

Product datasheet for **RG218404**

HOXD12 (NM_021193) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	HOXD12
Synonyms:	HOX4H
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG218404 representing NM_021193
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTGTGAGCGCAGTCTCTACAGAGCGGGCTATGTGGGCTCGCTTCTGAATCTGCAGTCGCCAGACTCTT
TCTACTTCTCCAACCTGAGGCCGAATGGCGGCCAGTTGGCCGCGCTTCCCCCTATCTCTACCCGCGCGG
CGCGCTGCCCTGGGCCGCCACGCCGCCCTCCTGCGCCCCGCGCAGCCTGCGGGCGCCACTGCCTTCGGC
GGCTTCTCGCAGCCCTACCTGGCTGGCTCCGGGCCTCTCGGCCTGCAGCCCCAACAGCCAAAGACGGAC
CCGAAGAGCAGGCTAAGTTCTATGCGCCCCAAGCGGCCGCTGGGCCAGAGGAGCGCGTCTGTAACCGGCC
GTCTTCTGCCCCGAGTCTAGCCTGGCTCCTGCAGTGGCTGCTCTCAAAGCGGCCAAGTATGACTACGCT
GGTGTGGGTCTGCCACGCCGGGCTCCACGACCCTGCTCCAGGGGGCTCCCTGCGCCCCTGGCTTCAAGG
ACGACACCAAGGGCCGCTCAACTTGAACATGACAGTGCAGGCGGGCGGCTTGCCTCTTGCCTGCGACC
TTCAGTCCCGACGGTAAACGGTGCCCATGCTCCCGGGCCGCGCTGCCGTGGGGGGCGGCCCGGGGAG
GCCCCGAAGAAGCGAAACCTACACGAAGCAGCAGATTGCGGAGTTGGAGAACGAATTCTCTCGTCAACG
AATTTCATCAACAGGCAGAACGCAAGGAATTGTCCAATAGGCTGAACCTCAGCGACCAGCAAGTCAAAAT
CTGGTTCCAGAACGGGTATGAAGAAGAAGCGCGTGGTCTCGGGAGCAGGCGCTGGCGCTCTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



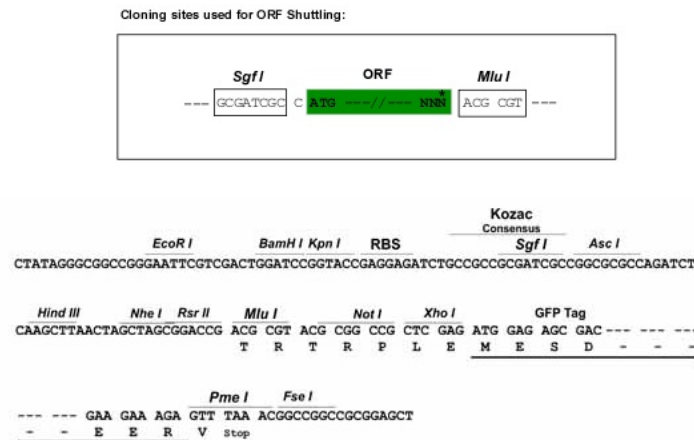
Protein Sequence: >RG218404 representing NM_021193
Red=Cloning site Green=Tags(s)

MCERSLYRAGYVGSLLNLQSPDSFYFSNLRPNGGQLAALPPISYPRGALPWAATPASCAPAQPAGATAFG
GFSQPYLAGSGPLGLQPPTAKDGPEEQAKFYAPEAAAGPEERGRTRPSFAPESSLAPAVAALKAAKYDYA
GVGRATPGSTTLLQGAPCAPGFKDDTKGPLNLMNTVQAAGVASCLRPSPDGRKPCSPGRPAVGGGPGE
ARKKRKPYTKQQIAELENEFLVNEFINRQKRKELSNRLNLSQQVKIWFQNRMRMKKRVVLREQALALY

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_021193

ORF Size: 837 bp

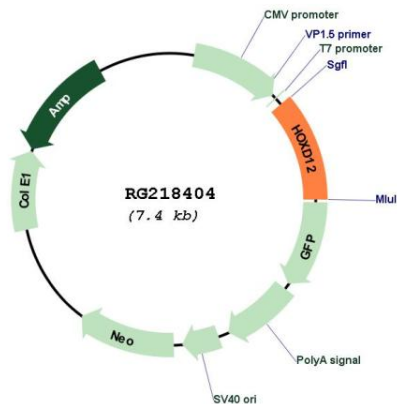
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_021193.2, NP_067016.2</u>
RefSeq Size:	840 bp
RefSeq ORF:	813 bp
Locus ID:	3238
UniProt ID:	<u>P35452</u>
Cytogenetics:	2q31.1
Protein Families:	Druggable Genome
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 in a cluster on chromosome 2. Deletions that remove the entire HOXD gene cluster or the 5' end of this cluster have been associated with severe limb and genital abnormalities. The exact role of this gene has not been determined. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG218404