

Product datasheet for **RC224942**

Reticulon 2 (RTN2) (NM_206900) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Reticulon 2 (RTN2) (NM_206900) 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:

>RC224942 representing NM_206900
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGCAGGTCCTGCCGTCTTCGCCACTGCAAGAAGCTCCGTCTACAGCCTCTCACTCCTGATT
 CCACAGAAGGAGGAACGACGACTCTGATTTTCGAGAGCTGCACACAGCCCGGAATTCTCAGAGGAGGA
 CGAGGAGGAGACCAGTCGCGAGGACTGGGGCACCCCGGGAGCTGACCTTCTCCTACATCGCCTTTGAT
 GGTGTAGTGGGCTCCGGGGCCGAGGGATTCAACTGCCCGCCGCCCGCCAGGGCCGCTCAGTCT
 CGGAACCACGAGACCAGCACCTCAGCCAGCCTGGGCGACAGCTTGAGAGCATCCCCAGCCTGAGCCA
 ATCCCCGAGCCTGGACGACGGGTGATCTGACACCGCGCTCCATCCGAGCGCCTCTGGAAGACCTG
 AGGCTTCGGTTGGACCATCTGGGCTGGGTGGCCCGGGAAACGGGATCCGGGGAGGACTCTCCACCAGCA
 GCTCCACCCCGCTGGAAGACGAAGAACCCCAAGAACCAACAGATTGGAGACAGGAGAAGCTGGGAAGA
 ACTGGACTACGACTCCGACTTGCTCAGCCCTCATCGCCGAGGTCTTGACTCCCAGCTCAGTCCGGGC
 TCTGGGACACCCAGCCGGTACTCCGTCCCATCCCGATCGCGAGATTGAACTCTGGGCCGAAGAGC
 CATTGCTGGAAGAGGAAGAAAAGCAGTGGGGGCCACTGGAGCGAGAGCCAGTAAGGGGACAGTGCCTCGA
 TAGCACGGACCAATTAGAATTCACGGTGGAGCCACGCCTTCTAGTGGCGGACCTGCTGACTGGAAGGAC
 ACGAGGACGTCAGGAGTGGTCTTACAGGCCTGATGGTCTCCCTCCTCTGCTCCTGCACTTTAGCATCG
 TGTCCGTGGCCGCGCACTTGGCTCTGTTGCTGCTGCGGCACCATCTCTCTCAGGGTTTACCGCAAAGT
 GCTGCAGCCGTGACCCGGGGGATGGAGCCAACCCCTTCCAGGCCTACCTGGATGTGGACCTCACCTG
 ACTCGGGAGCAGACGGAACGTTTGTCCCACCAGATCACCTCCCGGTGGTCTCGGCGCCACGCAGCTGC
 GGCACCTTCTTCTGGTAGAAGACCTCGTGATTCCTCAAGCTGGCCCTCCTCTTACATCTTGGCTT
 CGTGGGTGCCATTTCAATGGTTTACTCTTCTCATTCTGGGAGTGATTGGTCTATTACCATCCCCTG
 CTGTACCGGCAGCACCAGGCTCAGATCGACCAATATGTGGGGTTGGTGACCAATCAGTTGAGCCACATCA
 AAGCTAAGATCCGAGCTAAAATCCAGGGACCGAGCCCTGGCCTCTGCAGCAGCCGAGCTCCGGATC
 CAAAGCCAAAGCCGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC224942 representing NM_206900
 Red=Cloning site Green=Tags(s)

MGQVLPVFAHCKEAPSTASSTPDSTEGNDDSDFRELHTAREFSEDEEETTSQDWGTPRELTFSYIAFD
 GVVGSGRRDSTARRPRPQGRSVSEPRDQHPQPSLGDSLESIPSLSQSPEPGRRGDPDAPPSEPLEDL
 RLRLDHLGWVARGTGSGEDSSSTSTPLEDEEPQEPNLETGEAGEELDLRLRLAQPSPEVLTPLSPG
 SGTPQAGTPSPSRSDNSNGPEEPLLEEEKQWGPLEREPVRGQCLDSTDQLEFTVEPRLLVADLLYWKD
 TRTSGVVFGLMVSLLCLLHFSIVSVAHLALLLCGTISLRVYRKVLQAVHRGDGANPFQAYLDVDTL
 TREQTERLSHQITSRVSAATQLRHFFLVEDLVDSLKLALFYILTFVGAIFNGLTLLILGVIPLFTIPL
 LYRQHQAIQYVGLVTNQLSHIKAKIRAKIPGTGALASAAAASVSGSKAKAE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8062_b10.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

ACCN: NM_206900

ORF Size: 1416 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.

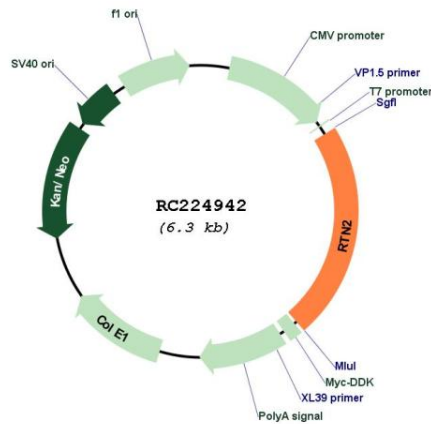
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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.

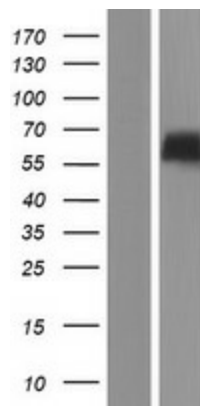
RefSeq: [NM_206900.3](#)
RefSeq Size: 2100 bp
RefSeq ORF: 1419 bp
Locus ID: 6253
UniProt ID: [O75298](#)
Cytogenetics: 19q13.32
Protein Families: Transmembrane
MW: 51.2 kDa

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. 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 RC224942



Western blot validation of overexpression lysate (Cat# [LY404160]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224942 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).