

## Product datasheet for RC210208

### HOXD10 (NM\_002148) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HOXD10 (NM_002148) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HOXD10
Synonyms:	Hox-4.4; HOX4; HOX4D; HOX4E
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210208 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGTCCTTTCCCAACAGCTCTCCTGCTGCTAATACTTTTTAGTAGATTCCCTTGATCAGTGCCTGCAGGA  
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GAACCGGATCCGAGAAGTACCGCCAACCTCACGTTTTCT

**ACGCGT**ACGCGCGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
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**Protein Sequence:** >RC210208 protein sequence  
Red=Cloning site Green=Tags(s)

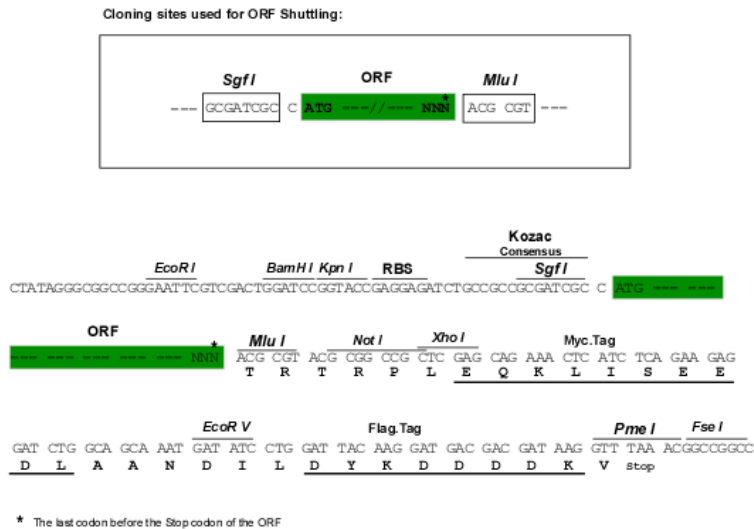
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 VENPEVPVPGYFRLSQT YATGKTQEYNN SPEGSSTVMLQLNPRGA AKPQLSAAQLQMEKKMNEPVSGQEP  
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 LEKEFLFNM YLTRERRLEISKSVNLDRQVKIWFQNR RMK LKMSRENRI RELTANLTF S

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6270\\_h04.zip](https://cdn.origene.com/chromatograms/mk6270_h04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_002148

**ORF Size:** 1020 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\\_002148.4](#)

**RefSeq Size:** 1814 bp

**RefSeq ORF:** 1023 bp

**Locus ID:** 3236

**UniProt ID:** [P28358](#)

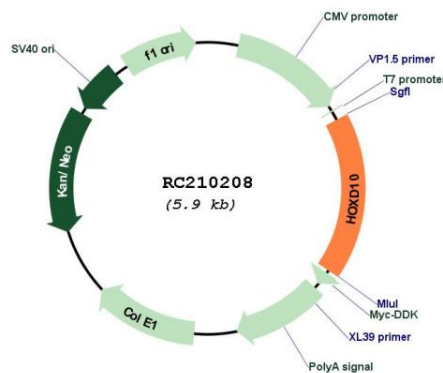
**Cytogenetics:** 2q31.1

**Protein Families:** Druggable Genome, Transcription Factors

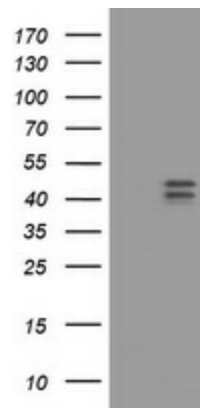
**MW:** 38.4 kDa

**Gene Summary:** This gene is a member of the Abd-B homeobox family and encodes a protein with a homeobox DNA-binding domain. It is included in a cluster of homeobox D genes located on chromosome 2. The encoded nuclear protein functions as a sequence-specific transcription factor that is expressed in the developing limb buds and is involved in differentiation and limb development. Mutations in this gene have been associated with Wilm's tumor and congenital vertical talus (also known as "rocker-bottom foot" deformity or congenital convex pes valgus) and/or a foot deformity resembling that seen in Charcot-Marie-Tooth disease. [provided by RefSeq, Jul 2008]

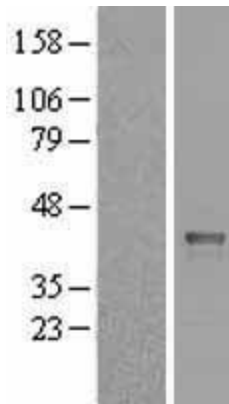
**Product images:**



Circular map for RC210208



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HOXD10 (Cat# RC210208, 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-HOXD10(Cat# [TA800777]). Positive lysates [LY419501] (100ug) and [LC419501] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419501]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210208 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).