

Product datasheet for **RR200211**

Rtn3 (NM_080909) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rtn3 (NM_080909) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rtn3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR200211 representing NM_080909
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGGAGTCATCGGCGCCACTCAGTCTCCGTGACTCTCCTCGTCGCTCCTCCGGGCGGAGCCGTC
 CGCTTGGCGGCGGCGGCGGAGCCCTGGAGCCTGCCCGCCCTGGGGCGAAGAGCTGCGGCTCCTCCTG
 TCGGTTGGGATTGAGCTCTCTTTGCTCTGATGAGCCACCATCAAAAATTATGACTTCCTCCTTTCTTTCA
 TCTTCTGAAATATAAACCTGACCCTACAACACCACTTGAAGTGAAACATTAGGCAGCCATCTGTAG
 CTAAGACGGAAGATCCCTTGGTTCTTAGATAAGAAAACCTGGACTCACCTCAGGGGACCAACA
 GGACAGAGTAGACTCCGGTTCTCTTGACGCTGACATTCCTTGACGCCACCCTTCTATTCCAGACAGT
 TTCCAGAACACTACTTTCTTTCAAAGGAACTGATCCAACAGAAGAGTGGGTAGTTAAAAACCAAG
 AACCAAGAACCAGTGAAGTCCAAGTGGAGAGGACAGAAGTGCAGTGGATCTTGGGCAGCGTAAGGC
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 GAGTCACCATTTGAAGTAATTATTGACAAAGCAACATTTGACAGAGAATTTAAAGATTTGTATAAGGAAA
 GCACAGATGATTTGGGTGGCTGGGCAGCTCACGGTGACAGAGAATCCCCAGCAGATTTATTGGAAATGAA
 TGACAAAGTGTTCCTGAGAAAATAAGAGGCGAGGCGTTACCCATCCTCTGCACTGCTCGGTAGACAA
 TTCTCACACACTACAGCAGCACTGGAAGAAGTGTCTAGATGTGTGAATGATATGCATAACTTTACTAATG
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 TATGAAAACCTGAGCAGCAGCAGGCCATGCAGAAAACCTACTCAGAGGAGTCTGGAAGGTGAGATGT
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 TTGCTCAGCAGCACCTCCAAGTGTCTTAGTGAGACTGGATTCTCACTAACTGTGCCAGCTTCTGCCAAG
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 AAAAATACTAAAAGCAAATACAGTGAACACAGCAGAGAAAACAATGGAGGTGCCCCCAAGGTGTCTTCCG
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 AATGTCTCCTGGAGGAAAACCAAGCGAACCTTGTATCCACAGTCTGGGCCACAGAATTCATCTGACATC
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 TACTCTGTCCACATCAGCTTACAGAGTCTACAAGTCTGTGATCCAAGCTGTGCAGAAGTGAAGAAGG
 ACATCCATTCAAGGCCTACCTGGATGTGGACATTACACTGTCCTCAGAAGCTTCCACAGCTACATGAAT
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 CACTATGTTGGGATTGCCCGGATCAGACCAAGTCAATTGTTGAAAAGATCCAAGCAAAGCTTCTGGAA
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ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR200211 representing NM_080909
 Red=Cloning site Green=Tags(s)

MAESSAATQSPSVSSSSSGAEPSTLGGGGGSPGACPALGAKSCGSSCAVGLSSLCSEPPSKIMTSSFLS
 SSEIYNPDPTTPLGSETLGSHLVAKDGDPLVLLDKKTLDSPQGTNKDRVDPVSLAADIPCSHPSIPDS
 FPEQPTFLSKETDPTTEWVVKNEPKNPSEVPSGEDRSALDLGQRKAHEICTHSLSPSEPAVASVEKDSP
 ESPFEVIIDKATFDREFKDLYKESTDDLGGWAAHGDRESPADLLEMNDKVFPLRNKEAGRYPSSALLGRQ
 FSHTTAALAEVSRVNDMHNFTNEILTWLDLPQAKQADKSPCTTESTGLDRSEHRSEIPVINLKTSPQQ
 KMPVCSFNGSTPIRSTGDWTEFTTEGKPKVGYLSSTKEAGGKVPDSSQPISGGAATVEVTLPLDRGT
 WPNSVLGEVTEVDSSGESDDTVIEDTTENPSVKNNKVLPEKSDSLPSAAVKTSERENKETTSHETVRSEM
 YENSEQQQAHAETPTQRSLEGQMSPQVPNMLNEVIPENLAMTDTRVCSAAPPVSLSETGFSLTVPASAK
 SESLLGKNVEDTDGSSPEDLMAALTGTEEKGTVDKEKGDVLEAVLEKIANVKNTLPVELLHENKLSSET
 KNTKSKYSEHSRETNGGAPKVSSDLEQEQLTIRAIKELGAKQVQAERMSPGGKLRKTFDPQSGPQNSSDI
 LEHTDITTGSDLGIPKKPTIIKDRIDSISLTKTETVNKHVLRLLSDFPVHDLIFWRDVKKTGFVFGT
 TLIIMLLSLAAFVSVSVSYLILALLSVTISFRVYKSVIQAVQKSEEGHPFKAYLDVDITLSSEAFHSYMN
 AAMVHVNKALKLIIRLFLVEDLVDSLKLAVFMWLMTYVGAVFNGITLLILAELLVFSVPIVYEKYKTQID
 HYVGIARDQTKSIVEKIQAKLPGIAKKKAE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

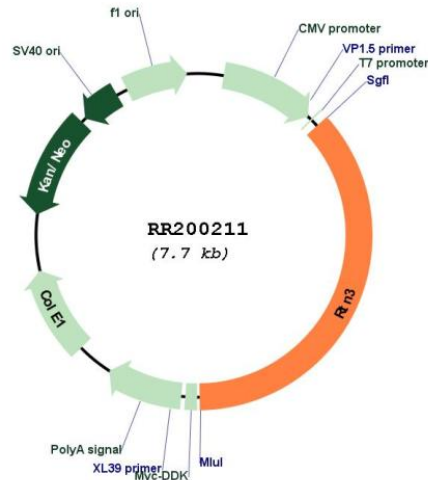
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_080909

ORF Size: 2820 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_080909.3](#), [NP_543185.2](#)

RefSeq Size: 4926 bp

RefSeq ORF: 2823 bp

Locus ID: 140945

UniProt ID: [Q6RJR6](#)

Cytogenetics: 1q43

MW: 101.5 kDa

Gene Summary: This gene encodes a member of the reticulon family, a large group of membrane-bound proteins that primarily localize to the endoplasmic reticulum with a small subpopulation at the cell surface. These proteins play roles in endocytosis, exocytosis, trafficking and neuronal outgrowth. Proteins belonging to this family are characterized by a carboxy-terminal reticulon homology domain that consists of a small hydrophilic loop flanked by hydrophobic regions. In rat, this protein has been shown to interact with two members of the synaptic adhesion-like molecule family, suggesting that it may function in trafficking of these proteins. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2015]