

Product datasheet for RC204747

HOXD4 (NM_014621) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HOXD4 (NM_014621) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HOXD4
Synonyms:	HHO.C13; Hox-4.2; HOX-5.1; HOX4; HOX4B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204747 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCCGATCGCC

ATGGTCATGAGTTCGTATATGGTGAACCTCAAGTATGTGGACCCCAAGTCCCTCCGTGCGAGGAGTATT
TGCAGGGCGGCTACCTAGGCGAGCAGGGCGCCGACTACTACGGCGGCGGCGCGCAGGGCGCAGACTTCCA
GCCCCGGGGCTCTACCCACGGCCCGACTTCGGTGAGCAGCCTTCGGAGGCAGCGGCCCGGGCCTGGC
TCGGCGCTGCCTGCGCGGGTACGGACAAGAGCCAGGCGGCCCGGGCGGTCACTACGCCCTCCAGGAG
AGCCTTGCCAGCTCCCCGGCGCTCCGCGGGCCCTGCCTGGCGCCGGGCTACAGTCAGTCCGA
CCCAAGCAGCCGCCCTCCGGGACGGCACTCAAGCAGCCGCGCGTGGTCTACCCCTGGATGAAGAAGGTG
CACGTGAATTCGGTGAACCCCACTACACCGGTGGGAACCCAAGCGGTCCCGAACGGCCTACACCCGGC
AGCAAGTCCTAGAACTGGAAAAAAGAAATTCATTTAACAGGTATCTGACAAGGCGCGTCCGATTGAAAT
CGCTCACACCCTGTGTCTGTGCGAGCGCCAGATCAAGATCTGGTCCAGAACCGGAGGATGAAGTGGAAA
AAAGATCATAAGCTGCCAACACTAAAGGCAGGTATCGTCCTCATCTTCTCCTCATCTTGCTCCTCCT
CAGTCGCCCCAGCCAGCATTTACAGCCGATGGCCAAAGACCACCACCGGACCTGACGACCTTA

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC204747 protein sequence
Red=Cloning site Green=Tags(s)

MVMSSYMVNSKYVDPKFPPEEYLQGGYLGEQGADYYGGGAQGADFQPPGLYPRPDFGEQPFGGSGPGPG
 SALPARGHGQEPGGPGGHYAAPGEPAPPPAPPAPLPGARAYSQSDPKPPSGTALKQPAVVYPWMKKV
 HVNSVNPNTGGEPKRSRTAYTRQQVLELEKEFHFNRYLTRRRRIEIAHTLCLSERQIKIWFQNRMRKWK
 KDHLKLPNTKGRSSSSSSSSSSSSSVAPSQHLQPMADHHTDLTTL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6062_f01.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_014621

ORF Size: 765 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_014621.3](#)

RefSeq Size: 1298 bp

RefSeq ORF: 768 bp

Locus ID: 3233

UniProt ID: [P09016](#)

Cytogenetics: 2q31.1

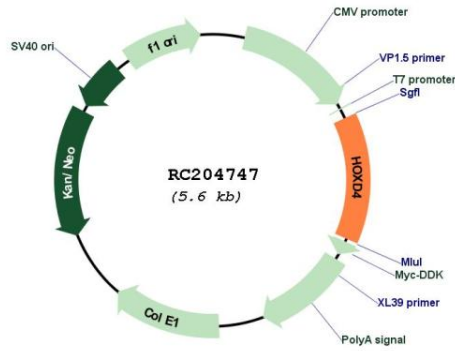
Domains: homeobox

Protein Families: Transcription Factors

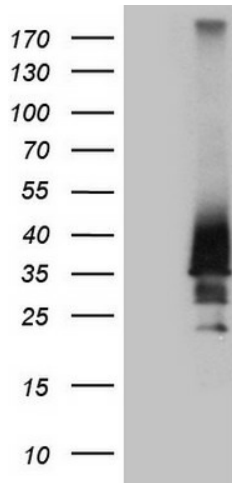
MW: 27.9 kDa

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 HOXD genes located at 2q31-2q37 chromosome regions. Deletions that removed the entire HOXD gene cluster or 5' end of this cluster have been associated with severe limb and genital abnormalities. The protein encoded by this gene may play a role in determining positional values in developing limb buds. Alternatively spliced variants have been described but their full length nature has not been determined. [provided by RefSeq, Jul 2008]

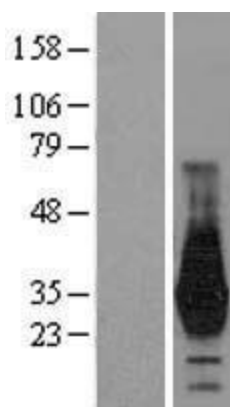
Product images:



Circular map for RC204747



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HOXD4 (Cat# RC204747, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-HOXD4 (Cat# [TA809474])(1:2000). Positive lysates [LY415173] (100ug) and [LC415173] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY415173]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204747 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).