

## Product datasheet for RC223682

### HOXC4 (NM\_153633) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HOXC4 (NM_153633) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HOXC4
Synonyms:	cp19; HOX3; HOX3E
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223682 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATCATGAGCTCGTATTTGATGGACTCTAACTACATCGATCCGAAATTCCTCCATGCGAAGAATATT  
CGCAAAATAGCTACATCCCTGAACACAGTCCGGAATATTACGGCCGACCAGGGAATCGGGATCCAGCA  
TCACCACCAGGAGCTGTACCCACCACCGCCTCCGCGCCCTAGCTACCCTGAGCGCCAGTATAGCTGCACC  
AGTCTCCAGGGGCCCGCAATTCGCGAGGCCACGGCCGGCCAGGCGGGCCACCACCACCCGAGAAAT  
CACAGTCGCTCTGCGAGCCGGCGCTCTCTCAGGCGCCTCCGCTCCCGTCCCCAGCCCCGCCAGCCTG  
CAGCCAGCCAGCCCCGACCATCCCTCCAGCGCCGCCAGCAAGCAACCCATAGTCTACCCATGGATGAAA  
AAAATTACGTTAGCACGGTGAACCCAGTTATAACGGAGGGGAACCCAAAGCGCTCGAGGACAGCCTATA  
CCCGGCAGCAAGTCTGGAAATTAGAGAAAGAGTTTCATTACAACCCTACCTGACCCGAAGGAGAAGGAT  
CGAGATCGCCACTCGCTGTGCCTCTCTGAGAGGCAGATCAAAATCTGGTTCCAAAACCGTCGCATGAAA  
TGAAGAAGGACCACCGACTCCCCAACCAAAGTCAGGTCAGCACCCCCGGCCGGCGCTGCGCCAGCA  
CCTTTTCGGCAGTACCCCGGTACTTCTGAAGACCACTCCAGAGCGCCACGCCCGCGGAGCAGCAACG  
GGCAGAGGACATTACCAGTTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >RC223682 protein sequence  
Red=Cloning site Green=Tags(s)

MIMSSYLMSNYIDPKFPPCEEYSQNSYIPEHSPEYYGRTRESGFQHHHQELYPPPPRPSYPERQYSCT  
 SLQGPNSRGHGPAQAGHHHPEKSQSLCEPAPLSGASASPAPPACSQPAPDHPSSAASKQPIVYPWMK  
 KIHVSTVNPSYNGGEPKRSRTAYTRQVLELEKEFHYNRYLTRRRRIEIAHSLCLSERQIKIWFQNRMMK  
 WKKDHRLPNTKVRSAPPAGAAPSTLSAATPGTSEDHSQSATPPEQQAEDITRL

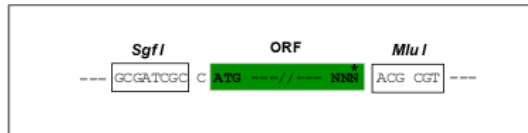
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6350\\_e11.zip](https://cdn.origene.com/chromatograms/mk6350_e11.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\_153633

**ORF Size:** 792 bp

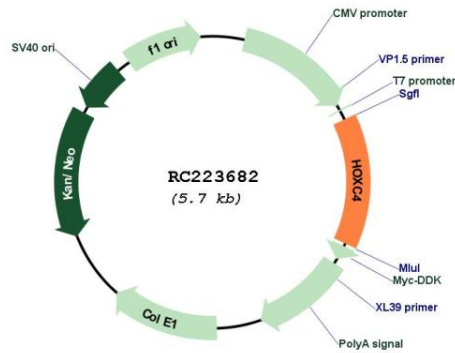
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

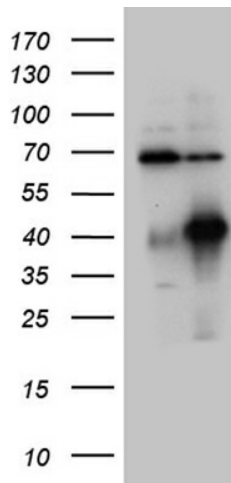
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_153633.3</a>
<b>RefSeq Size:</b>	1689 bp
<b>RefSeq ORF:</b>	795 bp
<b>Locus ID:</b>	3221
<b>UniProt ID:</b>	<a href="#">P09017</a>
<b>Cytogenetics:</b>	12q13.13
<b>Protein Families:</b>	Transcription Factors
<b>MW:</b>	29.8 kDa
<b>Gene Summary:</b>	<p>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, which are located on different chromosomes and consist of 9 to 11 genes arranged in tandem. This gene, HOXC4, is one of several homeobox HOXC genes located in a cluster on chromosome 12. Three genes, HOXC5, HOXC4 and HOXC6, share a 5' non-coding exon. Transcripts may include the shared exon spliced to the gene-specific exons, or they may include only the gene-specific exons. Two alternatively spliced variants that encode the same protein have been described for HOXC4. Transcript variant one includes the shared exon, and transcript variant two includes only gene-specific exons. [provided by RefSeq, Jul 2008]</p>

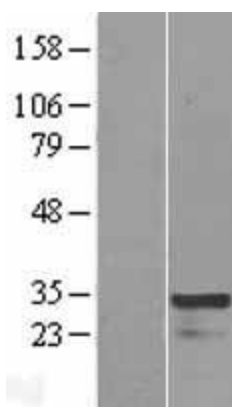
Product images:



Circular map for RC223682



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HOXC4 (Cat# RC223682, 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-HOXC4 (Cat# [TA809708])(1:2000). Positive lysates [LY406994] (100ug) and [LC406994] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY406994]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223682 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).