

Product datasheet for RC218740

HOXB5 (NM_002147) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HOXB5 (NM_002147) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HOXB5
Synonyms:	HHO.C10; HOX2; Hox2.1; HOX2A; HU-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218740 representing NM_002147 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCTCGTACTTTGTAAACTCCTTCTCGGGCGTTATCCAAATGGCCCGGACTATCAGTTGCTAAATT
ATGGCAGTGCCAGCTCTCTGAGCGGCTTTACAGGGATCCCGCTGCCATGCACACCGGCTTTACGGCTA
CAATTACAATGGGATGGACCTCAGCGTCAACCGCTCTCGGCCTCTCCAGCCACTTTGGGGCGGTGGC
GAGAGCTCGCGCCTTCCCCGCGCCCGCCAGGAGCCCGCTTCAGGCAAGCGGCTTCGAGCTGCTCCC
TGTCTCGCCGAGTCCCTGCCCTGCACCAACGGCGCAGCCACGGCGCCAAGCCCTCTGCTTCGTCCTCC
CTCCGACCGGCGACCTCAGCCAGCTCCAGCGCAATTTACCGAAATAGACGAGGCCAGCGCTCCTCG
GAGCCTGAGGAAGCGGCAAGCCAGCTAAGCAGCCCGCCTAGCTCGGGCGCAGCCAGAGCCCATGGCCA
CCTCCACAGCCGCGCCGAGGGGAGACTCCGAGATATTTCCCTGGATGAGGAAGCTTCACATCAGCCA
TGATATGACCGGGCCGGACGGGAAAAGGGCCCGGACCGGTATACCCGCTACCAGACCCTGGAGCTGGAA
AAGGAGTTCCACTTCAACCGCTACCTGACCCGGCGACGGCGCATCGAGATCGCCACGCACTCTGCCTGT
CCGAGCGCCAGATCAAGATCTGGTTCCAGAACCGGCATGAAGTGAAGAAGGACAACAAATTGAAAAG
TATGAGCTGGCTACAGCTGGCAGCGCCTTCCAGCCC

ACGCGTACGCGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC218740 representing NM_002147
 Red=Cloning site Green=Tags(s)

MSSYFVNSFSGRYPNGPDYQLLNYGSGSSLSGSYRDPAAAMHTGSYGNYNGMDLSVNRSSASSSHFGAVG
 ESSRAFAPAQEPFRFQAASSCSLSSPESLPCTNGDSHGAKPSASSPSDQATSASSANFTEIDEASASS
 EPEEAASQLSSPSLARAQPEPMATSTAAPEGQTPQIFPWMRKLHI SHDMTGPDGKRARTAYTRYQTLLELE
 KEFHFNRYLTRRRRIEIAHALCLSERQIKIWFQNRMRKWKKDNKLSMSLATAGSAFQP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6044_e08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_002147

ORF Size: 807 bp

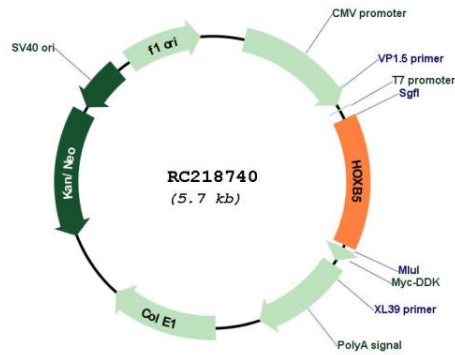
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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](#)

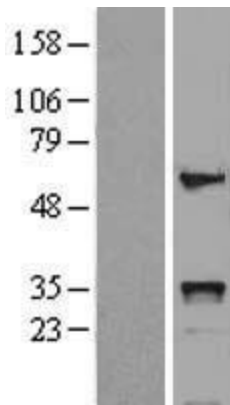
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<ol style="list-style-type: none">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_002147.2</u> , <u>NP_002138.1</u>
RefSeq Size:	1835 bp
RefSeq ORF:	810 bp
Locus ID:	3215
UniProt ID:	<u>P09067</u>
Cytogenetics:	17q21.32
Domains:	homeobox
Protein Families:	Transcription Factors
MW:	29.3 kDa
Gene Summary:	This gene is a member of the Antp homeobox family and encodes a nuclear protein with a homeobox DNA-binding domain. It is included in a cluster of homeobox B genes located on chromosome 17. The encoded protein functions as a sequence-specific transcription factor that is involved in lung and gut development. Increased expression of this gene is associated with a distinct biologic subset of acute myeloid leukemia (AML) and the occurrence of bronchopulmonary sequestration (BPS) and congenital cystic adenomatoid malformation (CCAM) tissue. [provided by RefSeq, Jul 2008]

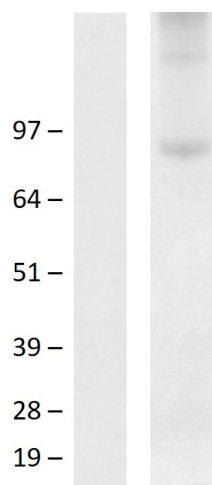
Product images:



Circular map for RC218740



Western blot validation of overexpression lysate (Cat# [LY400780]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218740 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Western blot validation of overexpression lysate (Cat# [LY400780]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218740 using transfection reagent PEI