

Product datasheet for **RC228086**

Nkx2.5 (NKX2-5) (NM_001166176) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Nkx2.5 (NKX2-5) (NM_001166176) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: NKX2-5
Synonyms: CHNG5; CSX; CSX1; HLHS2; NKX2.5; NKX2E; NKX4-1; VSD3
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC228086 representing NM_001166176
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

**ATGTTCCCGAGCCCTGCTCTCACGCCACGCCCTTCTCAGTCAAAGACATCCTAAACCTGGAACAGCAGC
AGCGCAGCCTGGCTGCCCGGAGAGCTCTCTGCCCGCTGGAGGCGACCCTGGCGCCCTCTCTGCAT
GCTGGCCGCTTCAAGCCAGAGGCTACGCTGGGCCGAGCGGCTGCGCCGGCCCTCCAGAGCTGCGC
GCAGAGCTGGGCCGCGCCCTTACCGGCAAGTGTGCGTCTGCCTTCCCGCCGCCCGCCTTCTATC
CACGTGCCTACAGCGACCCGACCCAGCCAAGGACCCTAGAGCCGAAAAGAAAGGGTGTGAAGTGCCTCC
AGGGCAGAGACCTCCCGTTTTGTTCTCCAGCGCCTTGAGCCAGCCTGACTTTCTACAAATGCTGAGTGAG
ACGTGTCGGTGGCTCCAGTGCATTGGCAGAG**

**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA**

Protein Sequence: >RC228086 representing NM_001166176
Red=Cloning site Green=Tags(s)

MFPSPALTPFPVSKDILNLEQQQRSLAAAGEL SARLEATLAPSSCMLAAFKEAYAGPEAAAPGLPELR
AELGRAPSPAKCASAFPAAPAFYPRAYSDPDPAKDPRAEKKGCELPGRQRPVLFSSALSQPDFLQMLSE
TCRWLPVHLAE

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

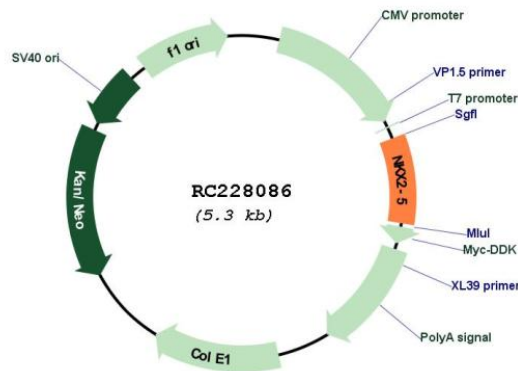


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Cloning Scheme:



Plasmid Map:



ACCN: NM_001166176

ORF Size: 453 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:	<ol style="list-style-type: none">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_001166176.2
RefSeq ORF:	456 bp
Locus ID:	1482
UniProt ID:	P52952
Cytogenetics:	5q35.1
Protein Families:	Transcription Factors
MW:	15.9 kDa
Gene Summary:	This gene encodes a homeobox-containing transcription factor. This transcription factor functions in heart formation and development. Mutations in this gene cause atrial septal defect with atrioventricular conduction defect, and also tetralogy of Fallot, which are both heart malformation diseases. Mutations in this gene can also cause congenital hypothyroidism non-goitrous type 5, a non-autoimmune condition. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2009]