

## Product datasheet for **RG215938**

### **BHLHA15 (NM\_177455) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** BHLHA15 (NM\_177455) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** BHLHA15  
**Synonyms:** BHLHB8; MIST1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG215938 representing NM\_177455  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGAAGACCAAGAACCGGCCACGGCGCCGGGCCCGGTGCAGGACACAGAGGCCACCCCGGGGAGG  
 GGACGCCCGACGGGTCCCTGCCGAACCCGGGGCCAGAGCCGGCCAAGGGTCTGCGGAGCCGGCCGCGCCG  
 GGCCGACGAAGGGCTCCGGGCGAGGGCAGGCGCAGGCGCCAGGACCCTCCGGGCCGGTGGCCGTCGT  
 GACAGCAGCATCCAGCGCGGCTGGAGAGCAACGAGAGGGAGCGGCAGCGGATGCACAAGCTAAATAACG  
 CCTTCCAGGCCCTGCGTGAAGTCATCCCCACGTGCGCGCGGACAAGAAGCTCTCCAAGATCGAGACGCT  
 CACGCTGGCCAAGAACTACATCAAATCGCTGACGGCCACCATCCTGACCATGTCCAGCAGCCGCTCCCA  
 GGCTGGAGGGGCGGGCCCAAGCTCTACCAGCACTACCAGCAGCAGCAGCAGGTGGTGGGGGTGCGT  
 TGGGGGCCACGGAGGCCAGCCAGGGCCACCTGCAGAGGTAICTCACGAGATCCACAGCTTCCGAGA  
 GGGCACC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG215938 representing NM\_177455  
 Red=Cloning site Green=Tags(s)

MKTKNRPPRRRAPVQDTEATPGEGETPDGSLPNPGPEPAKGLRSRPARAAARAPGEGRRRRPGPSGPGRR  
 DSSIQRRESNERERQRMHKLNNAFQALREVIPHVRADKLSKIETLTLAKNYIKSLTATILTMSSRLP  
 GLEGPGLKYQHYQQQQVAGGALGATEAQPQGHQRYSTQIHSFREGT

**TRTRPLE** - GFP Tag - V

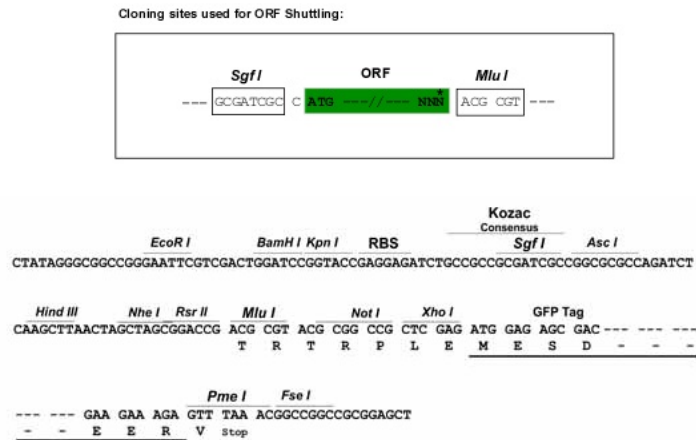
**Chromatograms:** [https://cdn.origene.com/chromatograms/ja2406\\_f01.zip](https://cdn.origene.com/chromatograms/ja2406_f01.zip)



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**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_177455

**ORF Size:** 567 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

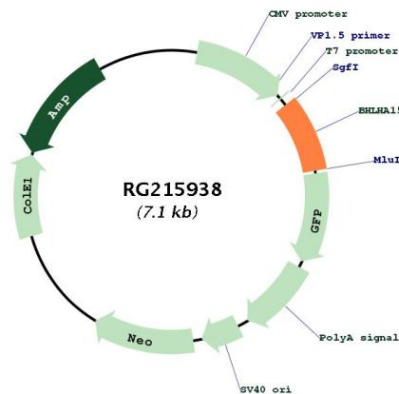
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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:	<u>NM_177455.4</u>
RefSeq Size:	588 bp
RefSeq ORF:	570 bp
Locus ID:	168620
UniProt ID:	<u>Q7RTS1</u>
Cytogenetics:	7q21.3
Protein Pathways:	Maturity onset diabetes of the young
Gene Summary:	Plays a role in controlling the transcriptional activity of MYOD1, ensuring that expanding myoblast populations remain undifferentiated. 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' (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for RG215938