

Product datasheet for MR206358

Hmbox1 (BC051457) Mouse Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Hmbox1 (BC051457) Mouse Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Hmbox1 |
| Synonyms: | AI451877; AI604847; F830020C16Rik |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >MR206358 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTCAGCTCCTTTCCAGTGGTTTTGCTGAAACCATGTCTCACTACACAGATGAACCCAGATTTACCA
TAGAACAGATAGACCTGCTCCAGCGTCTTCGGCGTACCGGGATGACCAAACATGAAATCCTTCATGCATT
AGAAACTTTGGACCGTCTTGATCAAGAGCATAGTGATAAATTTGGAAGGAGGTCCAGCTACGGGGGAAGC
TCATATGGGAACAGTACCAACAACGTTCCAGCATCTTCCTCTACAGCCACAGTTCACGCAGACCCAGC
ACTCGGGAATGTCCCATCACCCAGCAACAGTTACGATACCTCCCCTGCTTGCCTTGCCTACCAATCAAAA
TGGGAGGGAGAACAATGATCGATTGTCCACATCCAATGGGAAGATGTCACCATCTCGCTACCATGCAAA
AGCATGGGTGAGAGTCAATAGCTTTGAGGCCTCAGAAGAGGACCTAGATGTAGATGATAAAGTGGAGG
AATTAATGAGGAGGGACAGCAGTGTGATAAAGAGGAAATCAAAGCCTTTCTTGCCAATCGGAGGATTTT
CCAAGCAGTTGTTGCACAGGTAACAGGAATCAGTCAGAGTCGAATCTCTCACTGGCTGCTGCAGCAGGGA
TCAGATCTGAGTGAGCAGAAGAAAGGGCGTCTACCGATGGTATCAACTTGAGAAGACAAACCTCGGG
CTACGCTAAGTATGAGACCTGCCCCATTCCAATAGAGGACCTGAATGGAGACAAACACCTCCCCCAGT
CTCCGCCACACCTGGAACCTTCCGGCTTCGACGAGGGAGTAGATTTACCTGGAGAAGGAGTGCCTAGCT
GTCATGGAAAGTTACTTCAATGAGAACCAGTACCCAGATGAAGCAAAGAGAGAAGAAATGCCAATGCTT
GCAATGCAGTCATACAGAAGCCAGGCAAAAAGCTGTCTGACCTGGAACGAGTTACCTCTGAAAAGTATA
TAATTGGTTTGCTAATCGACGGAAGGAGATCAAGAGAAGAGCCAATATCGAAGCAGCAATCCTGGAGAGT
CATGGGATAGATGTACAGAGTCCAGGAGGCCATTCCAACAGTGACGATGTGGACGGGAACGACTACTCCG
AGCAGTCATCCTTTGCAGGAGCCTTGATTCAATTAGAGCGTCAGAAGGGTCCACCGGGATGCCAGCAGCT
ACCAGTGCTAAGTGGCCTTTTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >MR206358 protein sequence
Red=Cloning site Green=Tags(s)

MLSSFPVVLLETMSHYTDEPRFTIEQIDLLQRLRRTGMTKHEILHALETLDRLDQEHSDFGRSSYGGG
 SYGNSTNNVPASSSTATASTQTQHSGMSPSPNSYDTSPLPCTTNQNGRENNDRLSTSNKMSPSRYHAN
 SMGQRSYSFEASEEDLDVDDKVEELMRRDSSVIKKEIKAFANRRISQAVVAQVTGISQSRISHWLLQQG
 SDLSEQKKRAFYRWYQLEKTNPGATLSMRPAPIPIEDPEWRQTPPPVSATPGTFRLRRGSRFTWRKECLA
 VMESYFNENQYPDEAKREEIANACNAVIQKPGKKLSDLERVTSLKVYNWFANRRKEIKRRANIEAAILLES
 HGDIVQSPGGHSNSDDVDGNDYSEQSSFAGALIQLERQKGGCQQLPVL SGLL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

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

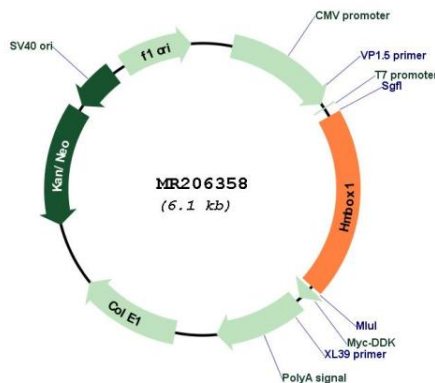
Locus ID: 219150

Cytogenetics: 14 D1

MW: 45.4 kDa

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 MR206358