

Product datasheet for **MG224224**

Bhlha15 (NM_010800) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Bhlha15 (NM_010800) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Bhlha15
Synonyms: 1810009C13Rik; Bhlhb8; MIST-1; Mist1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG224224 representing NM_010800
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAAGACAAAAACCGGCCCTCGGCGCCGAACACCCATGCAGGACACAGAAGCCACCCAGGAGAGC
 AGACACCTGACAGACCCAGTCAGGCTCAGGGGGTCTCAGAGCTGACAAAGGGTCTCCGGAGCAGGACAGC
 GCGTGCAAGCGGAGGTCGGGAGAGGTCAGCCCGCGCAGGGGTCTGGTGGCCGAGGGAGAACAGT
 GTTCAGAGGCGGCTGGAGAGCAATGAGCGAGAGAGGCAGCGGATGCATAAACTCAACAATGCCTTCAGG
 CACTGCGCGAGGTCATCCCGCACGTGCGGGCTGACAAGAAGCTCTCCAAGATCGAGACCCCTCACGCTGGC
 CAAGAACTATATCAAGTCGCTGACCGCCACCACTACTATGTCCAGCAGCCGCTCCCGGGGCTGGAG
 GCACCAGGTCCTGCGCCAGGCCCTAAATTATACCAGCACTACCATCACCAGCAGCAGCAACAGCAGCAGC
 AGCAGCAGGTAGCTGGGGCCATGCTTGGTGTCACTGAGGACCAGCCCAAGGCCACCTGCAACGCTACTC
 TACACAGATCCACAGCTTCAGAGAGGGGAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG224224 representing NM_010800
 Red=Cloning site Green=Tags(s)

MKTKNRPPRRRTPMQDTEATPGEQTPDRPQSGSGGSEL TKGLRSRTARASGGRGEVSRRRQSGGRRENS
 VQRRLNESNERERQRMHKLNNAFQALREVIPHVRADKLSKIETLTLAKNYIKSLTATILTMSSRLPGLG
 APGPAPGPKLYQHYHHQQQQQQQVAGAMLGVTEDPQGHLLQRYSTQIHSFREGS

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

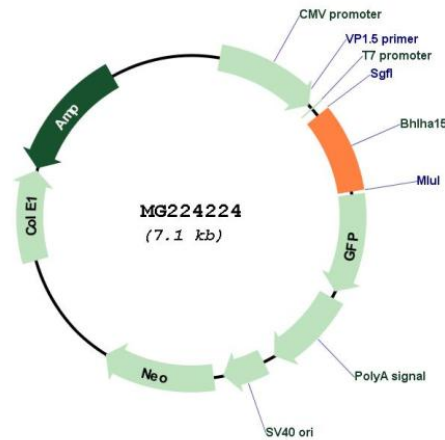


[View online »](#)

Cloning Scheme:



Plasmid Map:



ACCN: NM_010800

ORF Size: 3491 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_010800.4](#), [NP_034930.1](#)

RefSeq ORF: 594 bp

Locus ID: 17341

UniProt ID: [Q9QYC3](#)

Cytogenetics: 5 G2

Gene Summary: Plays a role in controlling the transcriptional activity of MyoD, ensuring that expanding myoblast populations remain undifferentiated (PubMed:17612490). Repression may occur through muscle-specific E-box occupancy by homodimers. May also negatively regulate bHLH-mediated transcription through an N-terminal repressor domain. Serves as a key regulator of acinar cell function, stability, and identity. Also required for normal organelle localization in exocrine cells and for mitochondrial calcium ion transport. May function as a unique regulator of gene expression in several different embryonic and postnatal cell lineages. Binds to the E-box consensus sequence 5'-CANNTG-3'. [UniProtKB/Swiss-Prot Function]