

## Product datasheet for **SC315070**

### RTN3 (NM\_201428) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RTN3 (NM_201428) Human Untagged Clone
Tag:	Tag Free
Symbol:	RTN3
Synonyms:	ASYIP; HAP; NSPL2; NSPLI; RTN3-A1
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_201428, the custom clone sequence may differ by one or more nucleotides

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ATGGCGGAGCCGTCGGCGGCCACTCAGTCCCATTCCATCTCCTCGTCGTCCTTCGGAGCC
GAGCCGTCGCGCCCGCGGGCGGGAGCCAGGAGCCTGCCCGCCCTGGGGACGAAG
AGCTGCAGCTCCTCCTGTGCGGAGGATTGAGCTCTCTTGCTCTGATGAGCCATCTTCA
GAAATTATGACTTCTTCTTTTCTTTCATCTTCTGAAATACATAAACTGGCCTTACAATA
CTACATGGAGAAAAAGCCATGTGTTAGGGAGCCAGCCTATTTTAGCCAAAGAAGGAAAA
GACCACCTGGATCTTCTAGATATGAAAAAGATGAAAAAGCCTCAGGGACCAGCAACAAC
GTATCAGACTCTTCAGTTTCTCTTGCGAGGAGTTTCATTGTGACCGTCCTTCTATTCCA
GCCAGTTTCCCAGAGCATCCTGCTTTTCTCTCAAAGAAAATTGGTCAAGTGAAGAGCAA
ATAGATAAAGAGACCAAGAACCACAAATGGGGTATCAAGTAGGGAGGCTAAAACCTGCATTG
GATGCTGATGACAGATCACTTTGCTGACAGCCAGAAACCCTACTGAGTACTCTAAG
GTAGAAGGCATTTATACATATTCTTTGTCTCCATCCAAAGTTTCAGGAGATGATGTTATT
GAAAAGGATCCCTGAATCACCATTTGAAGTAATTATTGACAAAGCAGCATTTGACAAA
GAATTTAAAGACTCATATAAGGAGAGCACAGATGATTTGGTAGCTGGTCTGTGCACACT
GATAAAGAATCATCCGAAGACATTTAGAGACTAATGACAAGCTTTTTCCACTGAGAAAT
AAAGAGGCAGGACGTTACCCAATGTCTGCATTGCTCAGTAGGCAGTTTTACACACAAAAT
GCAGCACTGGAAGAGGTGTCAGATGCGTGAATGATATGCATAACTTTACTAACGAAATA
CTGACTTGGGATCTGGTCCCAAGTGAACAACAGACCGATAAACTTTCTGACTGCATC
ACAAAACTACAGGACTTGACATGAGTGAATATAATTCAGAAATCCAGTTGTAATCTT
AAAACCTAGCACTCATCAGAAAACCTGTATGTTCTATTGATGGGAGCACTCCCACACT
AAATCAACAGGTGATTGGGCAGAAGCATCTCTCCAGCAAGAAAATGCTATTACTGGAAAA
CCTGTACCTGACTCTTTGAATCCACAAAAGAATTCAGTATCAAAGGTGTGCAAGGCAAT
ATGCAGAAACAGGATGACACACTTGCGAATTACCTGGATCTCCACCTGAGAAATGTGAC
TCTTTGGGTTCTGGAGTGGCCACAGTGAAGTGGTTTTACCTGATGACCACCTGAAAGAT
GAAATGGACTGGCAGAGCTCTGCATTGGGAGAAAATCACAGAAGCTGATAGTTCTGGTGAG
TCTGATGACACAGTAATAGAGGACATCACAGCAGATACATCTTTGAAAAAACAACAAAT
CAGGCTGAAAAACCTGTTTCCATTCCAAGTGCTGTTGTAACAAAGGTGAAAGAGAAATC
AAAGAGATTTCCAGTTGTGAGAGAGAAGAAAAACATCTAAAACTTTGAAGAATTGGTC
AGTGACTCTGAGCTGCATCAAGATCAGCCTGATATTCTTGAAGGAGTCCAGCTAGTGAG
GCAGCATGTTCAAAGTACCCGATACGAATGTCTCCTTAGAAGATGTGAGTGAAGTTGCT

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CCTGAAAAGCCTATTACTACTGAGAACCCCAAACCTCCTTCAACAGTGTCTCCAAATGTT
TTTAATGAGACAGAATTCTCATTAAATGTGACAACATCTGCCTATTTGGAGTCATTACAT
GGGAAAAATGTTAAACATATAGATGATTCTCCCCAGAGGACCTGATAGCAGCCTTTACA
GAAACCAGAGATAAAGGAATAGTAGATAGTGAAAGAAATGCTTTTAAAGCAATATCAGAG
AAGATGACAGACTTTAAAACAACCTCCTCCTGTAGAAGTCTTACATGAAAATGAGTCCGGT
GGTTCTGAAATTAAGACATTGGAAGCAAATACAGTGAACAAAGCAAAGAAACAAATGGA
AGTGAGCCTCTAGGTGTTTTCCCTACCCAAGTACTCCAGTAGCATCTCTTGACTTAGAA
CAAGAACAGCTCACAAATTAAGGCTCTTAAAGAATTAGGTGAAAGACAGGTTGAGAAGTCA
ACTTCTGCACAGCGTGACGCAGAATTGCCTTCTGAAGAAGTACTGAAGCAAACCTTCACA
TTTGCTCCAGAATCTTGCCACAGAGATCATATGACATCCTAGAACGTAATGTCAAGAAT
GGATCTGATCTTGGGATTTCCAGAAGCCATCACTATCAGAGAACTACTAGGGTAGAT
GCTGTTTCCAGCCTTAGCAAGACTGAATTGGTAAAAAAGCATGCTCCTAGCAAGACTTCTG
ACAGACTTCTCAGTGCACGATCTGATTTTCTGGAGAGATGTGAAGAAGACTGGGTTTGTG
TTTGGCACCACGCTGATCATGCTGCTTTCCCTGGCAGCTTTCAGTGTATCAGTGTGGTT
TCTTACCTCATCTGGCTTCTCTCTGTACCATCAGCTTCAGGATCTACAAGTCCGTC
ATCCAAGCTGTACAGAAGTCAGAAGAAGCCATCCATTCAAAGCTACCTGGACGTAGAC
ATTACTCTGCTCAGAAAGCTTTCCATAATTACATGAATGCTGCCATGGTGCACATCAAC
AGGGCCCTGAAACTCATTATTCGTCTTTCTGGTAGAAGATCTGGTTGACTCCTTGAAG
CTGGCTGTCTTATGTGGCTGATGACCTATGTTGGTGTGTTTTAACGGAAATCACCCCTT
CTAATCTTGCTGAAGTCTCATTTTTCAGTGTCCCGATTGTCTATGAGAAGTACAAGACC
CAGATTGATCACTATGTTGGCATCGCCCGAGATCAGACCAAGTCAATTGTTGAAAAGATC
CAAGCAAACCTCCCTGGAATCGCCAAAAAAAAGGCAGAA
    
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**Restriction Sites:**

Please inquire

**ACCN:**

NM\_201428

**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](mailto: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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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\\_201428.1](#), [NP\\_958831.1](#)

**RefSeq Size:** 4942 bp

**RefSeq ORF:** 3042 bp

**Locus ID:** 10313

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

**Cytogenetics:** 11q13.1

**Protein Families:** Transmembrane

**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]

Transcript Variant: This variant (2) includes an alternate exon in the coding region, but maintains the reading frame, compared to variant 1. The encoded isoform (b) is longer than isoform a.