OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC217235

Reticulon 2 (RTN2) (NM_005619) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Reticulon 2 (RTN2) (NM_005619) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Reticulon 2
Synonyms:	NSP2; NSPL1; NSPLI; SPG12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC217235 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGCAGGTCCTGCCGGTCTTCGCCCACTGCAAAGAAGCTCCGTCTACAGCCTCCTCAACTCCTGATT
CCACAGAAGGAGGGAACGACGACTCCGATTTTCGAGAGCTGCACACAGCCCGGGAATTCTCAGAGGAGGA
CGAGGAGGAGACCACGTCGCAGGACTGGGGCACCCCCCGGGAGCTGACCTTCTCCTACATCGCCTTTGAT
GGTGTAGTGGGCTCCGGGGGCCGCAGGGATTCAACTGCCCGCCGCCCCCGCCCCCAGGGCCGCTCAGTCT
CGGAACCACGAGACCAGCACCCTCAGCCCAGCCTGGGCGACAGCTTGGAGAGCATCCCCAGCCTGAGCCA
ATCCCCGGAGCCTGGACGACGGGGTGATCCTGACACCGCGCCTCCATCCGAGCGCCCTCTGGAAGACCTG
AGGCTTCGGTTGGACCATCTGGGCTGGGTGGCCCGGGGAACGGGATCCGGGGAGGACTCTTCCACCAGCA
GCTCCACCCCGCTGGAAGACGAAGAACCCCAAGAACCCAACAGATTGGAGACAGGAGAAGCTGGGGAAGA
ACTGGACCTACGACTCCGACTTGCTCAGCCCTCATCGCCCGAGGTCTTGACTCCCCAGCTCAGTCCGGGC
TCTGGGACACCCCAGGCCGGTACTCCGTCCCCATCCCGATCGCGAGATTCGAACTCTGGGCCCGAAGAGC
CATTGCTGGAAGAGGAAGAAAAGCAGTGGGGGCCACTGGAGCGAGAGCCAGTAAGGGGACAGTGCCTCGA
TAGCACGGACCAATTAGAATTCACGGTGGAGCCACGCCTTCTAGGAACAGCTATGGAATGGTTAAAGACA
TCATTGCTTTTGGCTGTTTACAAGACGGTTCCAATTTTGGAATTGTCCCCACCTCTGTGGACAGCCATTG
GCTGGGTCCAAAGGGGCCCCACCCCCCCTACTCCTGTCCTCCGGGTTCTACTGAAGTGGGCAAAATCCCC
GAGAAGCAGCGGTGTCCCCAGCCTCTCACTCGGAGCCGATATGGGGAGTAAAGTGGCGGACCTGCTGTAC
TGGAAGGACACGAGGACGTCAGGAGTGGTCTTCACAGGCCTGATGGTCTCCCTCCTCTGCCTCCTGCACT
TTAGCATCGTGTCCGTGGCCGCGCACTTGGCTCTGTTGCTGCTCTGCGGCACCATCTCTCTCAGGGTTTA
CCGCAAAGTGCTGCAGGCCGTGCACCGGGGGGATGGAGCCAACCCTTTCCAGGCCTACCTGGATGTGGAC
CTCACCCTGACTCGGGAGCAGACGGAACGTTTGTCCCACCAGATCACCTCCCGCGTGGTCTCGGCGGCCA
CGCAGCTGCGGCACTTCTTCCTGGTAGAAGACCTCGTGGATTCCCTCAAGCTGGCCCTCCTCTTCTACAT
CTTGACCTTCGTGGGTGCCATCTTCAATGGTTTGACTCTTCTCATTCTGGGAGTGATTGGTCTATTCACC
ATCCCCCTGCTGTACCGGCAGCACCAGGCTCAGATCGACCAATATGTGGGGTTGGTGACCAATCAGTTGA
GCCACATCAAAGCTAAGATCCGAGCTAAAATCCCAGGGACCGGAGCCCTGGCCTTTGCAGCAGCCGCAGT
CTCCGGATCCAAAGCCAAAGCCGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC217235 protein sequence
Red=Cloning site Green=Tags(s)

