

Product datasheet for RC210963

nkx6.2 (NKX6-2) (NM_177400) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	nkx6.2 (NKX6-2) (NM_177400) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	nkx6.2
Synonyms:	GTX; NKX6.2; NKX6B; SPAX8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210963 representing NM_177400 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGACTAACC GCCCGGGCGGTTCTGTGCTGAGCAGTGCCCGCTGGCCGCGCTGCACAACATGGCCG
AGATGAAGACGTCGCTGTTCCCTACGCGCTGCAGGGTCCGGCCGGCTTCAAGGCGCCGCGCTGGGGG
CCTGGGCGCGCAGCTCCCGCTCGGGACCCCGCACGGCATCAGCGACATCTGGCCGCGCCGCTGGGCGG
GCGGGCGGGGCTCCTGGGGGGCTGCCCGGCTCAACGGGCTCGCGTCTCCCGGGCGTTTACTTCG
GGCCCGCGGCGCTGTGGCGCGGGCTACCCCAAGCCCTGGCCGAGCTGCCGGGCGCCCGCCCATCTT
CTGGCCCGGCGTGGTGCAGGGCGCGCCCTGGAGGGACCCGCGTCTGGCTGGCCCGGCCCGCGCGGC
GTCTTGACAAGGACGGGAAGAAGAAGCACTCGCGCCGACCTTCTCGGGCCAGCAGATCTTCGCGCTGG
AGAAAACCTTCGAGCAGACCAAGTACCTGGCGGGCCCGGAGCGCGCGCTCTCGCCTACTCGCTGGGCAT
GACCGAGAGCCAGGTGAAGTCTGGTCCAGAACC CGCGGACCAAGTGGCGCAAGCGGCACGCGGGAG
ATGGCGTCGGCCAAGAAGAAGCAGGACTCGGACGCGGAGAAGCTGAAGGTGGGCGGCTCGGACGCGGAGG
ACGACGACGAATAACAACCGCCCTGGACCCCACTCGGACGACGAGAAGATCACGCGGCTGCTCAAGAA
GCACAAACCTCGAACTTGGCGCTGGTCAGCCCGTGGCGGCGCGCGGGGACGCCTTG

ACGCGTACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC210963 representing NM_177400
Red=Cloning site Green=Tags(s)

MDTNRPGAFVLLSSAPLAALHNMAEMKTSLFPYALQGPAGFKAPALGGLGAQLPLGTPHGISDILGRPVGA
 AGGGLLGGPLRLNGLASSAGVYFGPAAAARGYPKPLAELPGRPPIFWPGVVQGAPWRDPRLAGPAPAGG
 VLDKDGKKKHSRPTFFSGQQIFALEKTFEQTKYLAGEPARARLAYSLSGMTESQYKVFQNRRTKWRKRAAE
 MASAKKKQSDAEKLVKGGSDAEDDDEYNRPLDPNSDDEKITRLLKHKPSNLALVSPCGGGAGDAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3187_d04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_177400

ORF Size: 831 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: [NM_177400.2](#)

RefSeq Size: 834 bp

RefSeq ORF: 834 bp

Locus ID: 84504

UniProt ID: [Q9C056](#)

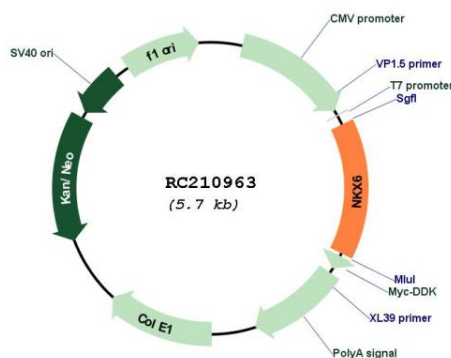
Cytogenetics: 10q26.3

Protein Families: Transcription Factors

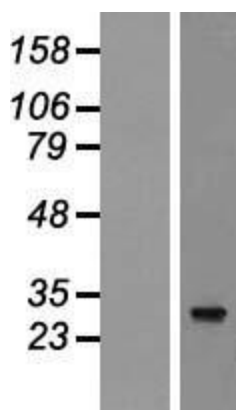
MW: 29.1 kDa

Gene Summary: Transcription factor with repressor activity involved in the regulation of axon-glia interactions at myelin paranodes in oligodendrocytes. Binds to the consensus DNA sequence 5'-(A/T)TTAATGA-3'. In oligodendrocytes, binds to MBP and PLP1 promoter regions. [UniProtKB/Swiss-Prot Function]

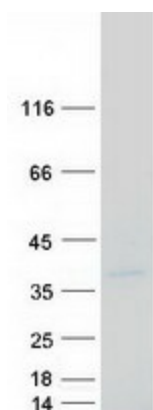
Product images:



Circular map for RC210963



Western blot validation of overexpression lysate (Cat# [LY406150]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210963 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NKX6-2 protein (Cat# [TP310963]). The protein was produced from HEK293T cells transfected with NKX6-2 cDNA clone (Cat# RC210963) using MegaTran 2.0 (Cat# [TT210002]).