

Product datasheet for **RC220981**

Nogo A (RTN4) (NM_207520) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Nogo A (RTN4) (NM_207520) 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) |



[View online »](#)

ORF Nucleotide Sequence:

>RC220981 representing NM_207520
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAAGACCTGGACCAGTCTCCTCTGGTCTCGTCTCGGACAGCCACCCCGGCCGAGCCCGGTTC
 AGTACCAGTTCGTGAGGGAGCCCGAGGACGAGGAGGAAGAAGAGGAGGAGGAAGAGGAGGACGAGGACGA
 AGACCTGGAGGAGCTGGAGGTGCTGGAGAGGAAGCCCGCCGCGGCTGTCCGCGCCCCAGTGCCACC
 GCCCTGCCGCGCGGCCCTGATGGACTTCGGAAATGACTTCGTGCCGCGCGCCCCGGGACCCC
 TGCCGGCCGCTCCCCCGTCCGCCGAGCGGCAGCCGCTTGGGACCCGAGCCGGTGTCTGACCGT
 GCCCGCGCATCCCCGTGTCTGCTGCCGAGTCTGCCCTCCAAGCTCCCTGAGGACGACGAGCCCTCCG
 GCCCGGCTCCCCCTCTCCCCGGCCAGCGTGAGCCCCAGGCAGGCCGTGTGGACCCGCCAGCCC
 CGGCTCCCGCGCGCCCCCTCACCCCGCCGCGCCCAAGCGCAGGGGCTCTCGGGCTCAGTGGATGA
 GACCCTTTTGCTTCTCTGCTGCATCTGAGCCTGTGATACGCTCCTCTGCAGTTGTTGACCTCCTGTAT
 TGAGAGACATTAAGAAGACTGGAGTGGTGTGGTGCCAGCCTATTCCTGCTGCTTCATTGACAGTAT
 TCAGCATTGTGAGCGTAACAGCCTACATTGCCTGGCCCTGCTCTCTGTGACCATCAGCTTAGGATATA
 CAAGGGTGTGATCCAAGCTATCCAGAAATCAGATGAAGGCCACCCATTAGGGCATATCTGGAATCTGAA
 GTTGCTATATCTGAGGAGTTGGTTCAGAAGTACAGTAATTCTGCTCTGGTATGTGAAGTGCACGATAA
 AGGAACTCAGGCGCCTCTTCTAGTTGATGATTTAGTTGATTCTCTGAAGTTGCAGTGTGATGTGGGT
 ATTTACCTATGTTGGTGCCTTGTAAATGGTCTGACACTACTGATTTGGCTCTCATTCACTCTTCAGT
 GTTCTGTTATTTATGAACGGCATCAGGCACAGATAGATCATTATCTAGGACTTGCAAATAAGAATGTTA
 AAGATGCTATGGCTAAAATCCAAGCAAAAATCCCTGGATTGAAGCGCAAAGCTGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC220981 representing NM_207520
 Red=Cloning site Green=Tags(s)

MEDLDQSPLVSSDSPRPQPAFKYQFVREPEDEEEEEEEDEDEDELEELERKPAAGLSAAPVPT
 APAAGAPLMDFGNDVFPAPRGPLPAAPPVAPERQPSWDSPVSSVTPAPSLSAAAVSPSKLPEDDEPP
 ARPPPPPPASVSPQAEPVWTPPAPAPAAPPSTPAAPKRRGSSGSVDETLFALPAASEPVIRSSAVDLLY
 WRDIKKTGVVFGASLFLLLSLTVFSIVSVTAYIALALLSVTISFRIYKQVIQAIQKSDGHPFRAYLESE
 VAISEELVQKYSNSALGHVNCTIKELRRLFLVDDLVDLKFVLMWVFTYVGFALFNGLTLLILALISLFS
 VPVIYERHQAQIDHYLGLANKNVKDAMAKIQAKIPGLKRKAE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6100_h08.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_207520

ORF Size: 1176 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 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.

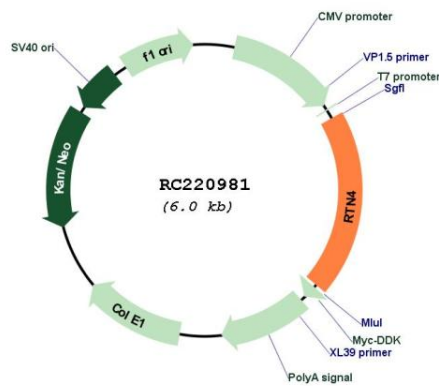
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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.

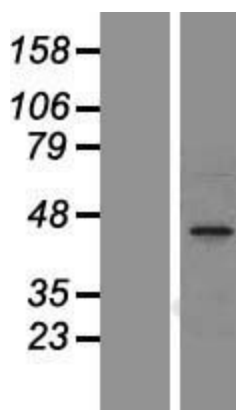
RefSeq: [NM_207520.1, NP_997403.1](#)
RefSeq Size: 2471 bp
RefSeq ORF: 1179 bp
Locus ID: 57142
UniProt ID: [Q9NQC3](#)
Cytogenetics: 2p16.1
Protein Families: Transmembrane
MW: 42.1 kDa

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]

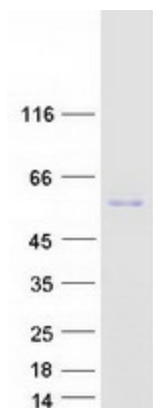
Product images:



Circular map for RC220981



Western blot validation of overexpression lysate (Cat# [LY403920]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220981 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RTN4 protein (Cat# [TP320981]). The protein was produced from HEK293T cells transfected with RTN4 cDNA clone (Cat# RC220981) using MegaTran 2.0 (Cat# [TT210002]).