

Product datasheet for **MG206358**

Hmbox1 (BC051457) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Hmbox1 (BC051457) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Hmbox1
Synonyms: AI451877; AI604847; F830020C16Rik
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG206358 representing BC051457
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCTCAGCTCCTTTCCAGTGGTTTTGCTGAAACCATGTCTCACTACACAGATGAACCCAGATTTACCA
 TAGAACAGATAGACCTGCTCCAGCGTCTTCGGCGTACCGGGATGACCAAACATGAAATCCTTCATGCATT
 AGAAACTTTGGACCGTCTTGATCAAGAGCATAGTGATAAATTTGGAAGGAGGTCCAGCTACGGGGGAAGC
 TCATATGGGAACAGTACCAACAACGTTCCAGCATCTTCCTCTACAGCCACAGTTCACGCAGACCCAGC
 ACTCGGGAATGTCCCATCACCCAGCAACAGTTACGATACCTCCCCTGCTTGCCTTGCCTACCAATCAAAA
 TGGGAGGGAGAACAATGATCGATTGTCCACATCCAATGGGAAGATGTCACCATCTCGCTACCATGCAAAC
 AGCATGGGTGAGAGTCAATAGCTTTGAGGCCTCAGAAGAGGACCTAGATGTAGATGATAAAGTGGAGG
 AATTAATGAGGAGGGACAGCAGTGTGATAAAAGAGGAAATCAAAGCCTTTCTTGCCAATCGGAGGATTTT
 CCAAGCAGTTGTTGCACAGGTAACAGGAATCAGTCAGAGTCGAATCTCTCACTGGCTGCTGCAGCAGGGA
 TCAGATCTGAGTGAGCAGAAGAAAGGGCGTCTACCGATGGTATCAACTTGAGAAGACAAACCTGGGG
 CTACGCTAAGTATGAGACCTGCCCCATTCCAATAGAGGACCTGAATGGAGACAAACACCTCCCCCAGT
 CTCGCCACACCTGGAACCTTCCGGCTTCGACGAGGGAGTAGATTTACCTGGAGAAAGGAGTGCCTAGCT
 GTCATGGAAAGTTACTTCAATGAGAACCAGTACCCAGATGAAGCAAAGAGAGAAGAAATGGCAAATGCTT
 GCAATGCAGTCATACAGAAGCCAGGCAAAAAGCTGTCTGACCTGGAACGAGTTACCTCTGAAAAGTATA
 TAATTGTTTTGCTAATCGACGGAAGGAGATCAAGAGAAGAGCCAATATCGAAGCAGCAATCCTGGAGAGT
 CATGGGATAGATGTACAGAGTCCAGGAGGCCATTCCAACAGTGACGATGTGGACGGGAACGACTACTCCG
 AGCAGTCATCCTTTGCAGGAGCCTTGATTCAATTAGAGCGTCAGAAGGGTCCACCGGGATGCCAGCAGCT
 ACCAGTGCTAAGTGGCCTTTTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG206358 representing BC051457
 Red=Cloning site Green=Tags(s)

MLSSFPVVLLETMSHYTDEPRFTIEQIDLLQLRRTGMTKHEILHALETLDRLDQEHSDFGRSSYGGSSYGNSTNNVPASSSTATASTQTQHSGMSPSPNSYDTSPLPCTTNQNGRENNDRLSTSNKMSPSRYHANSMGQRSYSFEASEEDLDVDDKVEELMRDSSVIKKEEIKAFLANRRISQAVVAQVTGISQSRISHWLLQQGSDLSEQKKRAFYRWYQLEKTNPGATLSMRPAPIPIEDPEWRQT PPPVSATPGTFRLRRGSRFTWRKECLAVMESYFNENQYPDEAKREEIANACNAVIQKPGKKLSDLERVTSLKVYNWFANRRKEIKRRANIEAAILES
 HGIDVQSPGGHSNSDDVDGNDYSEQSSFAGALIQLERQKGPPEGCQQLPVL SGLL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: BC051457

ORF Size: 1212 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: [BC051457](#), [AAH51457](#)

RefSeq Size: 3435 bp

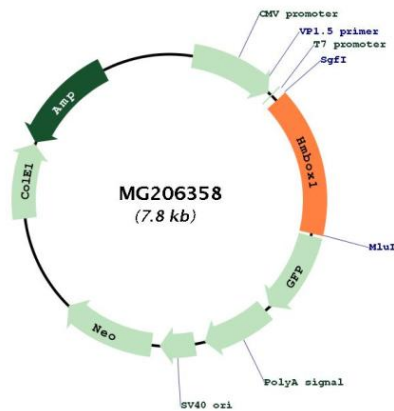
RefSeq ORF: 1214 bp

Locus ID: 219150

Cytogenetics: 14 D1

Gene Summary: Binds directly to 5'-TTAGGG-3' repeats in telomeric DNA (By similarity). Associates with the telomerase complex at sites of active telomere processing and positively regulates telomere elongation (By similarity). Important for TERT binding to chromatin, indicating a role in recruitment of the telomerase complex to telomeres (PubMed:23685356). Also plays a role in the alternative lengthening of telomeres (ALT) pathway in telomerase-negative cells where it promotes formation and/or maintenance of ALT-associated promyelocytic leukemia bodies (APBs) (By similarity). Enhances formation of telomere C-circles in ALT cells, suggesting a possible role in telomere recombination (By similarity). Might also be involved in the DNA damage response at telomeres (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG206358