

## Product datasheet for **MR230774**

### **Rtn3 (NM\_001271486) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Rtn3 (NM_001271486) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rtn3
Synonyms:	RTN3-A1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide  
Sequence:

>MR230774 representing NM\_001271486  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGCGGAGTCGTCAGCGGCCACTCAGTCCCCGTAGTCTCCTCGTCGTCCTCCGGGGCCGAGCCGTCAG  
CTCTCGGCGGCGGCGGCCGGAGCCCTGGAGCCTGCCCGCCCTGGGGGCGAAGAGCTGCGGCTCCTCGTG  
TGCGGATTCCCTTTGTTTCTTCTCCTCCTCAGCCTGTATCTATATTTTCGACCTCACAAGGTGACTGG  
ACAGAAGCATTTACAGAAGGAAAACCTGTAAGAGACTACCTCAGTTCACAAAAGAAGCTGGTGGCAACG  
GTGTGCCAGGCAGTTCTCAGTTCATTCTGAGCTGCCTGGCTCTATGCCTGAGAAATGGGTCTCAGGCTC  
TGGAGCAGCCACAGTGAAGTAACCTTACCTAACCTGAGGGTGCCTGGCCTAACCTGTGATGGGGAA  
GTCACAGAGGTTGATAGTTCTGGGGAATCTGATGACACAGTAATAGAGGACATCACAGAAAAACCTGACT  
CCCTTCCAAGTGCTGCTCAAAAAACAAGTAAAAGGGAAAATCAAAGAGACTCCAGTCTGAAACTGTGAG  
GAGTGAATGTGTAAAACCTCTGAGCAGCCGAGGCCAGCCAGAACTCCTACTCAGAAGAGTCTGGAA  
GGTGAGGTGGCTTCAAGTACCTAATACCTGAATGAAGTACACCTGAAAAGCTTGATATGACTAACA  
ACCCCAAAGTTTCTCAGCAGCACCTCCAAGTGTCTTAAAGAGACAGGATTCTACTAACTGTGCCAGC  
TTCTGCCAAGTTGGAATCTTTGCTTGGAAAATATGTTGAAGATACAGATGGTTTCTCCAGAGGACTTG  
ATGGCTGTCTCACAGGAGCCGAGGAGAAGGGGATAGTGGATAAAGAGGAAGGTGATGTTTTGGAAGCAG  
TGTTAGAGAAGATAGCAGACTTTAAAAACACTTTGCCCTGTGGAACCTTTCATGAAAGTGAAGTAAAGTGG  
TTCTGAAACAAAAATATTAAGCAAAATACAGTGAAGACAGCAGAGAAAACCTGGAGGTGCCCTACG  
ATGTCTCCCGACTTAGAGCAGGAGCAGCTCACCATCAGAGCCATTAAGAATTAGGAGAAAAGGCAAGCTG  
AGAAGGTGCAGGATGAAGGAATATCTTCTGGAGGAAAACCTCAAGCAAACCTTTGCTCCACAGTCTGGGCC  
ACAGAGTTCATCTGACATCCTAGAACACACAGATGTCAAACCTGGATCTGATCTTGAATTCCTCAAAAAT  
CCTACTATCATCAAAAACACTAGAATAGATTCTATTTCCAGCCTTACCAAGACTGAAATGGTTAAACAAGA  
ATGTTCTAGCAAGACTTCTCAGTGATTTCCAGTGCACGATCTGATTTTCTGGCGAGATGTGAAGAAGAC  
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TCTTACCTCATCTGGCTCTTCTCTCTGTCACCATCAGCTTCAAGTCTATAAGTCTGTCATTCAAGCTG  
TGCAGAAGTCAGAAGAAGGACATCCATTCAAGGCCTACTGGATGTGGACATTACCCTGTCTTCAAGAGC  
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CTGGTAGAAGACTTGGTTGACTCCTTGAAGCTGGCTGTCTTCATGTGGCTGATGACCTATGTTGGTCTG  
TTTTTAATGGAATTACCCTTCTGATTCTCGCCGAGCTGCTTGTCTTCAGGCTCCCAATTGTCTATGAGAA  
GTATAAGACACAGATTGACCACTATGTTGGGATTGCCCGGATCAGACCAAGTCAATTGTTGAAAAGATC  
CAAGCAAAGCTTCTGGAATCGCCAAAAAAAAGGCAGAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR230774 representing NM\_001271486  
 Red=Cloning site Green=Tags(s)

MAESSAATQSPSVSSSSSGAEPALGGGGGSPGACPALGAKSCGSSCADSFVSSSSSQPVSIFSTSQGDW  
 TEAFTEGKPVVDYL SSTKEAGNGVPGSSQLHSELPGSMPEKVVSGGAATVEVTL PNLRGAWPNSVMGE  
 VTEVDSSGESDDTVIEDITEKPDLSLPSAAKT SEREIKE TPSRE TVRSEMCENSEQPQAQPETPTQKSLE  
 GEVASQVPNTLNEVTPEKLDMTNPNKVCSAAPPSVLNETGFSL TVPASAKLESLLGKYVEDTDGSSPEDL  
 MAVLTGAEEKGIVDKEEGDVLEAVLEKIADFKNTLPVELLHESEL SGSETKNIKSKYSEDSRETTGGAPT  
 MSPDLEQEQLTIRAIKELGERQAQEVQDEGISSGGK LKQT FAPQSGPQSSSDILEHTDVKTGSDLGIPKN  
 PTIIKNTRIDSISSLTKTEMVNKNV LARLLSDFPVHDLIFWRDVKKTGFVFGTLLIMLLSLAAFSVISV  
 SYLILALLSVTISFRVYKSVIQAVQKSEEGHPFKAYLDVDITLSSEAFHNYMNAAMVHVNKALKIIRLF  
 LVEDLVDSLKLAVF MWLMTYVGVAVFNGITLLILAELLVFSVPVIVYEKYKTQIDHYVGIARDQTKSIVEKI  
 QAKLPGIAKKKAE

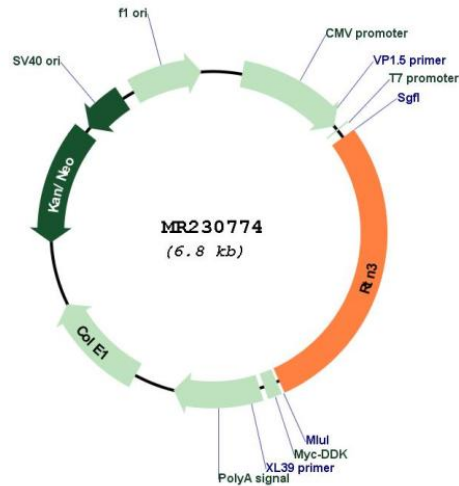
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_001271486

**ORF Size:** 1929 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\\_001271486.1](#), [NP\\_001258415.1](#)

RefSeq Size: 4075 bp

RefSeq ORF: 1932 bp

Locus ID: 20168

UniProt ID: [Q9ES97](#)

Cytogenetics: 19 A

MW: 69.2 kDa

**Gene Summary:** May be involved in membrane trafficking in the early secretory pathway. Inhibits BACE1 activity and amyloid precursor protein processing. May induce caspase-8 cascade and apoptosis. May favor BCL2 translocation to the mitochondria upon endoplasmic reticulum stress (By similarity). Induces the formation of endoplasmic reticulum tubules (PubMed:24262037).[UniProtKB/Swiss-Prot Function]