

## Product datasheet for **SC128187**

### Nogo A (RTN4) (NM\_153828) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Nogo A (RTN4) (NM_153828) Human Untagged Clone
Tag:	Tag Free
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:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC128187 sequence for NM_153828 edited (data generated by NextGen Sequencing)

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ATGGAAGACCTGGACCAGTCTCCTCTGGTCTCGTCTCGGACAGCCACCCCGGCCGAC
CCCCGTTCAAGTACCAGTTCGTGAGGGAGCCCGAGGACGAGGAGGAAGAAGAGGAGGAG
GAAGAGGAGGACGAGGACGAAGACCTGGAGGAGCTGGAGGTGCTGGAGAGGAAGCCCGCC
GCCGGGCTGTCCGCGCCCAAGTCCCCACCGCCCTGCCCGCGCGCCCTGATGGAC
TTCGAAATGACTTCGTGCCGCGGCCCGGGACCCCTGCCGGCCGCTCCCCCGTC
GCCCCGGAGCGGACGCCGTCTTGGGACCCGAGCCCGGTGTCGTCGACCGTCCCCGCGCCA
TCCCCGCTGTCTGCTGCCGAGTCTCGCCCTCCAAGCTCCCTGAGGACGACGAGCCTCCG
GCCCGGCTCCCCCTCTCCCCGGCCAGCGTGAGCCCCAGGCAGAGCCCGTGTGGACC
CCGCCAGCCCCGCTCCCGCCGCCCCCTCCACCCGCGCGCCCAAGCGCAGGGGC
TCCTCGGGCTCAGTGGTTGTTGACCTCCTGTACTGGAGAGACATTAAGAAGACTGGAGTG
GTGTTTGGTGCCAGCCTATTCCTGCTGCTTTCATTGACAGTATTCAGCATTGTGAGCGTA
ACAGCCTACATTGCCTTGCCCTGCTCTCTGTGACCATCAGCTTTAGGATATACAAGGGT
GTGATCCAAGCTATCCAGAAATCAGATGAAGGCCACCCATTCAGGGCATATCTGGAACT
GAAGTTGCTATATCTGAGGAGTTGGTTCAGAAGTACAGTAATTCTGCTCTTGGTCATGTG
AACTGCACGATAAAGGAACTCAGGCGCCTCTTCTTAGTTGATGATTTAGTTGATTCTCTG
AAGTTTGAGTGTGATGTGGGTATTTACATGTTGGTGCCCTTGTTAATGGTCTGACA
CTACTGATTTGGCTCTCATTTCAGTCTTCAAGTGTTCCTGTTATTTATGAACGGCATCAG
GCACAGATAGATCATTATCTAGGACTTGCAAATAAGAATGTTAAAGATGCATGGCTAAA
ATCCAAGCAAAAATCCCTGGATTGAAGCGCAAAGCTGAATGA

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Clone variation with respect to NM\_153828.2



