

## Product datasheet for **MR227490**

### **Nkx2-2 (NM\_010919) Mouse Tagged ORF Clone**

#### **Product data:**

**Product Type:** Expression Plasmids  
**Product Name:** Nkx2-2 (NM\_010919) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Nkx2-2  
**Synonyms:** Nkx-2.2; Nkx2.2; tinman  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >MR227490 ORF sequence  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGTCGCTGACCAACACAAAGACGGGGTTTTTCAGTCAAGGACATCTTGGACCTTCCGGACACCAACGATG  
AAGACGGCTCGGTGGCCGAAGGGCCAGAGGAGGAGAGCGAAGGGCCGGAGCCCGCAAGAGGGCCGGCC  
GCTGGGGCAGGGCGCCCTGGACGCTGTGCAGAGCCTGCCCTTAAGAGCCCTTTCTACGACAGCAGCGAC  
AACCCCTACACTCGCTGGCTGGCCAGCACCAGGGCCTCCAATACTCCCTGCACGGGCTGGCGGCCAGCG  
CTCCCCCAAGACTCGAGCTCCAAATCCCAGAGCCCTCGGCTGACGAGTCACCGGACAATGACAAGGA  
GACCCAGGGCGGGGGGGACGCAGGCAAGAAGCGGAAGCGCCGAGTGCTTTCTCAAAGCGCAGACC  
TACGAGCTGGAGCGGCGCTTCCGGCAGCAGCGGTACCTGTCCGGCGCCGAGCGGAGCACCTGGCCAGCC  
TCATCCGTCTCACGCCGACACAGGTCAAGATCTGGTCCAGAACCATCGCTACAAGATGAAACGTGCCCG  
GGCGGAGAAAGGTATGGAGGTGACGCCTCTGCCCTCGCCGCGCCGTGTGGCAGTGCCGGTCTTGGTCAGG  
GACGGCAAACCGTGCCACGCGCTCAAAGCCCAGGACCTGGCAGCCGCCACCTTCCAGGCAGGCATCCCCT  
TTCCGCCTACAGCGCGCAGTCGCTGCAGCACATGCAGTACAACGCCAGTACAGCTCGGCCAGCACCCC  
CCAGTACCCGACAGCACACCCCTGGTCCAGGCCAGCAGTGGACTTGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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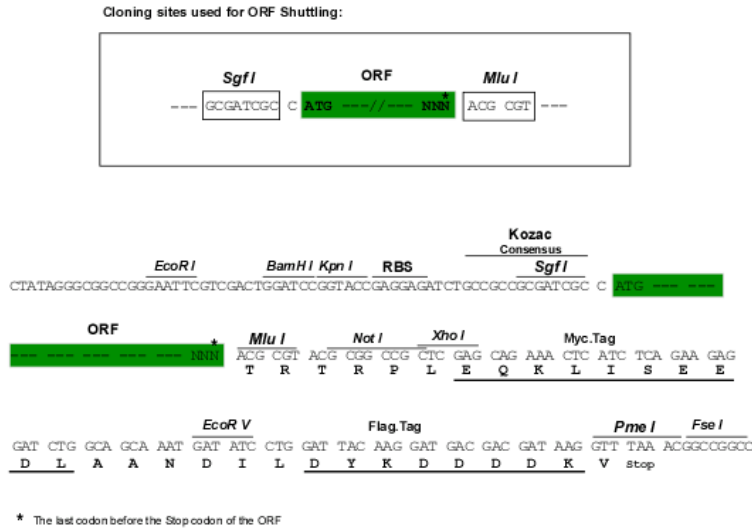
**Protein Sequence:** >MR227490 protein sequence  
Red=Cloning site Green=Tags(s)

MSLTNTKTGFSVKDILDLPDTNDEDGSVAEGPEEESEGPEPAKRAGPLGQGALDAVQSLPLKSPFYDSSD  
 NPYTRWLASTEGLQYSLHGLAASAPPQDSSSKSPEPSADESPDNDKETQGGGDAGKKRKRRLVFSKAQT  
 YELERRFRQRYLSAPEREHLASLIRLTPTQVKIWFQNHRYKMKRARAEEKGMEVTLPLSPRRVAVPVLVR  
 DGKPCHALKAQDLAAATFQAGIPFSAYSAQSLQHMQYNAQYSSASTPQYPTAHLPLVQAQQQWTW

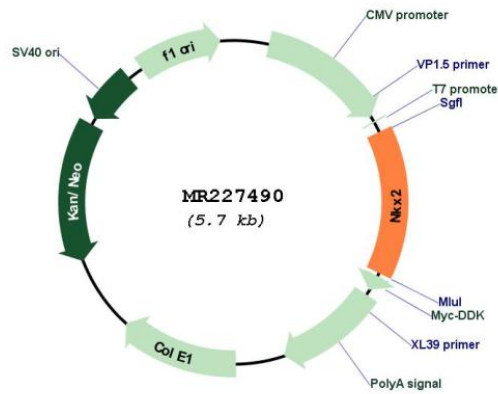
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_010919  
**ORF Size:** 819 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_010919.2</a> , <a href="#">NP_035049.1</a>
<b>RefSeq Size:</b>	2049 bp
<b>RefSeq ORF:</b>	822 bp
<b>Locus ID:</b>	18088
<b>UniProt ID:</b>	<a href="#">P42586</a>
<b>Cytogenetics:</b>	2 72.63 cM
<b>MW:</b>	30.1 kDa
<b>Gene Summary:</b>	Transcriptional activator involved in the development of insulin-producing beta cells in the endocrine pancreas (PubMed:11076772). May also be involved in specifying diencephalic neuromeric boundaries, and in controlling the expression of genes that play a role in axonal guidance. Binds to elements within the NEUROD1 promoter (PubMed:19759004). [UniProtKB/Swiss-Prot Function]