

## Product datasheet for **RC221343**

### **NXN (NM\_022463) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	NXN (NM_022463) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NXN
Synonyms:	NRX; RRS2; TRG-4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC221343 representing NM\_022463  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTCGGGCTTCCTGAGGAGCTGCTCGGCAGAGAAGCTGGTGACGGGCGCGCGCAGGAGGTGGACGTGC  
 ACTCGCTGGGCGCCCGCGCATCTCGCTGCTGGGTCTCTACTTCGGCTGCAGCCTCAGCGCCCCCTGCGC  
 GCAGCTCAGCGCCAGCCTGGCCGCTTCTACGGCGCCTGCGGGGGACGCGCGGCCGGCCGGGGCCG  
 GGAGCGGGGGCCGGGGCGCGCGGAGCCGAGCCGCGCGCGCCTGGAGATCGTCTTCGTGTCCTCGG  
 ACCAGGACCAGCGCAGTGGCAGGACTTCGTGCGGGACATGCCGTGGCTGGCGTGCCCTACAAGGAGAA  
 GCACAGGAAGCTCAAACCTTTGGAACAAATACCGAATTTCCAACATTCCATCACTAATATTCCTCGACGC  
 ACCACTGGGAAGTTGTGTGCAGGAACGGGCTGCTGGTGATCCGAGATGACCCAGAAGGTCTGGAGTTCC  
 CCTGGGACCGAAACCTTCAGGGAAGTCATTGCAGGGCCCTTGCTTAGAAACAATGGGCAGTCTCTGGA  
 GAGCAGCAGCCTGGAGGGTCTCACGTGGGCGTCTATTTCTCCGCACATTGGTGTCCGCCCTGCCAAGC  
 CTACCCGGGTCTGGTGAATCTACCGAAGATCAAGGAGGCAGGCCAGAACTTCGAGATCATCTTCG  
 TTAGTGACAGACAGGTCGGAGGAGTCCTTCAAACAGTACTTCAGTGAGATGCCCTGGCTCGCCGCCCTA  
 CACGGATGAGGCCGGCGGTGCGCCTCAACCGCTGTACGGAATCCAAGGCATCCCCACGCTCATCATG  
 CTGACCCCGCAGGGCGAGGTGATCACGCGCAGGGCGGGTGGAGGTGCTGAACGACGAGGACTGCCGGG  
 AGTTCCCTGGCACCCCAAGCCCGTGTGGAGCTCTCCGACTCCAACGCCGCGCAGCTTAACGAGGGCCC  
 CTGCCTCGTCTTTTTGTAGATTCTGAGGATGACGGAGAGTCCGAGGCGCAAGCAGCTGATTACGCCG  
 GGGAGGATGACATGACTGACTCCCTGCGAGATTACACCAACCTGCCTGAGGCTGCCCTTTGCTCACCAT  
 CCTGGACATGTACGCCCGGCCAAGTACGTGATGGAGCTGGAGGAGATCACCCCGCCATCGTGGAGGCC  
 TTTGTGAATGACTTCTAGCAGAGAAGCTCAAACCGAGCCCATC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC221343 representing NM\_022463  
 Red=Cloning site Green=Tags(s)

MSGFLEELLGEKLVTTGGGEEVDVHSLGARGISLLGLYFGCSLSAPCAQLSASLAIFYGRLRGDAAAGPGP  
 GAGAGAAAEPEPRRRLEIVFVSSDQDQRQWQDFVRDMPWLALPYKEKHKRKLKLNWKYRISNIPSLIFLDA  
 TTGKVVCRNGLLVIRDDPEGLEFPWGPKEFREVIAGPLLRNNGQSLESSSLEGSVGVYFSAHWCPPCR  
 LTRVLVESYRKIKEAGQNFEEIFVSADRSEESFKQYFSEMPWLAVPYTDEARRSRLNRLYGIQGIPTLIM  
 LDPQGEVITRQGRVEVLNDEDCREFPWHPKVLELSDSNAAQLNEGPCLVLFVDEDDGESEAAKQLIQP  
 IAEKIIAKYKAKEEEAPLLFFVAGEDDMTSLRDYTNLPEAPLLTILDMSARAKYVMDVEEITPAIVEA  
 FVNDFLAEKPKPEI

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8042\\_e09.zip](https://cdn.origene.com/chromatograms/mk8042_e09.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**

**ACCN:** NM\_022463

**ORF Size:** 1305 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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).

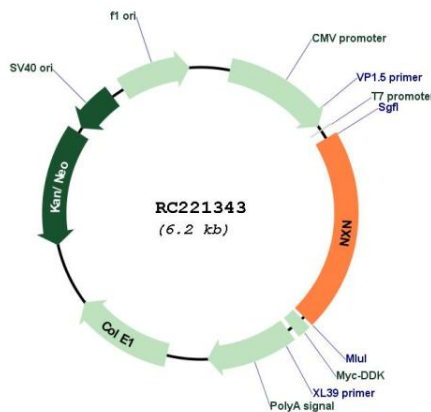
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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\\_022463.5](#)

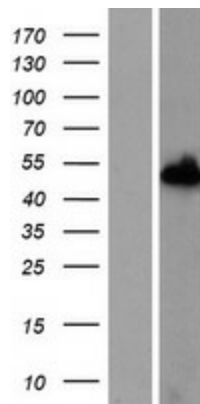
RefSeq Size: 3004 bp  
 RefSeq ORF: 1308 bp  
 Locus ID: 64359  
 UniProt ID: [Q6DKJ4](#)  
 Cytogenetics: 17p13.3  
 Protein Families: Druggable Genome  
 MW: 48.2 kDa

**Gene Summary:** This gene encodes a member of the thioredoxin superfamily, a group of small, multifunctional redox-active proteins. Members of this family are characterized by a conserved active motif called the thioredoxin fold that catalyzes disulfide bond formation and isomerization. The encoded protein acts a redox-dependent regulator of the Wnt signaling pathway and is involved in cell growth and differentiation. [provided by RefSeq, Sep 2015]

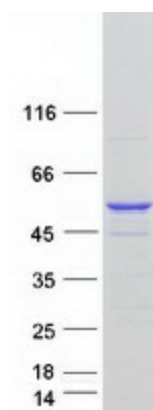
### Product images:



Circular map for RC221343



Western blot validation of overexpression lysate (Cat# [LY411678]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221343 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NXN protein (Cat# [TP321343]). The protein was produced from HEK293T cells transfected with NXN cDNA clone (Cat# RC221343) using MegaTran 2.0 (Cat# [TT210002]).