

## Product datasheet for **RC213447**

### HOXA4 (NM\_002141) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** HOXA4 (NM\_002141) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** HOXA4  
**Synonyms:** HOX1; HOX1D  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC213447 representing NM\_002141  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACCATGAGCTCGTTTTGATAAACTCCAACATACATCGAGCCCAAGTTCCTCCCTTCGAGGAGTACG  
CGCAGCACAGCGGCTCGGGCGGCGCAGACGGCGGCCCGGGCGGGGCCCCGGCTACCAGCAGCCCCCAGC  
GCCCCGACCCAGCACCTGCCGCTGCAGCAGCCAGCTCCCTCACGCGGGCGGGCGGAGAGCCCACT  
GCCTCTACTACGCGCCGCGGACCGCCCGGAGCCGCTACCCTGCTGCCGCGTGTACCCCGCGCATG  
GGCGCCGGACACCGCTACCCCTATGGCTACCGCGGCGGCCAGCCCCGGGCGGCCCGCCAGCCGA  
GCAGCCCCGGCGCAAGCAAGGGCCCAGCGCACGGCCTGCATGCGAGCCACGTCCTGCAGCCCCAGCTG  
CCGCCGCCCTGCAGCCTCGCGCGTGCSCCAGCGGCCCGCGGCGCTGCGAGGCGGCCCGCCACCC  
CAGGCGTCCCAGGAGGGGCGAGCGCCCCCGCTGCCCGTCTTGGCCGACAAGAGCCCGCTGGGCT  
GAAGGGCAAGGAGCCCGTGGTGTACCCCTGGATGAAGAAGATCCATGTCAGCGCGTTAACCCAGTTAT  
AACGGAGGGGAGCCTAAGCGCTCTGAACCGCTACACCCGGCAGCAGGTCTGGAGCTGGAGAAGGAGT  
TCCACTCAATCGATACCTGACCCGGCGGCGCCGATCGAGATCGCCACACGCTCTGTTGTCTGAGCG  
CCAGGTCAAGATCTGGTTTCAGAACCGGAGGATGAAGTGAAGAAAGACCACAACTGCCAACACCAAG  
ATGCGATCCTCCAATTCGGCCTCGGCCTCTGCCGCCACCAGGAAAGCACAAACTCAGAGCCACACC  
TCCATCCCCACCCACCCGAGCACCTCCACACCCGTTCCCTCCTCCATA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC213447 representing NM\_002141  
Red=Cloning site Green=Tags(s)

MTMSSFLINSNYIEPKFPPFEEYAQHS GSGGADGGPGGGPGYQPPAPPTQHLPLQQPQLPHAGGGREPT  
 ASYYAPRTAREPAYPAALYP AHGAADTAYPYGYRGGASPRPPQPEQPPAQAKGPAHGLHASHVLQPQL  
 PPPLQPRAVPPAAPRRCEAAPATPGVPAGGSAPACPLLLADKSPLGLKGKEPVVYPMWKKIHSVAVNPSY  
 NGGEPKRSRTAYTRQQVLELEKEFHFNRYLTRRRRIEIAHTLCLSERQVKIWFQNRMRMKWKKDKHKL PNTK  
 MRSSNSASASAGPPGKAQTQSPHLHPHPHPSTSTPVSSI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8115\\_b02.zip](https://cdn.origene.com/chromatograms/mk8115_b02.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\_002141

**ORF Size:** 960 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\\_002141.5](#)

**RefSeq Size:** 1728 bp

**RefSeq ORF:** 963 bp

**Locus ID:** 3201

**UniProt ID:** [Q00056](#)

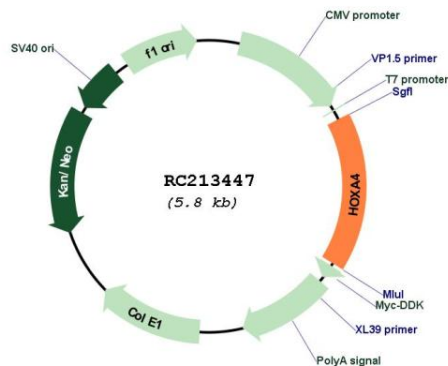
**Cytogenetics:** 7p15.2

**Protein Families:** Transcription Factors

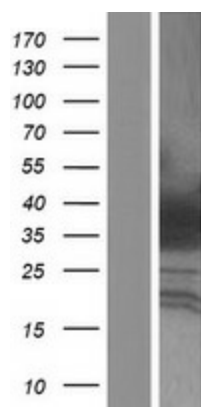
**MW:** 34.5 kDa

**Gene Summary:** In vertebrates, the genes encoding the class of transcription factors called homeobox genes are found in clusters named A, B, C, and D on four separate chromosomes. Expression of these proteins is spatially and temporally regulated during embryonic development. This gene is part of the A cluster on chromosome 7 and encodes a DNA-binding transcription factor which may regulate gene expression, morphogenesis, and differentiation. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC213447



Western blot validation of overexpression lysate (Cat# [LY419504]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213447 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).