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**5' Read Nucleotide Sequence:** >OriGene 5' read for NM\_153828 unedited  
 TTGGATTTTGTAAACGACTCTCTATTAGGGCGGCCGGAATTCGCACGAGCCACCCTCC  
 AGCCATGGAAGACCTGGACCAGTCTCTCTGGTCTCGTCTCGGACAGCCACCCCGGCC  
 GCAGCCCGCGTTCAAGTACCAGTTCGTGAGGGAGCCGAGGACGAGGAGGAAGAAGAGGA  
 GGAGGAAGAGGAGGACGAGGACGAAGACCTGGAGGAGCTGGAGGTGCTGGAGAGGAAGCC  
 CGCCCGCGGGCTGTCCGCGGCCCACTGCCACCAGCCCTGCCGCGGCGCGCCCTGAT  
 GACTTCGGAAATGACTTCGTGCCGCGGCCCGGGGACCCCTGCCGCGCGCTCCCCC  
 CGTCGCCCCGGAGCGGCAGCCGTCTTGGACCCGAGCCCGGTGTCGTCGACCGTGCCCGC  
 GCCATCCCCGCTGTCTGTGCGCAGTCTCGCCCTCCAAGCTCCCTGAGGACGACGAGCC  
 TCCGGCCCGGCCCTCCCCCTTCCCCGGNCAGNGAGCCCCNAGCAGAGCCCGNGN  
 GGACCCCGCCAGCCCGGCTTCCGGCGNGCCCCNCCACCCCGCCGCGCCAAACGCA  
 GGGGCNCCCCGGCCCCAGGGGNGGGGACCCCGGACGGGAAAGACAAAAAGACCGG  
 AGGGGCGCGNGGCCACCCAANCCCGCCGCCACAGGACGACCCACGCAGGGGAGCG  
 GAACAGCCACAANGGCCGGGGCCGGCCCCGACCAACAACCCGAAGGAAAACAGGGG  
 GGAACCAAGCGCCCCAAAAAAGAGGAGGGCCCCACCCGGGCAANNNGGACCCC  
 GCACCGCCCAACCCGAAGGGGGGGCACAAGACACCAACCCGGCCCTGGACAAGGGA  
 GCCGGCCAAAAAGCAACCCAGGCCCCCNCAACGGCGACCCAACAGACCCCC

**3' Read Nucleotide Sequence:** >OriGene 3' read for NM\_153828 unedited  
 GACTCGGATTTTTTCTTTTTTTTTCTAGCTCCACCATCTCTGCAACTTGCCAANATG  
 CGCAAGACTATCTGCAACAAAGTAAAATATACAGTTTTTTTATCCACCAGTGCCTCAG  
 ATTAGATAGGAAAAAGATATGATTACGGTTTAAATCCATACATAGCAGCTTACAATACTT  
 AAGATGATGAACACATGGCAGTCAAGACAGGTAATTTTTCTCACAACAGTGCATGGCTA  
 AAAATAAAGATCTAACAACGATCTGTGAACTGCACTGCAACGTCAAGTTCGTTCTTCC  
 CTGACCCCTCCCCGTATAATCAAATGAATATCCCTTTAAAGATGAACTCCTACTAATTA  
 TTTTGGCGTTTTTCATTCAGCTTTGCGCTTCAATCCAGGGATTTTTGCTTGGATTTTAC  
 CATAGCATCTTTAACATTCTTATTGCAAGTCTAGATAATGATCTATCTGTGCCTGATG  
 CCGTTCATAAATAACAGGGACACTGAAGAGTGAAAGGAGAGCCAAAATCAGTGGTGTGAG  
 CCCATTAACAAGGCCCAACTTAGGAAATACCCACATTAACCTTGCAAACTTTAGGGA  
 ATCAACTTAATCATCCACTAAGAAGAGGCCCTGGGTTCTTTTTCGGGGAGTTACCTG  
 ACCCAGGGCGGAATTCCTGTACTTTTGAACCACTCCTCAGATTTGGAACCTTAGATTCC  
 CAGTTTTGCCCTGGAGGGGGGGCCTTCAACTGGATTCTTGGGAAGTTGGGACACACC  
 TTTGGTTTTCCAAAAGCTGTTGGGAACAGGAGGCAGGCCAGGGAATGGTAGGCTGGAAC  
 CCCCCCAAGTTGAATCCT

**Restriction Sites:** NotI-NotI  
**ACCN:** NM\_153828  
**Insert Size:** 1700 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](#)

**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\\_153828.2](#), [NP\\_722550.1](#)

**RefSeq Size:** 2414 bp

**RefSeq ORF:** 1122 bp

**Locus ID:** 57142

**UniProt ID:** [Q9NQC3](#)

**Cytogenetics:** 2p16.1

**Protein Families:** Transmembrane

**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]

Transcript Variant: This variant (2), also known as Foccen-M, Nogo-B, RTN-XS and RTN4-B1, lacks an in-frame segment of the coding region, compared to variant 1. It encodes a shorter isoform (B), that is missing an internal segment, compared to isoform A.