

Product datasheet for **RG235038**

RTN3 (NM_001265590) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RTN3 (NM_001265590) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RTN3
Synonyms:	ASYIP; HAP; NSPL2; NSPLII; RTN3-A1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG235038 representing NM_001265590
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGAGCCGTCGGCGGCCACTCAGTCCCATTCCATCTCCTCGTCGCTCTTCGGAGCCGAGCCGTCGG
 CGCCCGGCGGCGCGGGAGCCCAGGAGCCTGCCCGCCCTGGGGACGAAGAGCTGCAGCTCCTCCTGTGC
 GGCCAGTTTCCCAGAGCATCCTGCTTTTCTCTCAAAGAAAATTGGTCAAGTGAAGAGCAAAATAGATAAAA
 GAGACCAAGAACCCAAATGGGGTATCAAGTAGGGAGGCTAAAAGTGCATTGGATGCTGATGACAGATTCA
 CTTTGCTGACAGCCAGAAACCCTACTGAGTACTCTAAGGTAGAAGGCATTTATACATATTCTTTGTC
 TCCATCCAAAGTTTCAGGAGATGATGTTATTGAAAAGGATTCCCCTGAATCACCATTGGAAGTAATTATT
 GACAAAGCAGCATTGACAAAGAATTTAAAGACTCATATAAGGAGACACAGATGATTTTGGTAGCTGGT
 CTGTGCACACTGATAAAGAATCATCCGAAGACATTTAGAGACTAATGACAAGCTTTTCCACTGAGAAA
 TAAAGAGGCAGGACGTTACCCAATGTCTGCATTGCTCAGTAGGCAGTTTTACACACAAAATGCAGCACTG
 GAAGAGGTGTCCAGATGGTGAATGATATGCATAACTTTACTAACGAAATACTGACTTGGGATCTGGTTC
 CCCAAGTGAACAACAGACCCGATAAATCTTCTGACTGCATCACA AAAA ACTACAGGACTTGACATGAGTGA
 ATATAATTCAGAAATCCAGTTGTAATCTTAAAAGTACTGACTCATCAGAAA ACTCCTGTATGTTCTATT
 GATGGGAGCACTCCCATCACTAAATCAACAGGTGATTGGGCAGAAGCATCTCCAGCAAGAAAATGCTA
 TTAAGTGGAAAACCTGTACCTGACTCTTTGAATTCACAAAAGAATTGAGTATCAAAGGTGTGCAAGGCAA
 TATGCAGAAACAGGATGACACACTTGCAGAATTACCTGGATCTCCACCTGAGAAATGTGACTCTTTGGGT
 TCTGGAGTGGCCACAGTAAAAGTGGTTTTACCTGATGACCACCTGAAAGATGAAATGGACTGGCAGAGCT
 CTGCATTTGGGAGAAAATCAGAGAAGCTGATAGTTCTGGTGAATCTGATGACACAGTAAATAGAGGACAC
 AGCAGATACATCATTGAAAATAACAAAATTGAGGCTGAAAAACCTGTTCCATTCCAAGTCTGTTGTA
 AAAACAGGTGAAAGAGAAATCAAAGAGATTCCAGTTGTGAGAGAGAAGAAAAACATCTAAAAGTTTGT
 AAGAATTGGTCAGTACTCTGAGCTGCATCAAGATCAGCCTGATATTCTTGAAGGAGTCCAGCTAGTGA
 GGCAGCATGTTCAAAGTACCCGATACGAATGTCTCCTTAGAAGATGTGAGTGAAGTTGCTCCTGAAAAG
 CCTATTACTACTGAGAACCCAACTTCCCTCAACAGTGTCTCCAAATGTTTTAATGAGACAGAATTCT
 CATTAAATGTGACAACATCTGCCTATTTGGAGTCAATACATGGGAAAAATGTTAAACATATAGATGATTC
 CTCCCCAGAGGACCTGATAGCAGCCTTTACAGAAAACAGAGATAAAGGAATAGTAGATAGTAAAGAAAT
 GCTTTTAAAGCAATATCAGAGAAGATGACAGACTTTAAAACAACCTCCTCCTGTAGAAGTCTTACATGAAA
 ATGAGTCCGGTGGTTCTGAAATTAAGACATTGGAAGCAAATACAGTGAACAAAGCAAAGAAACAATGG
 AAGTGAGCCTCTAGGTGTTTTCCCTACCAAGGTACTCCAGTAGCATCTCTTGACTTAGAACAAGAACAG
 CTCACAATTAAGGCTCTTAAAGAATTAGGTGAAAGACAGGTTGAGAAGTCAACTTCTGCACAGCGTGACG
 CAGAATTGCCCTTGAAGAAGTACTGAAGCAAACCTTTCACATTTGCTCCAGAATCTTGGCCACAGAGATC
 ATATGACATCCTAGAACGTAATGTCAAGAATGGATCTGATCTTGGGATTTCCAGAAGCCCATCACTATC
 AGAGAACTACTAGGGTAGATGCTGTTCCAGCCTTAGCAAGACTGAATTGGTAAAAAGCATGTCCTAG
 CAAGACTTCTGACAGACTTCTCAGTGCACGATCTGATTTTCTGGAGAGATGTGAAGAAGACTGGGTTTGT
 CTTTGGCACCACGCTGATCATGCTGCTTTCCCTGGCAGCTTTCAGTGCATCAGTGTGGTTTCTTACCTC
 ATCCTGGCTCTTCTCTGTCCATCAGCTTACAGGATCTACAAGTCCGTCATCCAAGCTGTACAGAAGT
 CAGAAGAAGGCCATCCATTCAAAGCCTACCTGGACGTAGACATTACTCTGTCTCAGAAGCTTTCCATAA
 TTACATGAATGCTGCCATGGTGCACATCAACAGGGCCCTGAAACTCATTATTCGTCTCTTTCTGGTAGAA
 GATCTGGTTGACTCCTTGAAGCTGGCTGTCTTCAATGTGGCTGATGACCTATGTTGGTGTGTTTTAACG
 GAATCACCTTCTAATTCTTGTGAAGTCTCATTTCAGTGTCCCGATTGTCTATGAGAAGTACAAGAC
 CCAGATTGATCACTATGTTGGCATCGCCCGAGATCAGACCAAGTCAATTGTTGAAAAGATCCAAGCAAAA
 CTCCTGGAATCGCCAAAAAAAAGGCAGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG235038 representing NM_001265590
 Red=Cloning site Green=Tags(s)

