

Product datasheet for MR223412

Bhlhe41 (NM_024469) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Bhlhe41 (NM_024469) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Bhlhe41
Synonyms: 6430520M22Rik; Bhlhb; Bhlhb2l; Bhlhb3; DEC2; Sh; Sharp1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR223412 representing NM_024469
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGACGAAGGAATCCCTCATTTGCAAGAGAGACAGTTACTGGAACATAGGGATTTATAGGACTGGACT
 ATTCCTCTTTGTATATGTGTAACCCAAAAGGAGCTTGAAGCGAGACGATACCAAGGATACCTACAAGTT
 ACCGCACAGATTAATAGAAAAGAAGAGACGAGACCGAATTAATGAATGCATTGCTCAGCTGAAAGATTTA
 CTGCCCAACATCTGAAATTGACAACACTGGGGCATTGGAGAAAGCAGTAGTCTTGAATTAACTTAA
 AGCACTTGAAAGCGCTAACAGCCTTAACAGCAGCAGCATCAGAAGATAATTGCTTTACAGAATGGGA
 GCGCTCTCTGAAATCGCCGGTCCAGGCCGACTTGGATGCGTTCCACTCGGGGTTTCAAACCTGCGCCAAA
 GAAGTCTTGCAATACCTCGCGCGCTTTGAGAGCTGGACACCCAGGGAGCCGCGCTGCGCACAGCTCGTCA
 GCCACCTGCATGCCGTGGCCACCCAGCTCCTGACGCCACAGGTGCCCTCCGGCAGGGGCTCTGGCGCGC
 GCCCTGCAGCGCGGGGCTGCGGCCGCCTCGGGTCCCAGCGCGTCCGCCGCTGCGTCCCGGTATCCAG
 CGGACTCAGCCCGGCACGGAGCCGGAACACGACACGGACACCGACAGCGGCTACGGAGGCGAGGCGGAGC
 AGGGCCGCGCGGCGCTCAAGCAGGAGCCACCCGGGACTCGTCCCTGCGCCAAAGAGGCCGAAGCTGGA
 GGCGCGGCGCGCTCCTGGGCCGAGCCCGCGCTGCTCGGCTCGCTCGTGGCGCTTGGCGGGGCGCG
 CCCTTCGCGCAGCCCGCTGCCGCGCCTTCTGCCTGCCCTTCTATCTGCTGTCGCGTCCGCCGCGCCGCT
 AGGTACAGCCCTGGCTAGACAAGAGCGGCTGGACAAGTATCTGTACCCCGCGGCGCGCCCTTCCC
 GCTGCTGTATCCCGCATCCCAGCAGCGCCGCGCTGCTGCTGCCGCGCTTCCCTTGTGTGCTGCC
 GTGCTGTCGCCACCCCGGAGAAGGCGGCGGACCGCCGGTGCCTGCTTCTGGCGCACGAGGTGGCGC
 CCCCAGGCGCGTGCGCCCCAGCAGCGCATAGCCGACCCACCTGCCGCGCTGTGAACCCGGAGAG
 CTCTCAGGAAGATGCCACGACGCCGCAAGGACGCCCC

ACGGTACGCGCGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >MR223412 representing NM_024469
Red=Cloning site Green=Tags(s)

MDEGIPHLQERQLLEHRDFIGLDYSSLYMCKPKRSLKRDDTKDITYKLPHRLIEKKRRDRINECIAQLKDL
 LPEHLKLTTLGHLEKAVVLELTLKHLKALTALTEQQHQKIIALQNGERSLKSPVQADLDAFHSGFQCAK
 EVLQYLARFESWTPREPRCAQLVSHLHAVATQLLTPQVPSGRGSGRAPCSAGAAAAA SGPERVARCVPIQ
 RTQPGEPEHDTDDTDSGYGGEAEQGRAAVKQEPDSSPAPKRPKLEARGALLGPEPALLGSLVALGGGA
 PFAQPAAPFCLPFYLLSPSAAAAYQPWLDKSGLDKYL YPAAAAFPPLL YPGIPAAAAAFAFPCLSS
 VLSPPPEKAGATAGAPFLAHEVAPPGLRPQHAHSRTHLPRAVNPESQEDATQPAKDAP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1280_h06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_024469

ORF Size: 1230 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_024469.2](#), [NP_077789.1](#)

RefSeq Size: 1421 bp

RefSeq ORF: 1233 bp

Locus ID: 79362

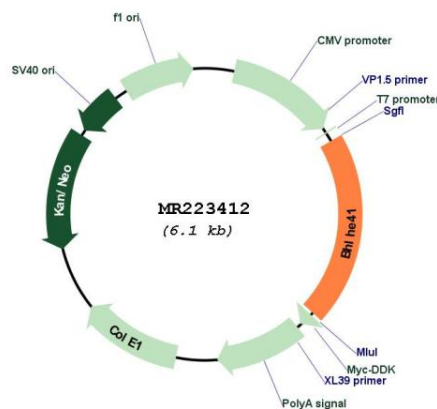
UniProt ID: [Q99PV5](#)

Cytogenetics: 6 77.7 cM

MW: 44.4 kDa

Gene Summary: This gene encodes a basic helix-loop-helix protein expressed in various tissues. The encoded protein can interact with Arntl or compete for E-box binding sites in the promoter of Per1 and repress Clock/Arntl's transactivation of Per1. This gene is believed to be involved in the control of circadian rhythm and cell differentiation. Defects in this gene are associated with the short sleep phenotype. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Feb 2014]

Product images:



Circular map for MR223412