

Product datasheet for RC210086

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OriGene Technologies, Inc.

Reticulon 2 (RTN2) (NM_206901) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Reticulon 2 (RTN2) (NM 206901) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: RTN2

Synonyms: NSP2; NSPL1; NSPLI; SPG12

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC210086 representing NM_206901

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGGGAGTAAAGTGGCGGACCTGCTGTACTGGAAGGACACGAGGACGTCAGGAGTGGTCTTCACAGGCC
TGATGGTCTCCCTCCTCTGCCTCTGCACTTTAGCATCGTGTCCGTGGCCGCGCACTTGGCTCTGTTGCT
GCTCTGCGGCACCATCTCTCTCAGGGTTTACCGCAAAGTGCTGCAGGCCGTGCACCGGGGGGATGGAGCC
AACCCTTTCCAGGCCTACCTGGATGTGGACCTCACCCTGACTCGGGAGCAGACGGAACGTTTGTCCCACC
AGATCACCTCCCGCGTGGTCTCGGCGGCCACGCAGCTGCGGCACTTCTTCCTGGTAGAAGACCTCGTGGA
TTCCCTCAAGCTGGCCCTCCTCTTCTACATCTTGACCTTCGTGGGTGCCATCTTCAATGGTTTGACTCTT
CTCATTCTGGGAGTGATTGGTCTATTCACCATCCCCCTGCTGTACCGGCAGCACCAGGCTCAGATCGACC
AATATGTGGGGTTGGTGACCAATCAGTTGAGCCACATCAAAGCTAAAGTCCGAGCTAAAAATCCCAGGGAC
CGGAGCCCTGGCCTCTCGCAGCAGCCGCAGTCTCCCGGATCCAAAGCCAAAGCCGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC210086 representing NM_206901

Red=Cloning site Green=Tags(s)

MGSKVADLLYWKDTRTSGVVFTGLMVSLLCLLHFSIVSVAAHLALLLLCGTISLRVYRKVLQAVHRGDGA NPFQAYLDVDLTLTREQTERLSHQITSRVVSAATQLRHFFLVEDLVDSLKLALLFYILTFVGAIFNGLTL LILGVIGLFTIPLLYRQHQAQIDQYVGLVTNQLSHIKAKIRAKIPGTGALASAAAAVSGSKAKAE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

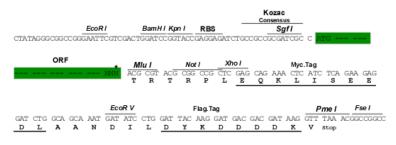
Restriction Sites: Sgfl-Mlul





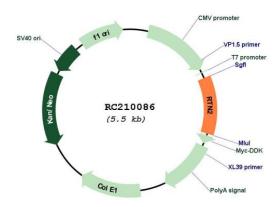
Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_206901

ORF Size: 615 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 customercom 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. <u>More info</u>

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: <u>NM 206901.3</u>

 RefSeq Size:
 1111 bp

 RefSeq ORF:
 618 bp

 Locus ID:
 6253

 UniProt ID:
 075298

 Cytogenetics:
 19q13.32

Protein Families: Transmembrane

MW: 22.3 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]