

## Product datasheet for **RG219796**

### Nogo A (RTN4) (NM\_153828) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Nogo A (RTN4) (NM_153828) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RTN4
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-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG219796 representing NM_153828 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAAGACCTGGACCAGTCTCCTCTGGTCTCGTCTCGGACAGCCACCCCGGCCGAGCCCGGTTCA  
AGTACCAGTTCGTGAGGGAGCCCGAGGACGAGGAGGAAGAAGAGGAGGAGGAAGAGGAGGACGAGGACGA  
AGACCTGGAGGAGCTGGAGGTGCTGGAGAGGAAGCCCGCCGCGGGCTGTCCGCGCCCCAGTGCCACC  
GCCCCTGCCGCGCGCGCCCTGATGGACTTCGGAAATGACTTCGTGCCGCGCGCCCGGGGACCCC  
TGCCGGCCGCTCCCCCGTCCCGCGGAGCGGCAGCCGCTTTGGACCCGAGCCCGGTGTCGTCGACCGT  
GCCCGCGCATCCCCGTGTCTGCTGCCGAGTCTCGCCCTCCAAGCTCCCTGAGGACGACGAGCCTCCG  
GCCCGGCTCCCCCTCTCCCCGGCCAGCGTGAGCCCCAGGCAGAGCCCGTGTGGACCCCGCCAGCCC  
CGGCTCCCGCGCGCCCTCCACCCCGCCGCCCCAAGCGCAGGGGCTCCTCGGGCTCAGTGGTTGT  
TGACCTCCTGACTGGAGAGACATTAAGAAGACTGGAGTGGTGTGGTGGCCAGCCTATTCTGCTGCTT  
TCATTGACAGTATTCAGCATTGTGAGCGTAACAGCCTACATTGCCTTGGCCCTGCTCTGTGACCATCA  
GCTTTAGGATATAACAAGGTGTGATCCAAGCTATCCAGAAATCAGATGAAGGCCACCCATTACAGGCATA  
TCTGGAATCTGAAGTTGCTATATCTGAGGAGTTGGTTCAGAAGTACAGTAATTCTGCTCTGGTCATGTG  
AACTGCACGATAAAGGAAGTCAAGCGCCTCTTCTAGTTGATGATTTAGTTGATTCTCTGAAGTTTGAG  
TGTTGATGTGGTATTTACCTATGTTGGTGCCTTGTTAATGGTCTGACACTACTGATTTGGCTCTCAT  
TTCCTCTCAGTGTTCCTGTTATTTATGAACGCATCAGGCACAGATAGATCATTATCTAGGACTGCA  
AATAAGAATGTTAAAGATGCTATGGCTAAAATCCAAGCAAAAATCCCTGGATTGAAGCGCAAAGCTGAA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



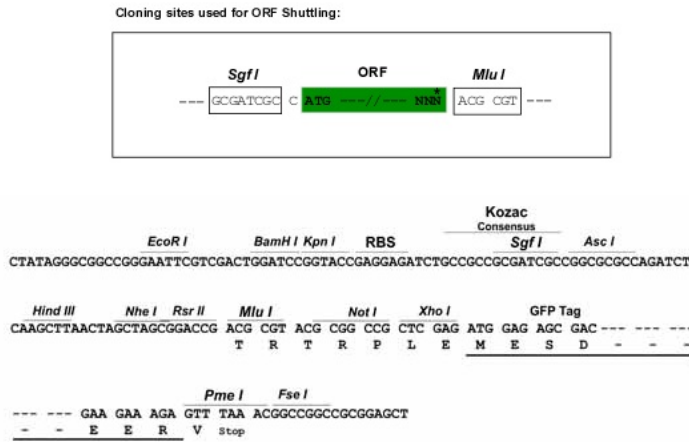
**Protein Sequence:** >RG219796 representing NM\_153828  
 Red=Cloning site Green=Tags(s)

MEDLDQSPLVSSSDSPRRPQPAFKYQFVREPEDEEEEEEEEEDEDEDLEELVLERKPAAGLSAAPVPT  
 APAAGAPLMDFGNDFVPPAPRGPLPAAPPVAPERQPSWDPSPVSTVPAPSPLSAAAVSPSKLPEDDEPP  
 ARPPPPPPASVSPQAEPVWTPPAPAPAAPPSTPAAPKRRGSSGSVVVDLLYWRDIKKTGVVFGASLFLLL  
 SLTVFSIVSVTAYIALALLSVTISFRIYKGVIIQAIQKSDEGHPFRAYLESEVAISEELVQKYSNSALGHV  
 NCTIKELRRLFLVDDLVDLSLKFVLMWVFTYVGFALFNGLTLLILALISLFSVPVIYERHQAIQIDHYLGLA  
 NKNVKDAMAKIQAKIPGLKRKAE

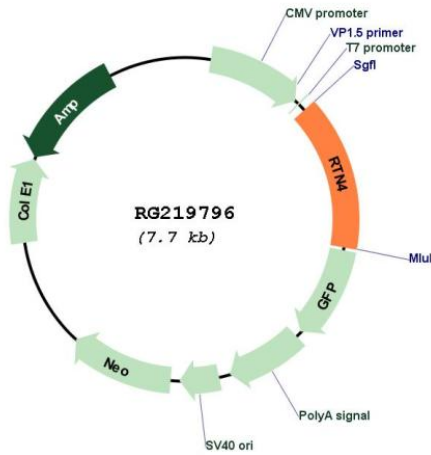
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_153828

<b>ORF Size:</b>	1119 bp
<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_153828.3</a>
<b>RefSeq Size:</b>	2414 bp
<b>RefSeq ORF:</b>	1122 bp
<b>Locus ID:</b>	57142
<b>UniProt ID:</b>	<a href="#">Q9NQC3</a>
<b>Cytogenetics:</b>	2p16.1
<b>Protein Families:</b>	Transmembrane
<b>Gene Summary:</b>	<p>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]</p>