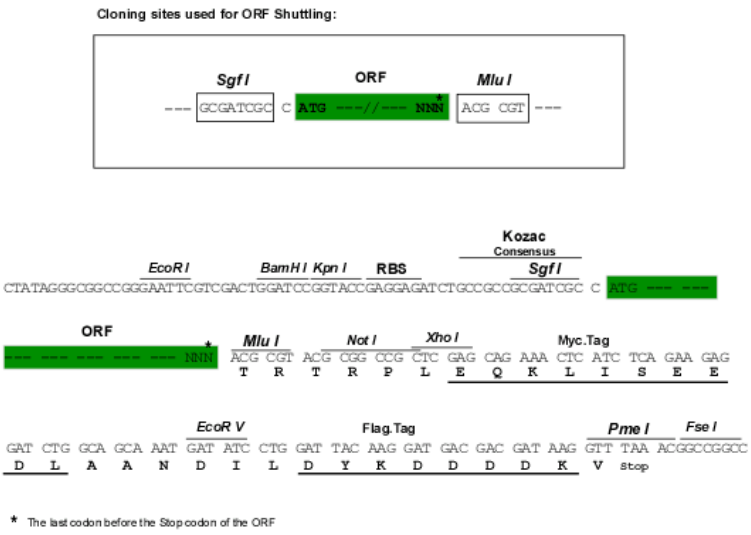
MGQVLPVFAHCKEAPSTASSTPDSTEGGNDDSDFRELHTAREFSEEDEEETTSQDWGTPRELTFSYIAFD
GVVGSGGRRDSTARRPRPQGRSVSEPRDQHPQPSLGDSLESIPSLSQSPEPGRRGDPDTAPPSERPLEDL
RLRLDHLGWVARGTGSGEDSSTSSSTPLEDEEPQEPNRLETGEAGEELDLRLRLAQPSSPEVLTPQLSPG
SGTPQAGTPSPSRSRDSNSGPEEPLLEEEEKQWGPLEREPVRGQCLDSTDQLEFTVEPRLLGTAMEWLKT
SLLLAVYKTVPILELSPPLWTAIGWVQRGPTPPTPVLRVLLKWAKSPRSSGVPSLSLGADMGSKVADLLY
WKDTRTSGVVFTGLMVSLLCLLHFSIVSVAAHLALLLLCGTISLRVYRKVLQAVHRGDGANPFQAYLDVD
LTLTREQTERLSHQITSRVVSAATQLRHFFLVEDLVDSLKLALLFYILTFVGAIFNGLTLLILGVIGLFT
IPLLYRQHQAQIDQYVGLVTNQLSHIKAKIRAKIPGTGALAFAAAAVSGSKAKAE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6363_a05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005619

ORF Size: 1635 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.

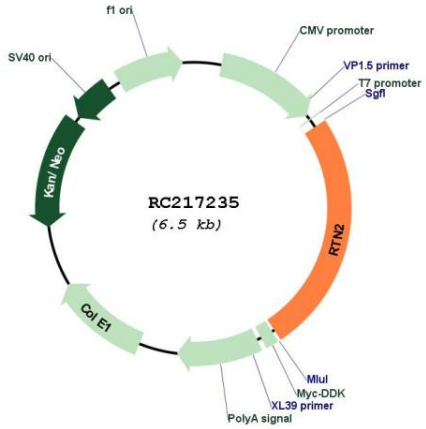
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.

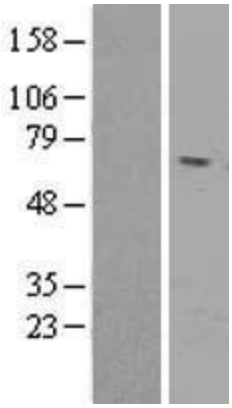
RefSeq: NM_005619.5

RefSeq Size:	2288 bp
RefSeq ORF:	1638 bp
Locus ID:	6253
UniProt ID:	O75298
Cytogenetics:	19q13.32
Domains:	Reticulon
Protein Families:	Transmembrane
MW:	59.3 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. Reticulon proteins also play an important role in the replication of positive-strand RNA (ssRNA) viruses. Mutations at this locus have been associated with autosomal dominant spastic paraplegia-12. [provided by RefSeq, Aug 2020]

Product images:



Circular map for RC217235



Western blot validation of overexpression lysate (Cat# [LY417183]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217235 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).