

Product datasheet for **RG220992**

RTN3 (NM_201428) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RTN3 (NM_201428) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RTN3
Synonyms:	ASYIP; HAP; NSPL2; NSPLI; RTN3-A1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG220992 representing NM_201428 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGAGCCGTCGGCGGCCACTCAGTCCCATTCCATCTCCTCGTCGTCTTCGGAGCCGAGCCGTC
CGCCCGCGGGCGGGAGCCAGGAGCCTGCCCGCCCTGGGGACGAAGAGCTGCAGCTCCTCTGTGC
GGAGGGATTGAGCTCTCTTTGCTCTGATGAGCCATCTTCAGAAAATTGACTTCTTCTTTCTTTCATCT
TCTGAAATACATAACACTGGCCTTACAATACTACATGGAGAAAAAGCCATGTGTAGGGAGCCAGCCTA
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CAGCAACAACGTATCAGACTCTTCACTTTCTTTCGAGCAGGAGTTCATTGTGACCGTCTTCTATTCCA
GCCAGTTTCCCAGAGCATCCTGCTTTTCTCCTCAAGAAAATTGGTCAAGTGAAGAGCAAAATAGATAAAG
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TTTGCTGACAGCCAGAAACCCTACTGAGTACTCTAAGGTAGAAGGCATTTATACATATTCTTTGCT
CCATCCAAAGTTTCAGGAGATGATGTTATTGAAAAGGATCCCTGAATCACCATTTGAAGTAATTATTG
ACAAAGCAGCATTTGACAAAGAATTTAAAGACTCATATAAGGAGAGCACAGATGATTTTGGTAGCTGGTC
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AAAGAGGCAGGAGTACCCAATGTCTGCATTGCTCAGTAGGCAGTTTTACACACAAATGCAGCAGCTGG
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TGCATTGGGAGAAATCACAGAAGCTGATAGTTCTGGTGTGCTGATGACACAGTAATAGAGGACATCACA



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GCAGATACATCATTTGAAAAAACA AAAATTCAGGCTGAAAAACCTGTTCCATTCCAAGTCTGTTGTAA
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 TCACAATTAAGGCTCTTAAGAATTAGGTGAAAGACAGGTTGAGAAGTCAACTTCTGCACAGCGTGACGC
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 AATCACCTTCTAATTCTTGCTGAAGTCTCATTTCAGTGTCCCGATTGTCTATGAGAAGTACAAGACC
 CAGATTGATCACTATGTTGGCATCGCCGAGATCAGACCAAGTCAATTGTTGAAAAGATCCAAGCAAAAC
 TCCCTGGAATCGCCAAAAAAGGCAGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG220992 representing NM_201428
 Red=Cloning site Green=Tags(s)

MAEPSAATQSHSISSSSFGAEPSAPGGGSPGACPALGKSCSSSCEGLSSLCSDEPSSEIMTSSFLSS
 SEIHNTGLTILHGEKSHVLGSQPI LAKEGKDHLDLLDMKKMEKPGT SNNVSDSSVSLAAGVHCDRPSIP
 ASFPEHPAFLSKKIGQVEEQIDKETKNPNGVSSREAKTALDADDRFTLLTAQKPPEYSKVEGIYYSLS
 PSKVSGDDVIEKDSPEPFEVIIDKAAFDFEFKDSYKESTDDFGSWSVHTDKESSEDISETNDKLFPLRN
 KEAGRYPMSALLSRQFSHTNAALEEVSRCVNDMHNFTNEILTDLVQVQKQTDKSSDCITKTTGLDMSE
 YNSEIPVNLKSTHQKTPVCSIDGSTPITKSTGDWAEASLQQENAITGKVPDLSNSTKEFSIKGVQGN
 MQKQDDTLAELPGSPPEKCDLGSVATVKVVL PDDHLKDEMDWQSSALGEITEADSSGESDDTVIEDIT
 ADTSFENNKIQAEKPVSI SAVVKTGEREIKEIPSCEREKTSKNFEELVSDSELHQDQPDILGRSPASE
 AACSKVPDNTVSLLEDVSEVAPEKPITTENPKLPSTVSPNVFNETEFSLNVTT SAYLES LHGKNVKHIDDS
 SPEDLIAAFTETRDKGIVDSERNAFKAISEKMTDFKTPPVEVLHENESGGSEIKDIGSKYSEQSKETNG
 SEPLGVFPTQGTVPASLDLEQEQLTIKALKELGERQVEKSTSAQRDAELPSEEVLKQTFAPESWPQRS
 YDILERNVKNGSDLGISQKPITIRETTRVDVSSLSKTEL VKKHVLARLLTDFSVHDLIFWRDVKKTGFV
 FGTTLIMLLSLAAFSVISVVSYLILALLSVTISFRIYKSVIQAVQKSEEGHPFKAYLDVDITLSSEAFHN
 YMNAAMVHINRALKLIIRLFLVEDLVDSLKLAVFMWLMTYVGA VNGITLLILAELLIFSVPVIVYEKYKT
 QIDHYVGIARDQTKSIVEKIQAKLPGI AKKAE

TRTRPLE - GFP Tag - V

Restriction Sites:

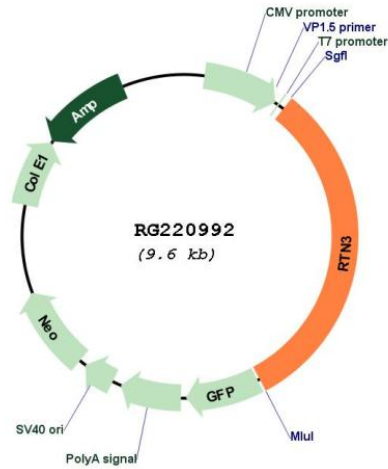
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_201428
 ORF Size: 3039 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_201428.3](#)

RefSeq Size: 4919 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]