

## Product datasheet for RC217819

### RTN3 (NM\_006054) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RTN3 (NM_006054) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RTN3
Synonyms:	ASYIP; HAP; NSPL2; NSPLI; RTN3-A1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC217819 representing NM_006054 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGGAGCCGTCGGCGGCCACTCAGTCCCATTCCATCTCCTCGTCGTCTTCGGAGCCGAGCCGTCGG  
CGCCCGCGCGCGGGAGCCAGGAGCCTGCCCGCCCTGGGGACGAAGAGCTGCAGCTCCTCCTGTGC  
GGTGCACGATCTGATTTCTGGAGAGATGTGAAGAAGACTGGGTTTGTCTTTGGCACCACGCTGATCATG  
CTGCTTTCCTGGCAGCTTTCAGTGTCACTAGTGTGGTTTCTTACCTCATCCTGGCTCTTCTCTGTCA  
CCATCAGCTTCAGGATCTACAAGTCCGTCATCCAAGCTGTACAGAAGTCAGAAGAAGGCCATCCATTCAA  
AGCTACCTGGACGTAGACATTACTCTGTCTCAGAAGCTTCCATAATTACATGAATGCTGCCATGGTG  
CACATCAACAGGGCCCTGAAACTCATTATTCGTCTCTTCTGGTGAAGATCTGGTTGACTCCTTGAAGC  
TGGCTGTCTTCATGTGGCTGATGACCTATGTTGGTGTGTTTTAACGGAATCACCTTCTAATCTTGC  
TGAAGTGTCTATTTTCAGTGTCCGATTGTCTATGAGAAGTACAAGACCCAGATTGATCACTATGTTGGC  
ATCGCCCGAGATCAGACCAAGTCAATTGTTGAAAAGATCCAAGCAAACTCCCTGGAATCGCCAAAAAAA  
AGGCAGAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC217819 representing NM\_006054  
Red=Cloning site Green=Tags(s)

MAEPSAATQSHSISSSSFGAEPSAPGGGGSPGACPALGTKSCSSSCAVHDLIFWRDVKKTGFVFGTTLIM  
 LLSLAAFSVISVSYLILALLSVTISFRIYKSVIQAVQKSEEGHPFKAYLDVDITLSSEAFHNYMNAAMV  
 HINRALKLIIRLFLVEDLVDSLKLAVFMWLMTYVGAVFNGITLLILAELLIFSVPIVYEKYKTQIDHYVVG  
 IARDQTKSIVEKIQAQLPGIAKKKAE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6492\\_a06.zip](https://cdn.origene.com/chromatograms/mk6492_a06.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_006054

**ORF Size:** 708 bp

**OTI Disclaimer:** 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\\_006054.4](#)

**RefSeq Size:** 2583 bp

**RefSeq ORF:** 711 bp

**Locus ID:** 10313

**UniProt ID:** [O95197](#)

**Cytogenetics:** 11q13.1

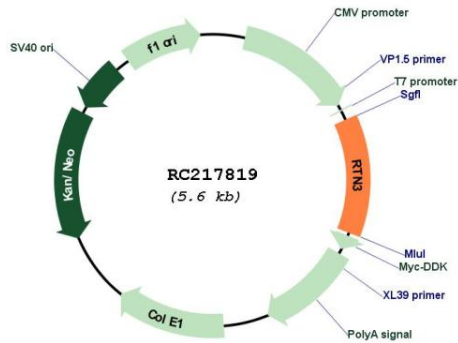
**Domains:** Reticulon

**Protein Families:** Transmembrane

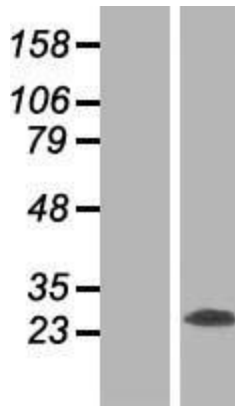
**MW:** 25.4 kDa

**Gene Summary:** This gene belongs to the reticulon family of highly conserved genes that are preferentially expressed in neuroendocrine tissues. This family of proteins interact with, and modulate the activity of beta-amyloid converting enzyme 1 (BACE1), and the production of amyloid-beta. An increase in the expression of any reticulon protein substantially reduces the production of amyloid-beta, suggesting that reticulon proteins are negative modulators of BACE1 in cells. Alternatively spliced transcript variants encoding different isoforms have been found for this gene, and pseudogenes of this gene are located on chromosomes 4 and 12. [provided by RefSeq, May 2012]

Product images:



Circular map for RC217819



Western blot validation of overexpression lysate (Cat# [LY416906]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217819 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).