

Product datasheet for **RC221080**

Nogo A (RTN4) (NM_007008) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--------------------------------------------------------------------------------------------------|
| Product Type: | Expression Plasmids |
| Product Name: | Nogo A (RTN4) (NM_007008) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Nogo A |
| Synonyms: | ASY; Nbla00271; Nbla10545; NI220/250; NOGO; NSP; NSP-CL; RTN-X; RTN4-A; RTN4-B1; RTN4-B2; RTN4-C |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >RC221080 representing NM_007008 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACGGTCAGAAGAAAATTGGAAGGACAAGGTTGTTGACCTCCTGTACTGGAGAGACATTAAGAAGA
CTGGAGTGGTGTGGTCCAGCCTATTCCTGCTGCTTTCATTGACAGTATTCAGCATTGTGAGCGTAAC
AGCCTACATTGCCTTGGCCCTGCTCTGTGACCATCAGCTTTAGGATATAACAAGGGTGTGATCCAAGCT
ATCCAGAAATCAGATGAAGGCCACCCATTCAGGGCATATCTGGAATCTGAAGTTGCTATATCTGAGGAGT
TGGTTCAGAAGTACAGTAATTCTGCTCTGGTTCATGTGAAGTGCACGATAAAGGAAGTCAAGGCGCCTCTT
CTTAGTTGATGATTTAGTTGATTCTCTGAAGTTTGCAGTGTGATGTGGGTATTTACCTATGTTGGTGCC
TTGTTAATGGTCTGACACTACTGATTTGGCTCTCATTTCACTCTTCAGTGTTCCTGTTATTTATGAAC
GGCATCAGGCACAGATAGATCATTATCTAGGACTTGCAAATAAGAATGTTAAAGATGCTATGGCTAAAAT
CCAAGCAAAAATCCCTGGATTGAAGCGCAAAGCTGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC221080 representing NM_007008
 Red=Cloning site Green=Tags(s)

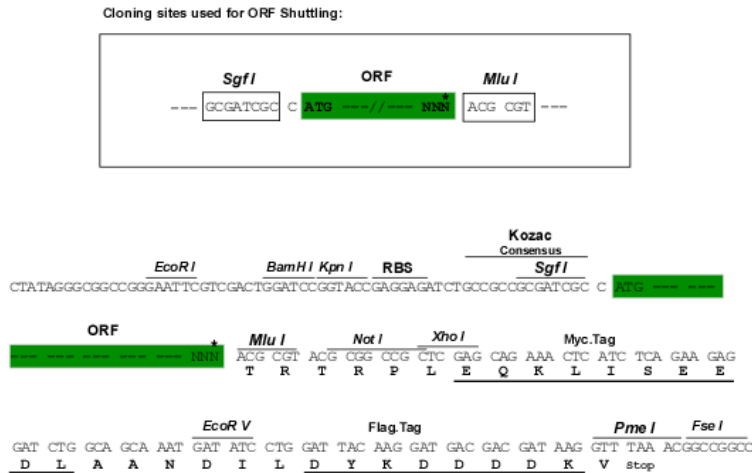
MDGQKKNWKDKVVDLLYWRDIKKTGVVFGASLFLLLSLTVFSIVSVTAYIALALLSVTISFRIYKGVIIQA
 IQKSDEGHPFRAYLESEVAISEELVQKYSNSALGHVNCITIKELRRLFLVDDLVDLSLKFVAVLMWVFTYVGA
 LFNGLTLLILALISLFSVPVIYERHQAQIDHYLGLANKNVKDAMAKIQAKIPGLKRKAE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6043_b10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_007008

ORF Size: 597 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_007008.3](#)

RefSeq Size: 1808 bp

RefSeq ORF: 600 bp

Locus ID: 57142

UniProt ID: [Q9NQC3](#)

Cytogenetics: 2p16.1

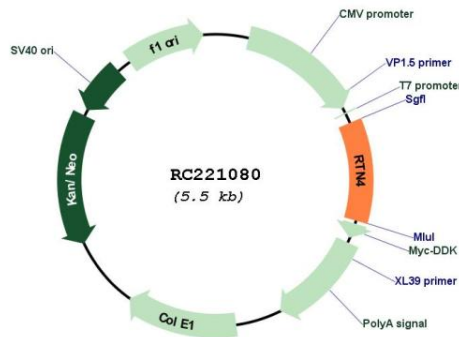
Domains: Reticulon

Protein Families: Transmembrane

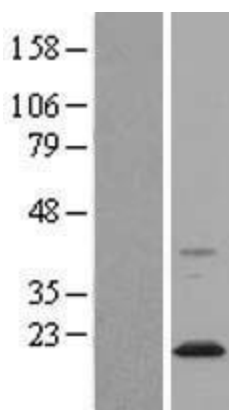
MW: 22.2 kDa

Gene Summary: This gene belongs to the family of reticulon encoding genes. Reticulons are associated with the endoplasmic reticulum, and are involved in neuroendocrine secretion or in membrane trafficking in neuroendocrine cells. The product of this gene is a potent neurite outgrowth inhibitor which may also help block the regeneration of the central nervous system in higher vertebrates. Alternatively spliced transcript variants derived both from differential splicing and differential promoter usage and encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]

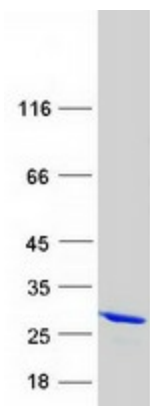
Product images:



Circular map for RC221080



Western blot validation of overexpression lysate (Cat# [LY402073]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221080 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RTN4 protein (Cat# [TP321080]). The protein was produced from HEK293T cells transfected with RTN4 cDNA clone (Cat# RC221080) using MegaTran 2.0 (Cat# [TT210002]).