

Product datasheet for RC208375

HOXB4 (NM_024015) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HOXB4 (NM_024015) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HOXB4
Synonyms:	HOX-2.6; HOX2; HOX2F
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208375 representing NM_024015 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTATGAGTCTTTTTGATCAACTCAAATATGTCGACCCCAAGTCCCTCCATGCGAGGAATATT
CACAGAGCGATTACCTACCCAGCGACCACTCGCCCGGTACTACGCCGGCGGCCAGAGGCGAGAGAGCAG
CTTCCAGCCGGAGGCGGGCTTCGGGCGGCGCGGGCGTGCACCGTGCAGCGCTACGCGGCTGCCGGGAC
CCTGGGCCCGCGGCTCCGCCACCACCCCGCCCGCCCGCCACCGCCGGTCTGTCCCTCGGGCTC
CTGCGCCGCCACCGCCGGGGCCCTCCTCCCGAGCCCGCCAGCGCTGCGAGGCGGTGAGCAGAGCC
CCGCGCCGCTCCCTGCGCCAGAACCCCTGCACCCAGCCCGTCCCACTCCGCGTGCAAAGAGCCCGTC
GTCTACCCCTGGATGCGCAAAGTTCACGTGAGCAGGTAACCCCAATTACGCCGGCGGGAGCCCAAGC
GCTCTCGGACCGCTACACGCGCCAGCAGGTCTTGGAGCTGGAGAAGGAATTTCACTACAACCGCTACCT
GACACGGCGCCGGAGGTTGGAGATCGCCACGCGCTCTGCCTCTCCGAGCGCCAGATCAAGATCTGGTTC
CAGAACC GGCGCATGAAGTGGAAAAAGACCACAAGTTGCCAACACCAAGATCCGCTCGGGTGTGCGG
CAGGCTCAGCCGGAGGGCCCCCTGGCCGGCCCAATGGAGGCCCGCCGCGCTC

ACGCGTACGCGCGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC208375 representing NM_024015
Red=Cloning site Green=Tags(s)

MAMSSFLINSNYVDPKFPPEEYSQSDYLPDSHSPGYAGQRRESSFQPEAGFGRRAACTVQRYAACRD
 PGPPPPPPPPPPPPPLSPRAPAPPAGALLPEPGQRCEAVSSPPPPPCAQNPLHPSPSHSACKPEV
 VYPWMRKVHVSTVNPYAGGEPKRSRTAYTRQQVLELEKEFHYNRYL TRRRRVEIAHALCLSERQIKIWF
 QNRRMKWKKDHKLPNTKIRSGGAAGSAGPPGRPNGGPRAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2583_b07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_024015

ORF Size: 753 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: [NM_024015.5](#)

RefSeq Size: 2040 bp

RefSeq ORF: 756 bp

Locus ID: 3214

UniProt ID: [P17483](#)

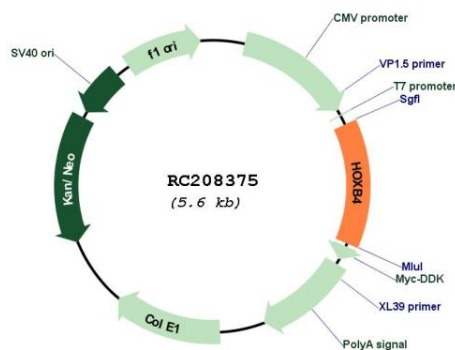
Cytogenetics: 17q21.32

Protein Families: ES Cell Differentiation/IPS, Stem cell relevant signaling - DSL/Notch pathway, Transcription Factors

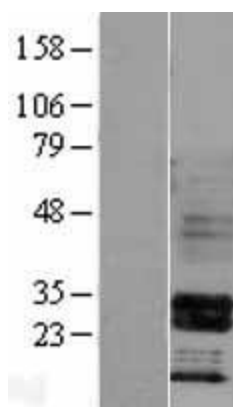
MW: 27.4 kDa

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 development. Intracellular or ectopic expression of this protein expands hematopoietic stem and progenitor cells in vivo and in vitro, making it a potential candidate for therapeutic stem cell expansion. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC208375



Western blot validation of overexpression lysate (Cat# [LY402972]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208375 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).