

## Product datasheet for **RG210208**

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

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HOXD10 (NM_002148) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HOXD10
Synonyms:	Hox-4.4; HOX4; HOX4D; HOX4E
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG210208 representing NM_002148 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGTCCTTTCCCAACAGCTCTCCTGCTGCTAATACTTTTTAGTAGATTCCCTTGATCAGTGCCTGCAGGA  
GTGACAGTTTTTATTCCAGCAGCGCCAGCATGTACATGCCACCACCTAGCGCAGACATGGGGACCTATGG  
AATGCAAACCTGTGGACTGCTCCCGTCTCTGGCCAAAAGAGAAGTGAACCACCAAATATGGGTATGAAT  
GTGCATCCTTATACCTCAAGTAGACAGTTGGACAGATCCGAACAGATCTTGTCGAATAGAGCAACCTG  
TTACACAGCAAGTCCCCACTTGCTCCTCACCACCAACATTAAGGAAGAATCCAATTGCTGCATGTATTC  
TGATAAGCGCAACAACTCATTTTCGGCCGAGGTCCTTCGTACCAGAGGCTGGTCCCTGAGTCTTGTC  
GTTGAGAACCTGAGGTTCCCGTCCCTGGATATTTAGACTGAGTCAGACCTACGCCACCGGAAAAACCC  
AAGAGTACAATAATAGCCCCGAAGGCAGCTCCACTGTCATGCTCCAGCTCAACCTCGTGGCGCGGCCAA  
GCCGCAGCTCTCCGCTGCCAGCTGCAGATGGAAGAAGATGAACGAGCCCGTGAGCGGCCAGGAGCCC  
ACCAAAGTCTCCAGGTGGAGAGCCCCGAGGCCAAAGGCGGCCTCCCGAAGAGAGGAGCTGCCTGGCTG  
AGGTCTCCGTGTCCAGTCCCGAAGTGCAGGAGAAGGAAAGCAAAGAGGAAATCAAGTCTGATACCAAC  
CAGCAATTGGCTCACTGCAAAGAGTGGCAGAAAAGAGGTGCCCTTACACTAAGCACCAACCGCTGGAA  
TTAGAAAAGAGTTCTTGTTCAATATGTACCTCACCCGAGCGCCGCTAGAGATCAGTAAGAGCGTTA  
ACCTCACCGACAGGCAGTCAAGATTTGGTTTCAAACCGCCGAATGAACTCAAGAAGATGAGCCGAGA  
GAACCGGATCCGAGAACTGACCGCAACCTCACGTTTTCT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG210208 representing NM\_002148  
Red=Cloning site Green=Tags(s)

MSFPNSSPAANTFLVDSLISACRSDSFYSSASMYMPPPSADMGTYGMQTCGLLPSLAKREVNHQNMGMN  
 VHPYIPQVDSWDPNRSERIEQVPTQQVPTCSFTTNIKEESNCCMYSDKRNKLISAEVPSYQRLVPESCP  
 VENPEVPVPGYFRLSQTATGKTQEYNNSEGSSTVMLQLNPRGAAPQLSAAQLQMEKKMNEPVSGQEP  
 TKVSVQVESPEAKGGLPEERSCLAEVSVSSPEVQEKEKEEIKSDTPTSNWLTAKSGRKKRCPYTKHQTL  
 LEKEFLFNMYLTRERRLEISKSVNLDRQVKIWFQNRMKLKKMSRENRIRELTANLTF

TRTRPLE - GFP Tag - V

**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

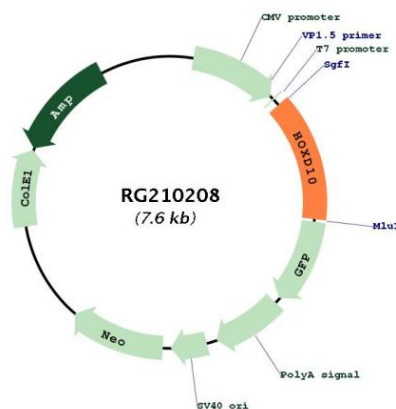
**UniProt ID:** [P28358](#)

**Cytogenetics:** 2q31.1

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

**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 RG210208