

Product datasheet for **MG226113**

Rtn4 (NM_194051) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rtn4 (NM_194051) 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:	>MG226113 representing NM_194051 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGCCCCGCTGGCGGGAGGCGGGCAGAAGGGTGGGCGGCCCTCGGAAGCCTGGGTGCCTTCATTGT
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CCTATCAGCAGCTAGGAATGAGACCCTTTTGTCTTCTCCTGCTGCATCTGAGCCTGTGATACCCTCCTCT
GCAGAAAAAATTATGGATTTGAAGGAGCAGCCAGGTAACACTGTTTCGTCTGGTCAAGAGGATTTCCCAT
CTGTCCTGTTGAACTGCTGCCTCTTCTCTCTCTATCTCCTCTCTCAACTGTTTCTTTAAAGAACA
CGGATACCTTGGTAACCTATCAGCAGTGGCATCCACAGAAGGAATTTGAAGAACTTTAAATGAAGCT
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 TAAGGATGCCATGGCCAAAATCCAAGCAAAAATCCCTGGATTGAAGCGCAAAGCAGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG226113 representing NM_194051
 Red=Cloning site Green=Tags(s)

MAPPLAGGQKGGAAASEAWVPSLFGVSGSTCTAAKSLVPIPARSSRLSAARNETLALPAASEPVIPSS
 AEKIMDLKEQPGNTVSSGQEDFPSVLFETAASLPSLSPLSTVFSFKEHGYLGNLSAVASTEGETIEETLNEA
 SRELPERATNPFVNRESAEFVLEYSSEMSSFNKSPKGESAMLVENTKEEVIVRSKDKEDLVCSAALHNP
 QESPATLTKVVKEDGVMSPKMDIFNEMKMSVAVPVREEYADFKPFEQAWVKDTEGSRDVLAAARANM
 ESKVDKCFEDSLEQKGHGKDESRNENASFPRTPELVKDGSRAYITCDSFSSATESTAANIFPVLEDHT
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 ESLTEVSETVTQHKHKERLSASPQEVGKPYLESFQPNLHITKDAASNEIPTLTKKETISLQMEEFNTAIY
 SNDDLSSKEDKMKESETFSDSSPIEIIDEFPTFVSAKDDSPKEYTDLEVSNKSEIANVQSGANSLPCSE
 LPCDLFSKNTYPKDEAHVSDEFKSRSSVSKVPLLLPNVSALESQIEMGNIVKPKVLTKAEKELPSDTE
 KEDRSLTAVLSAELNKTSVVDLLYWRDIKKTGVVFGASLFLLLSLTVFSIVSVTAYIALALLSVTISFRI
 YKGVIIQAIQKSDEGHPFRAYLESEVAISEELVQKYSNSALGHVNSTIKELRRLFLVDDLVDLKFVLMW
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TRTRPLE - GFP Tag - V

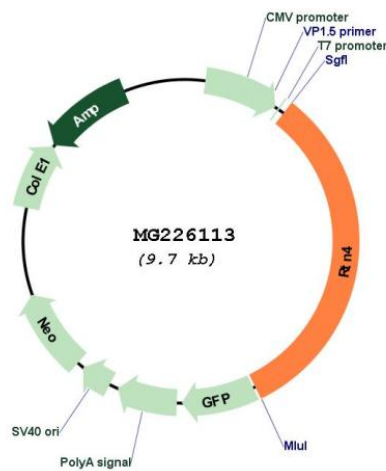
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_194051

ORF Size: 3138 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:	<ol style="list-style-type: none">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_194051.3 , NP_918940.1
RefSeq Size:	5558 bp
RefSeq ORF:	3141 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]