAGACCACATTCCTTCCCTGCACCTGTTGAGCCTGTGCTTTGCCAGCCCCACCTCC
 ACAGACGGTGATATCCATGAGGATTTTGCAGTGTTCAGAAAAAGTGGCCAGTTGCTGATGTGTGACA
 CGTGTCCCGTGTATCATCTGGACTGCTTAGAGCCGCCCTGAAAACAATTCCAAGGGCATGTGGAT
 CTGTCCCAGATGTCAGGACCAGATGCTAAAGAAGGAAGAAGCAATTCCTTGGCCTGGAACCTTAGCCATT
 GTTCATTCTACATCGCCTACAAAGCAGCAAAAGAAGAGGAGAAACAGAAGCTACTTAAGTGGAGTTCAG
 ATTTAAAACAGGAGCGGGAACAACCTGGAGCAGAAGGTCAAAGAGCTCAGCAGTTCTATAAGTAAATGTAT
 GGAGATGAAGAGCAGCATCCTGGCGCGGAGAAGGAGATGCGCAGCTCCCTGGACAAGGTGAAGCGGCTC
 ATCCGCTTGTGCATGGCGTCGACCTCTGCAGACCTGTGGACTCAGAGGCCACGGCGGGGCCCTCTCCA
 ATGGCCAGACTGCACTCCCCTGCCAACGCCCTCCACACCCGCCCTTCCCCTCCTCGCAGAGCTG
 CACAGCGAACTGTAACAGGGGGAAGAGACTAAA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG224824 representing NM_001109690
 Red=Cloning site Green=Tags(s)

```
MELQTLQEALKVEIQVHQKLV AQMKQDPQNADLKKQLHELQAKITALSEKQKRVEQLRKNLIVKQE QPD
KFQIQPLSQSENKLOTAQQQLPLQQQPQQPQQQQQQQHAQQSAAAPPSLTASQKTVTTASMITTK
TLPLVLKAATATMPASVVGQRPTIAMVTAINSQKAVLSTDVQNTPVNLQTSKVTGPGAEAVQIVAKNTV
TLQVQATPPQPIKVPQFIPPPRLTPRPNFLPQVRPKPVAQNNIPIAPAPPMLAAPQLIQRPVMLTKFTP
TTLPTSQNSIHPVRVNGQTATIAKTFPMAQLTSIVIATPGTRLPGPQT VQLSKPSLEKQTVKSHPEAEE
KQAESRTVTPPAAPKPKREENPQKLAFMVSLGLVTHDLEEIQSKRQERKRRRTANPVYS GAVFEPERKK
SAVTYLNSTMHPGTRKRGRPPKYNAVLGFGAL TPTSPSSHPDSPENEKTETFTFPAPVQPVSLPSPTS
TDGDIHEDFCVSRKSGQLLMCDTCSR VYHLDCLPPLKTI PKGMWICPRCQDQMLKKEEAIPWPGTLAI
VHSYIAYKAAKEEEKQLLKWSSDLKQEREQLEQKV KELSSSISKMEMKSSILARQKEMRSSLDKVKRL
IRLVHGVDLCRPVDSEATAGALSNGPDC TPPANAASTPAPSPSSQSCTANCNQGEETK
```

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001109690

ORF Size: 2064 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_001109690.2](#)

RefSeq Size: 6328 bp

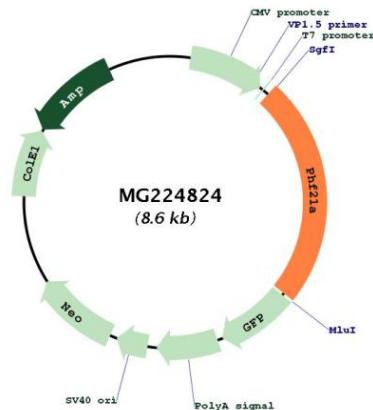
RefSeq ORF: 2067 bp

Locus ID: 192285

Cytogenetics: 2 E1

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 MG224824