

Product datasheet for **RG214217**

HOXB1 (NM_002144) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HOXB1 (NM_002144) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HOXB1
Synonyms:	HCFP3; Hox-2.9; HOX2; HOX2I
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG214217 representing NM_002144 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACTATAATAGGATGAACTCCTTCTTAGAGTACCCACTCTGTAACCGGGGACCCAGCGCCTACAGCG
CCCACAGCGCCCCAACCTCCTTTCCCCCAAGCTCGGCTCAGGCGGTTGACAGCTATGCAAGCGAGGGCCG
CTACGGTGGGGGCTGTCCAGCCCTGCGTTTCAGCAGAAGTCCGGCTATCCCGCCAGCAGCCGCTTCG
ACCCTGGGGGTGCCCTTCCCAGCTCCGCGCCCTCGGGTATGCTCCTGCCGCTGCAGCCCCAGCTACG
GGCCTTCTCAGTACTACCCTCTGGTCAATCAGAAGGAGACGGAGGCTATTTTCATCCCTCGAGCTACGG
GGCCAGCTAGGGGCTTGTCCGATGGCTACGGAGCAGGTGGAGCCGGTCCGGGGCCATATCCTCCGCGAG
CATCCCCCTTATGGGAACGAGCAGACCCGAGCTTTGCACCGGCCATGCTGATCTCCTCTCCGAGGACA
AGGAAACACCCTGCCCTCAGAACCTAACACCCCCACGGCCCGGACCTTCGACTGGATGAAGGTTAAGAG
AAACCCACCCAAGACAGCGAAGGTGTCAGAGCCAGGCCTGGGCTCGCCAGTGGCCTCCGCACCAACTTC
ACCACAAGGCAGCTGACAGAAGTGGAAAAGGAGTTCCATTTCAACAAGTACCTGAGCCGGGCCCGGAGGG
TGGAGATTGCCGCCACCCTGGAGCTCAATGAAACACAGGTCAAGATTTGGTTCCAGAACCAGCAATGAA
GCAGAAGAAGCGGAGCGAGAGGAAGGTCCGGTCCCCCAGCCCCACCAGGCTGCCCAAGGAGGCAGCT
GGAGATGCCTCAGACCAGTCGACATGCACCTCCCCGGAAGCCTCACCCAGCTCTGTACCTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG214217 representing NM_002144
Red=Cloning site Green=Tags(s)

```
MDYNRMNSFLEYPLCNRGPSAYSASHSAPTSFPPSSAQAVDSYASEGRYGGGLSSPAFQQNSGYPAQQPPS
TLGVFPSSAPSGYAPAAACSPSYGPSQYYPLGQSEGDGGYFHPSSYGAQLGGLSDGYGAGGAGPGPYPPQ
HPPYGNQETASFAPAYADLLSEDKETPCPSEPNTPTARTFDWMKVKNPPKTAKVSEPGLGSPSGLRTNF
TTRQLTELEKEFHFNKYLSRRARVEIAATLELNETQVKIWFQNRMRKQKKREREEGRVPPAPPGCPKEAA
GDASDQSTCTSPASPSSVTS
```

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002144

ORF Size: 903 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 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: [NM_002144.4](#)

RefSeq Size: 1014 bp

RefSeq ORF: 906 bp

Locus ID: 3211

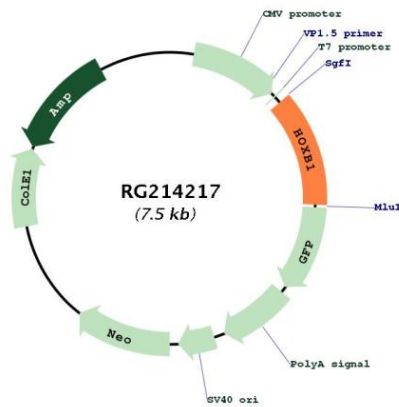
UniProt ID: [P14653](#)

Cytogenetics: 17q21.32

Protein Families: Transcription Factors

Gene Summary: This gene belongs to the homeobox family of genes. The homeobox genes encode a highly conserved family of transcription factors that play an important role in morphogenesis in all multicellular organisms. Mammals possess four similar homeobox gene clusters, HOXA, HOXB, HOXC and HOXD, located on different chromosomes, consisting of 9 to 11 genes arranged in tandem. This gene is one of several homeobox HOXB genes located in a cluster on chromosome 17. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG214217