

Product datasheet for **RC224722**

BHLHE23 (NM_080606) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: BHLHE23 (NM_080606) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: BHLHE23
Synonyms: bA305P22.3; Beta3b; BETA4; BHLHB4
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC224722 representing NM_080606
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGAGCTCAAGTCGCTGTCGGGGACGCGTACCTGGCACTAAGCCACGGCTACGCGGCGGGCGCTG
CGGGTCTCGCTACGGGGCGGCGGAGAACCCGAAGCGGCCCGCGGCTACGGCACTCCGGGCCCGGGCGG
CGACCTCCCCGCGGCGCCTGCACCTCGCGCCCCAGCTCAGGCGGCGGAGAGCAGCGGCGAACAGAGCGGG
GACGAGGACGACGCTTCGAGCAGCGGGCGGGCGGCGGGCCAGGGAGCGGCGGACGGGCGGGCGG
GGCCGCGAGAGCAGCGGTCTCTGCGGCTCAGCATCAACGCGCGGAGCGGCGGCGCATGCACGACCTAAA
CGACGCGCTGGACGGGCTGCGAGCCGTCATCCCTACGCGCACAGCCCGTCGGTGCAGCAAGCTCTCCAAG
ATCGCCACGCTGCTGCTCGCAAGAAGTATATCCTCATGCAGGCGCAGGCCCTGGACGAGATGCGGGCGC
TGGTGGCCTTCTCAACCAGGGCCAGGGCCTGGCCGCGCCGTAACGCGCGCCCTTGACGCCCTTCGG
CCAGGCCACTGTGTGCCCTTCTCCGAGGCGCCGCCCTGGGGCCCTGCCCTGACAAAGTGCAGCCGCTTC
TCCGGGACGCCCTCCGCGCTTTCGAAACACTGTCACGAGAAGCCG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC224722 representing NM_080606
Red=Cloning site Green=Tags(s)

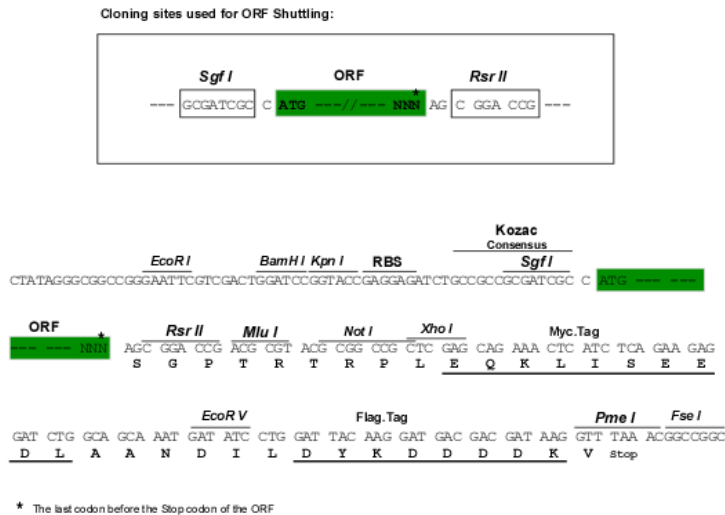
MAELKSLSGDAYLALSHGYAAAAAGLAYGAAREPEAARGYGTGPGGDLPAAPAPRAPAQAAESSGEQSG
 DEDDAFEQRRRRRGPSSAADGRRRPREQRSLRLSINARERRRMHDLNDALDGLRAVIPYAHSPSVRKLK
 IATLLLAKNYILMQAQLDEMRRLVAFLNQGGLAAPVNAAPLTPFGQATVCPFSAGAALGPCDPKCAAF
 SGTSPALCKHCHEKP

SGPTRTRRLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8045_c09.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_080606

ORF Size: 675 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_080606.2](#), [NP_542173.1](#)

RefSeq Size: 942 bp

RefSeq ORF: 726 bp

Locus ID: 128408

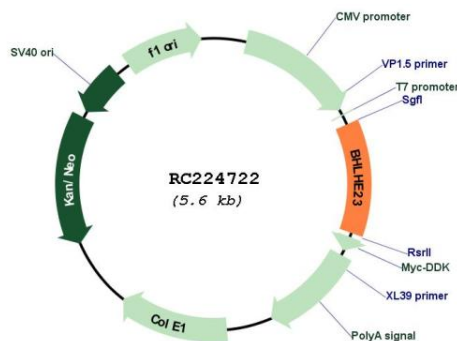
UniProt ID: [Q8NDY6](#)

Cytogenetics: 20q13.33

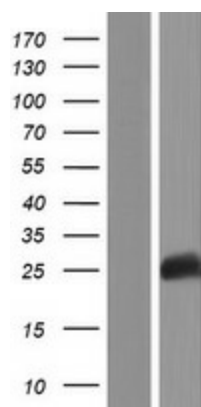
MW: 23.5 kDa

Gene Summary: This gene encodes a member of the basic helix-loop-helix transcription factor family. Members of this family contain two highly conserved and functionally distinct domains: the basic domain targets sequence-specific DNA binding, while the helix-loop-helix domain facilitates protein interaction. Studies of a related gene in mouse suggest that the encoded protein may function as a transcriptional repressor in the pancreas and brain, and that it is required for normal retinal function. [provided by RefSeq, May 2013]

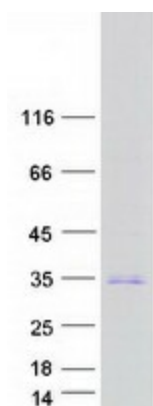
Product images:



Circular map for RC224722



Western blot validation of overexpression lysate (Cat# [LY409150]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224722 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified BHLHE23 protein (Cat# [TP324722]). The protein was produced from HEK293T cells transfected with BHLHE23 cDNA clone (Cat# RC224722) using MegaTran 2.0 (Cat# [TT210002]).