OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC217254

HOXA3 (NM_153631) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HOXA3 (NM_153631) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HOXA3
Synonyms:	HOX1; HOX1E
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC217254 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCAAAAAGCGACCTACTACGACAGCTCGGCGATCTACGGTGGCTACCCCTACCAGGCAGCCAACGGGT
TCGCTTATAATGCCAATCAGCAGCCGTACCCGGCGTCCGCCGCTTTGGGCGCCGACGGCGAGTACCACCG
ACCCGCCTGCTCCCTCCAGTCTCCCTCCAGCGCCGGGGGCCACCCCAAGGCACACGAACTGAGTGAGGCG
TGCCTGCGCACCCTGAGCGCCCCACCTAGCCAGCCTCCAAGCCTGGGAGAGCCGCCCCTGCACCCGCCGC
CGCCCCAGGCCGCGCCCCCTGCCCCACAGCCGCCTCAGCCCGCACCTCAGCCCCCTGCACCTACCCCTGC
CGCGCCCCCGCCTCCCTCTTCTGCCTCCCCTCCTCAGAATGCCAGCAACAACCCTACCCCTGCCAACGCG
GCCAAGAGCCCCCTGCTCAACTCACCCACAGTGGCCAAACAAATCTTCCCCTGGATGAAAGAGTCTCGAC
AAAACACAAAGCAGAAAACCAGCAGCTCCAGCTCAGGCGAAAGCTGCGCTGGCGACAAGAGCCCGCCGGG
GCAGGCTTCGTCCAAGCGCGCGCGCACGGCCTACACGAGCGCGCAGCTGGTGGAGCTGGAGAAAGAGTTC
CACTTCAACCGCTACCTGTGCCGGCCGCGCCGGGTGGAGATGGCCAATCTGCTGAACCTCACTGAGCGCC
AGATCAAGATCTGGTTCCAGAATCGCCGCATGAAGTACAAAAAGGATCAGAAGGGCAAGGGCATGCTAAC
GTCATCGGGGGGCCAGTCTCCAAGTCGCAGCCCCGTGCCCCCCGGAGCCGGTGGCTATCTGAACTCTATG
CATTCGCTGGTCAACAGCGTCCCGTATGAGCCCCAGTCGCCCCCGCCCTTCTCCAAGCCCCCCCAGGGTA
CCTACGGGCTGCCCCCCGCCTCCTACCCTGCGTCCCTGCCCAGCTGCGCACCCCCGCCACCCCCACAGAA
GCGCTACACGGCGGCAGGGGCGGGCGCAGGGGGCACCCCCGACTATGACCCGCACGCTCATGGCCTGCAG
GGCAACGGCAGCTATGGGACCCCACACATACAGGGAAGCCCCGTCTTCGTGGGGGGCAGCTATGTGGAGC
CCATGAGCAACTCCGGGCCAGCCCTCTTTGGTCTAACTCACCTCCCCCACGCTGCCTCGGGCGCCATGGA
CTATGGGGGTGCCGGGCCGCTGGGCAGCGGCCACCACCACGGGCCGGGGCCTGGGGAGCCGCACCCCACC
TACACGGACCTTACCGGCCACCATCCTTCTCAGGGAAGAATTCAGGAAGCACCCAAGCTCACCCACCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC217254 protein sequence
Red=Cloning site Green=Tags(s)

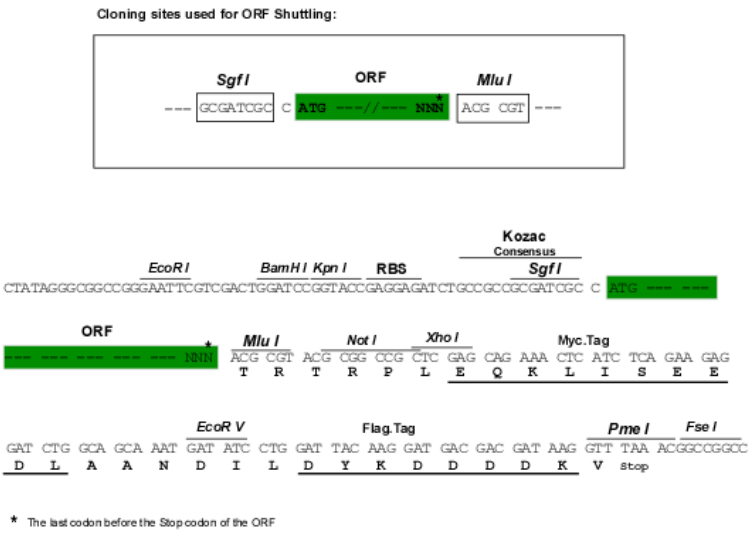
MQKATYYDSSAIYGGYPYQAANGFAYNANQQPYPASAALGADGEYHRPACSLQSPSSAGGHPKAHELSEA
CLRTLSAPPSQPPSLGEPPLHPPPPQAAPPAPQPPQPAPQPPAPTPAAPPPPSSASPPQNASNNPTPANA
AKSPLLNSPTVAKQIFPWMKESRQNTKQKTSSSSSGESCAGDKSPPGQASSKRARTAYTSAQLVELEKEF
HFNRYLCRPRRVEMANLLNLTERQIKIWFQNRRMKYKKDQKGKGMLTSSGGQSPSRSPVPPGAGGYLNSM
HSLVNSVPYEPQSPPPFSKPPQGTYGLPPASYPASLPSCAPPPPPQKRYTAAGAGAGGTPDYDPHAHGLQ
GNGSYGTPHIQGSPVFVGGGSYVEPMSNSGPALFGLTHLPHAASGAMDYGGAGPLGSGHHHGPGPGEPHPT
YTDLTGHHPSQGRIQEAPKLTHL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6307_h09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_153631

ORF Size: 1329 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_153631.3

RefSeq Size: 3396 bp

RefSeq ORF: 1332 bp

Locus ID: 3200

UniProt ID: O43365

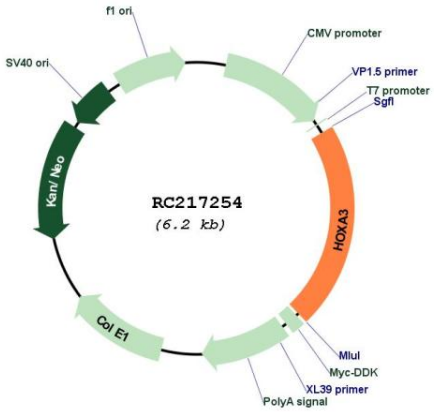
Cytogenetics: 7p15.2

Protein Families: Transcription Factors

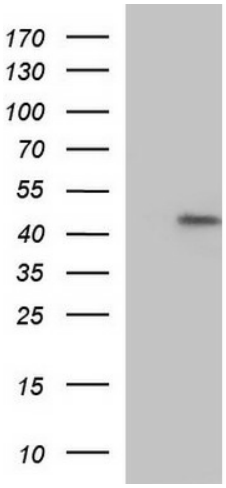
MW: 46.4 kDa

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. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

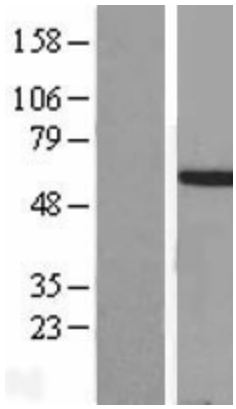
Product images:



Circular map for RC217254



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HOXA3 (Cat# RC217254, 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-HOXA3(Cat# [TA590383]). Positive lysates [LY430277] (100ug) and [LC430277] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY406992]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217254 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).