

Product datasheet for **RC226770**

Nkx2.6 (NKX2-6) (NM_001136271) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	Nkx2.6
Synonyms:	CSX2; CTHM; NKX2F; NKX4-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence: >RC226770 representing NM_001136271
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGACGCGGAACGGATGGGGGAGCCACAGCCCGGCCTGAACGCGGCCTCGCCCTCGGCGGCGGGACCA
GGGTGCCAGAGCGCGCGTGGCAACAGCGGCAGAGCGTGCAGGGTGGCCGCTCGGAGCAGCCCAAGGC
GCGGCAACGACGGAAGCCGCGCGTCTTTTCGAGGCGCAGGTGCTGGCCCTGGAGCGCGCTTCAAG
CAGCAGCGGTACCTGTCAGCGCCGAGCGCAGCACCTGGCCAGCGCGCTGCAGCTCACGTCCACGCAGG
TCAAGATCTGGTTCCAGAACCAGCGCTACAAATGCAAGAGACAGCGCCAGGACAAGTCGCTGGAAGTGGC
TGGCCACCCTCTAACGCGCGCGGAGTAGCTGTGCCCGTCTGGTGCAGGATGGCAAGCCCTGCCTGGGC
CCCGGGCCCGGCGCACCTGCCTTCCCGAGCCCTACAGTGCAGCAGTGTGCGCCCTACTCTTGCTACGGAG
GCTACAGCGGAGCACCTACGGCGCAGGCTACGGCACCTGCTACGCGGGCGCGCCCTCGGGTCTGCGCC
ACACACACCACTGGCCAGCGCGGGCTTCGGACACGGTGGCCAGAATGCCACCCCGCAGGGCCATCTGGCA
GCCACGCTGCAGGGTGTCAAGGCCTGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence:

>RC226770 representing NM_001136271

Red=Cloning site Green=Tags(s)

MDAERMGEPPQPLNAASPLGGGTRVPERGVNSGDSVRGGRSEQPKARQRRKPRVLFSSQAQVLALERRFK
QQRYL SAPEREHLASALQLTSTQVKIWFQNRKYCKRQRQDKSLELAGHPLTPRRVAVPVLVRDGKPCLG
PGPGAPAFSPYSAVSPYSCYGGYSGAPYGAGYGTCTYAGAPSGPAPHTPLASAGFGHGGQATPQGH
LA
ATLQGVRAW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

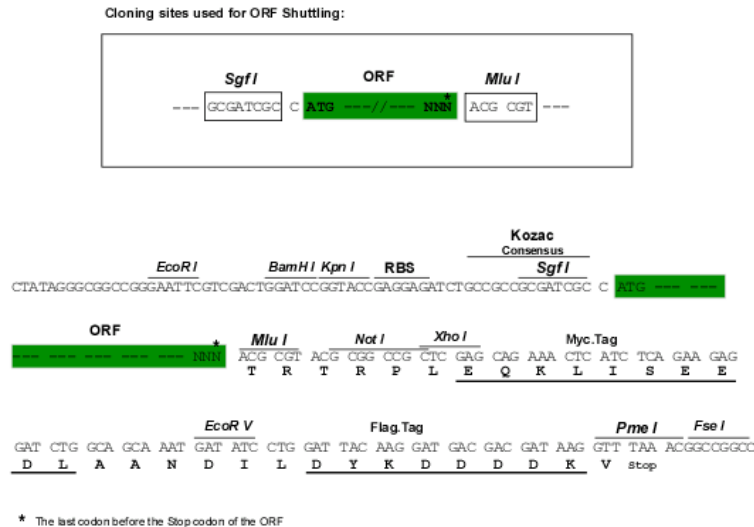
Chromatograms:

https://cdn.origene.com/chromatograms/mk8031_c08.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN:

NM_001136271

ORF Size:

657 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:

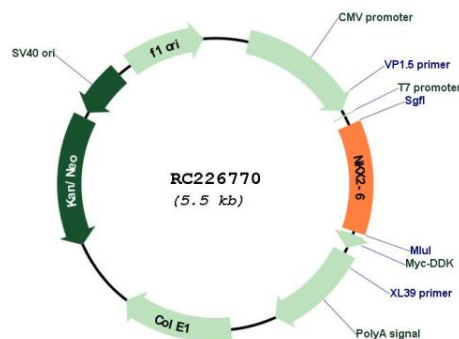
This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components:

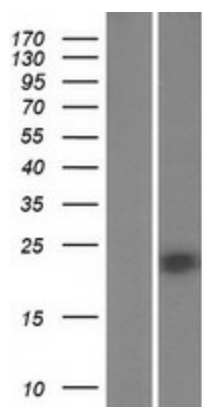
The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001136271.1, NP_001129743.1</u>
RefSeq ORF:	906 bp
Locus ID:	137814
UniProt ID:	<u>A6NCS4</u>
Cytogenetics:	8p21.2
MW:	23.1 kDa
Gene Summary:	This gene encodes a homeobox-containing protein that belongs to the NK-2 homeobox family. This protein is a vertebrate homolog of Drosophila homeobox-containing protein called 'tinman', which has been shown to be essential for development of the heart-like dorsal vessel. In conjunction with related gene, NKX2-5, this gene may play a role in both pharyngeal and cardiac embryonic development. Mutations in this gene are associated with persistent truncus arteriosus.[provided by RefSeq, Aug 2011]

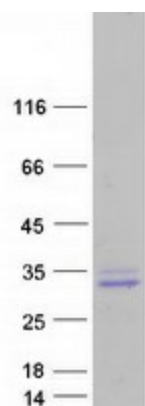
Product images:



Circular map for RC226770



Western blot validation of overexpression lysate (Cat# [LY427879]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226770 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NKX2-6 protein (Cat# [TP326770]). The protein was produced from HEK293T cells transfected with NKX2-6 cDNA clone (Cat# RC226770) using MegaTran 2.0 (Cat# [TT210002]).