MAEPSAATQSHSISSSSFGAEPSAPGGGGSPGACPALGTKSCSSCAASFPEHPAFLSKKIGQVEEQIDK
 ETKNPNVSSREAKTALDADDRFTLLTAQKPTEYSKVEGIYTYSLSPSKVSGDDVIEKDSPEPFEVII
 DKAAFDKEFKDSYKESTDDFGSWSVHTDKESSEDISETNDKLFPLRNKEAGRYPMALLSRQFSHTNAAL
 EEVSRVNDMHNFTNEILTWDLVPQVKQTDKSSDCITKTTGLDMSEYNSEIPVVNLKSTHQKTPVCSI
 DGSTPITKSTGDWAEASLQQENAITGKPVPSLNSSTKEFSIKGVQGNMQQDDTLAELPGSPPEKCDLGLG
 SGVATVKVVLPPDHLKDEMDWQSSALGEITEADSSGESDDTVIEDITADTSFENNKIQAEPVSIPIASAVV
 KTGEREIKEIPSCEREKTSKNFEELVSDSELHQDQPDILGRSPASEAACSKVPDTPVNSLEDVSEVAPEK
 PITTENPKLPSTVSPNVFNETEFLSNVTSAYLESLSHGKVKHIDDSSPEDLIAAFETTRDKGIVDSERN
 AFKAISEKMTDFKTPPVVEVLHENESSGSEIKDIGSKYSEQSKETNGSEPLGVFPQTGTPVASLDLEQEQ
 LTIKALKELGERQVEKSTSAQRDAELPSEEVLKQTFAPESWPQRSYDILERNVKNGLGISQKPIITI
 RETTRVDAVSSLKTELVKKHVLARLLTDFSVHDLIFWRDVKKTGFVFGTTLIMLLSAAFVSVISVVSYL
 ILALLSVTISFRIYKSVIQAVQKSEEGHPFKAYLDVDITLSSEAFHNYMNAAMVHINRALKLIIRLFLVE
 DLVDSLKLAVFMWLMTYVGAVFNGITLLILAELLIFSVPIVYKEYKTQIDHYVGIARDQTKSIVEIKQAK
 LPGIAKKKAE

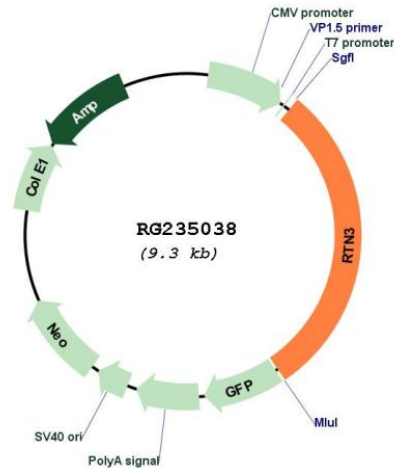
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001265590

ORF Size: 2760 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_001265590.2](#)

RefSeq Size: 4640 bp

RefSeq ORF: 2763 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]