

## Product datasheet for **MG226122**

### **Rtn4 (NM\_194053) Mouse Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Rtn4 (NM_194053) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Rtn4
Synonyms:	1110020G17Rik; AA407876; AA409940; AA960376; ASY; C130026I10Rik; mKIAA0886; mKIAA4153; NgA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG226122 representing NM_194053 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAAGACATAGACCAGTCGTCGCTGGTCTCCTCGTCCGCGGATAGCCCGCCCCGGCCCCCGCCGCTT  
TCAAGTACCAGTTCGTGACGGAGCCCGAGGACGAGGAGGACGAGGAAGACGAGGAGGAGGAGGAGGACGA  
CGAGGACCTGGAGGAATTGGAGGTGCTGGAGAGGAAGCCCGCAGCCGGGCTGTCCGCGGCTCCGGTGCC  
CCCGCCGCCGACCGCTGCTGGACTTCAGCAGCGACTCGGTGCCCGCCCGCCCGGGCCGCTGCCGG  
CCGCGCCCCCACCGCCCTGAGAGGCAGCCGCTCTGGGAACGCAGCCCCGCGGCGTCCGCGCCATCCCT  
GCCGCCGCTGCCGAGTCTGCCCTCCAAGCTCCCGGAGGACGACGAGCCTCCAGCGCGCCTCCGGCG  
CCAGCCGCGCGAGCCCCCTAGCGGAGCCCGCCGCCCCCTTCCAGCGCGCCGCGCCCAAGCGCAGGG  
GCTCGGGCTCAGTGGATGAGACCCTTTTGTCTTCTCTGCTGCATCTGAGCCTGTGATACCTCCTCTGC  
AGTTGTTGACCTCCTGTACTGGAGAGACATTAAGAAGACTGGAGTGGTGTGGTGGCCAGCTTATTCCTG  
CTGCTGTCTCTGACAGTGTTCAGCATTGTCAAGTGTAAACGGCTACATTGCCTTGGCCCTGCTCTGTGA  
CTATCAGCTTTAGGATATATAAGGGTGTGATCCAAGCTATCCAGAAATCAGATGAAGGCCACCCATTAG  
GGCATATTTGGAATCTGAAGTTGCCATATCAGAGGAATTGGTTCAGAAATATAGTAATTCTGCTCTTGGT  
CATGTGAACAGCACAATAAAAAGAATTGAGGCGTCTCTTCTTAGTTGATGATTTAGTTGATTCCCTGAAGT  
TTGAGTGTGATGTGGTATTTACTTACGTTGGTGCCTTGTTCATGGTTTGACACTACTGATTTTAGC  
TCTGATCTCACTTTCAGTATTCCTGTTATATGAACGCGATCAGGCGCAGATAGATCATTATCTAGGA  
CTTGCAAACAAGAGCGTTAAGGATGCCATGGCCAAAATCCAAGCAAAAATCCCTGGATTGAAGCGCAAAG  
CAGAA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >MG226122 representing NM\_194053  
 Red=Cloning site Green=Tags(s)

MEDIDQSSLVSSSADSPRPPPAFKYQFVTEPEDEEEDDEEEEDDEDLEEEVLERKPAAGLSAAPVP  
 PAAAPLLDFSSDSVPPAPRGLPAAPPTAPERQPSWERSPAASAPSLPAAAVLPSKLPEDDEPPARPPA  
 PAGASPLAEPAAPSTPAAPKRRGSGSVDLTFALPAASEPVIPSSAVVDLLYWRDIKKTGVVFGASLFL  
 LLSLTVFSIVSVTAYIALALLSVTISFRIYKGVIQAIQKSDGHPFRAYLESEVAISEELVQKYSNSALG  
 HVNSTIKELRRLFLVDDLVDLKFVAVLMWVFTYVGALFNGLTLLILALISLFSIPVIYERHQAIQIDHYLG  
 LANKSVKDAMAKIQAKIPGLKRKAE

TRTRPLE - GFP Tag - V

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1647\\_f05.zip](https://cdn.origene.com/chromatograms/ja1647_f05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_194053

**ORF Size:** 1125 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\\_194053.3](#), [NP\\_918942.1](#)

**RefSeq Size:** 3804 bp

**RefSeq ORF:** 1128 bp

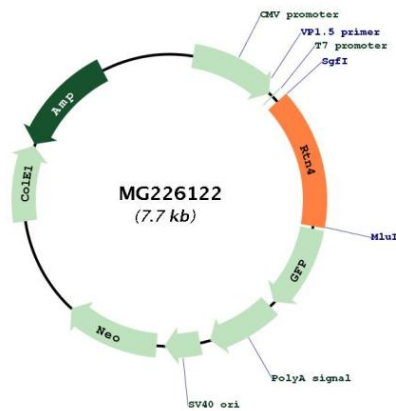
**Locus ID:** 68585

**UniProt ID:** [Q99P72](#)

**Cytogenetics:** 11 A3.3

**Gene Summary:** Required to induce the formation and stabilization of endoplasmic reticulum (ER) tubules. They regulate membrane morphogenesis in the ER by promoting tubular ER production. They influence nuclear envelope expansion, nuclear pore complex formation and proper localization of inner nuclear membrane proteins. However each isoform have specific functions mainly depending on their tissue expression specificities.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MG226122