

Product datasheet for **MR227494**

Nkx2-2 (NM_001077632) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Nkx2-2 (NM_001077632) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Nkx2-2
Synonyms: Nkx-2.2; Nkx2.2; tinman
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR227494 representing NM_001077632
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCGCTGACCAACACAAGACGGGGTTTTTCAGTCAAGGACATCTTGGACCTTCCGGACACCAACGATG
 AAGACGGCTCGGTGGCCGAAGGGCCAGAGGAGGAGAGCGAAGGGCCGAGCCCGCCAAGAGGGCCGGGCC
 GCTGGGGCAGGGCGCCCTGGACGCTGTGCAGAGCCTGCCCTTAAGAGCCCTTTCTACGACAGCAGCGAC
 AACCCCTA CACTCGCTGGCTGGCCAGCACCGAGGGCTCCAATACTCCCTGCACGGGCTGGCGGCCAGCG
 CTCCCCCAAGACTCGAGCTCCAAATCCCAGAGCCCTCGGCTGACGAGTACCGGACAATGACAAGGA
 GACCCAGGGCGGGGGGGACGCAGGCAAGAAGCGGAAGCGCCGAGTGCCTTCTCCAAAGCGCAGACC
 TACGAGCTGGAGCGGCGCTTCCGGCAGCAGCGGTACCTGTGCGGCCCGAGCGGAGCACCTGGCCAGCC
 TCATCCGTCTCACGCCGACAGGTCAAGATCTGGTCCAGAACCATCGCTACAAGATGAAACGTGCCCCG
 GGCGGAGAAAGCATTTCAAACCAGCGGATGGATGCCAGGATCGAAGCTGCGGTGCCCATAGTGTCCGCA
 AGGTGGAGCGATTGGATAAGAAAACAATTTAGGTGCGGGCAGTACTCAGGCCTGGGAGCAACAATCTGG
 TCATCTGTGGATTTGAGGGATGTCTGGTAAAGTCCATTTACAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR227494 representing NM_001077632
Red=Cloning site Green=Tags(s)

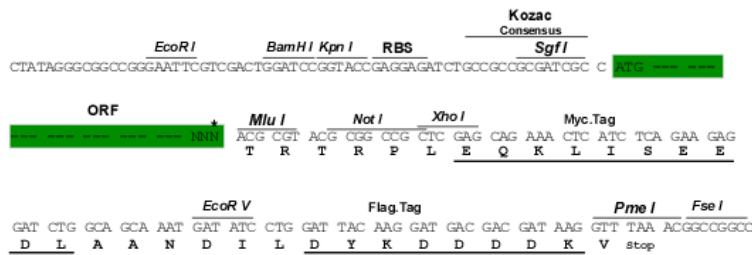
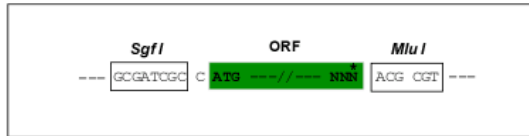
MSLTNTKTGFSVKDILDLPDTNDEDGSVAEGPEEESEGPPEPAKRAGPLGQGALDAVQSLPLKSPFYDSSD
 NPYTRWLASTEGLQYSLHGLAASAPPQDSSSKSPEPSADESPDNDKETQGGGDAGKKRKRRLVFSKAQT
 YELERRFRQRYLSAPEREHLASLIRLTPTQVKIWFQNHRYKMKRARAFAKAFQNRMRMDARIEAAVPIVSA
 RWSDWIRKQFQVGRLTQAWEHNLVICGFEGCLGKVHLQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001077632

ORF Size: 744 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_001077632.1](#), [NP_001071100.1](#)

RefSeq Size: 1354 bp

RefSeq ORF: 747 bp

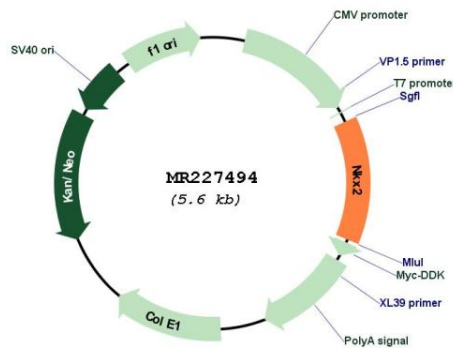
Locus ID: 18088

Cytogenetics: 2 72.63 cM

MW: 28.2 kDa

Gene Summary: 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]

Product images:



Circular map for MR227494