

Product datasheet for RC222721

HOXA1 (NM_153620) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: HOXA1 (NM_153620) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: HOXA1
Synonyms: BSAS; HOX1; HOX1F
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC222721 representing NM_153620
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACAATGCAAGAATGAACTCCTTCTGGAATACCCATACTTAGCAGTGGGACTCGGGACCTGCT
CAGCCCGAGCCTACCCCTCGGACCATAGGATTACAACCTTCCAGTCGTGCGCGGTGAGCGCAACAGTTG
CGGCGGCGACGACCGCTTCTAGTGGGCGGGGGTGCAGATCGGTTCCGCCACCACCACCACCACC
CACCATCACCACCCAGCCGGCTACCTACCAGACTTCCGGGAACCTGGGGGTGCTCTACTCCCACTCAA
GTTGTGGTCCAAGCTATGGCTCACAGAACTTCAGTGCCTTACAGCCCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC222721 representing NM_153620
Red=Cloning site Green=Tags(s)
MDNARMNSFLEYPIILSSGDSGTCSARAYPSDHRIITTFQSCAVSANS CGGDDRFLVGRGVQIGSPHHHHH
HHHHPQPATYQTSGNLGVSYSHSSCGPSYGSQNF SAPYSP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2950_g07.zip

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_153620

ORF Size: 331 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 Size: 2358 bp

RefSeq ORF: 414 bp

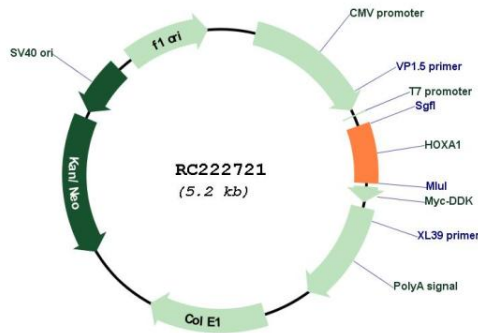
Locus ID: 3198

UniProt ID: [P49639](#)

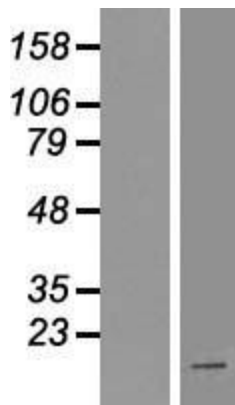
Cytogenetics: 7p15.2
Protein Families: Druggable Genome, Transcription Factors
MW: 14.6 kDa

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. The encoded protein may be involved in the placement of hindbrain segments in the proper location along the anterior-posterior axis during development. Two transcript variants encoding two different isoforms have been found for this gene, with only one of the isoforms containing the homeodomain region. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC222721



Western blot validation of overexpression lysate (Cat# [LY406991]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222721 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).