

Product datasheet for **RG208395**

HOXC4 (NM_014620) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: HOXC4 (NM_014620) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: HOXC4
Synonyms: cp19; HOX3; HOX3E
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG208395 representing NM_014620
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGATCATGAGCTCGTATTTGATGGACTCTAACTACATCGATCCGAAATTCCTCCATGCGAAGAATATT
 CGCAAAATAGCTACATCCCTGAACACAGTCCGGAATATTACGGCCGGACCAGGAATCGGGATTCCAGCA
 TCACCACCAGGAGCTGTACCCACCACCGCCTCCGCGCCCTAGCTACCCTGAGCGCCAGTATAGCTGCACC
 AGTCTCCAGGGGCCCGGCAATTCGCGAGGCCACGGCCGGCCAGGCGGGCCACCACCACCCGAGAAAT
 CACAGTCGCTCTGCGAGCCGGCGCTCTCTCAGGCGCCTCCGCTCCCGTCCCCAGCCCGCCAGCCTG
 CAGCCAGCCAGCCCCGACCATCCCTCCAGCGCCGCCAGCAAGCAACCCATAGTCTACCCATGGATGAAA
 AAAATTACGTTAGCACGGTGAACCCAGTTATAACGGAGGGGAACCCAAGCGCTCGAGGACAGCCTATA
 CCCGGCAGCAAGTCTGGAATTAGAGAAAGAGTTTCATTACAACCCTACCTGACCCGAAGGAGAAGGAT
 CGAGATCGCCACTCGTGTGCCTCTCTGAGAGGCAGATCAAAATCTGGTTCCAAAACCGTCGCATGAAA
 TGAAGAAGGACCACCGACTCCCCAACCAAAGTCAGGTCAGCACCCCCGGCCGGCGCTGCGCCAGCA
 CCCTTTCGGCAGTACCCCGGTACTTCTGAAGACCACTCCAGAGCGCCACGCCCGCGGAGCAGCAACG
 GGCAGAGGACATTACCAGTTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG208395 representing NM_014620
Red=Cloning site Green=Tags(s)

MIMSSYLMSNYIDPKFPPCEEYSQNSYIPEHSPEYYGRTRESGFQHHHQELYPPPPRPSYPERQYSCT
 SLQGPNSRGGHPAQAGHHHPEKSQSLCEPAPLSGASASPAPPACSQPAPDHPSSAASKQPIVYPWMK
 KIHVSTVNPSYNGGEPKRSRTAYTRQQVLELEKEFHYNRYLTRRRRIEIAHSLCLSERQIKIWFQNRMMK
 WKKDHRLPNTKVRSAAPPAGAAPSTLSAATPGTSEDHSQSATPPEQQRAEDITRL

TRTRPLE - GFP Tag - V

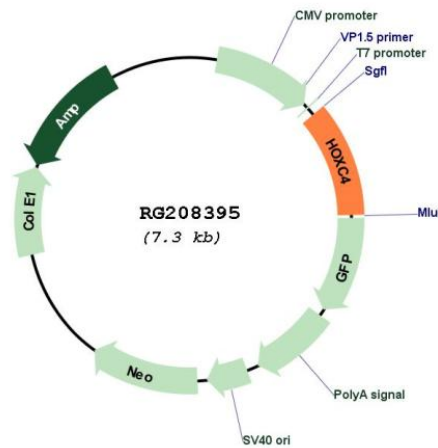
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_014620

ORF Size: 792 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_014620.4](#), [NP_055435.2](#)

RefSeq Size: 2300 bp

RefSeq ORF: 795 bp

Locus ID: 3221

UniProt ID: [P09017](#)

Cytogenetics: 12q13.13

Protein Families: Transcription Factors

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, 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]