

## Product datasheet for MC223370

### Rtn4 (NM\_194051) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Rtn4 (NM_194051) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Rtn4
Synonyms:	1110020G17Rik; AA407876; AA409940; AA960376; ASY; C130026I10Rik; mKIAA0886; mKIAA4153; NgA
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC223370 representing NM_194051 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGCCCCGCTGGCGGGAGGCGGGCAGAAGGGTGGGCGGCCTCGGAAGCCTGGTGCCTTCATTGT  
TTGTCGGGGTTTCGGGGAGCACGTGCACCCTGCCAAGTCGTTGCCATTCCAGCACGAAGTCTCG  
CCTATCAGCAGCTAGGAATGAGACCCTTTTGGCTCTTCTGCTGCATCTGAGCCTGTGATACCTCCTCT  
GCAGAAAAATTATGGATTTGAAGGAGCAGCCAGGTAACACTGTTTCGTCCTGGTCAAGAGGATTTCCCAT  
CTGTCCTGTTTGAAGTCTGCCTCTCTCTCTCTCTCTCTCAACTGTTTCTTTAAAGAACA  
CGGATACCTTGGTAACTTATCAGCAGTGGCATCCACAGAAGGAAGTATTGAAGAACTTTAAATGAAGCT  
TCTAGAGAATTGCCAGAGAGGGCAACAAATCCATTTGTAATAGAGAGTCAAGAGGATTTTCAGTATTAG  
AACTACTCAGAAATGGGATCATCTTTCAATGGCTCCCCAAAAGGAGAGTCAAGCCATGTTAGTAGAAAAAC  
TAAGGAAGAAGTAATTGTGAGGAGTAAAGACAAAGAGGATTTAGTTTGTAGTGCAGCCCTTCATAATCCA  
CAAGAGTCACTGCGACCCTTACTAAAGTGTTAAAGAAGACGGAGTTATGTCTCCAGAAAAAGACAATGG  
ACATTTTAAATGAAATGAAAATGTCAGTGGTAGCACCTGTGAGGGAAGTATGCAGATTTTAAAGCCATT  
TGAACAAGCATGGGAAGTGAAGATACTTATGAGGGAAGTAGGGATGTGCTGGCTGCTAGAGCTAATATG  
GAAAGTAAAGTGGACAAAAATGCTTTGAAGATAGCCTGGAGCAAAAAGTCAAGGGAAGGATAGTGAAA  
GCAGAAATGAGAATGCTTCTTTCCAGGACCCAGAACTTGTGAAGGACGGCTCCAGAGCGTACATCAC  
CTGTGATTCCTTTAGCTCAGCAACCGAGAGTACTGCAGCAAAACATTTTCCCTGTGCTAGAAGATCACACT  
TCAGAAAAACAAACAGATGAAAAAAAATAGAAGAAAGGAAGGCCAAATTATAACAGAGAAGACTAGCC  
CCAAAACGTCAAATCCTTTCTTGTAGCAATACATGATTCTGAGGCAGATTATGTCACAACAGATAATTT  
ATCAAAGTGACTGAGGCAGTAGTGCAACCATGCCTGAAGGTCTAACGCCAGATTTAGTTCAGGAAGCA  
TGTGAAAGTGAAGTGAACGAAGCCACAGGTACAAAGATTGCTTATGAAACAAAAGTGGACTTGGTCCAGA  
CATCAGAAGCTATACAAGAGTCAATTTACCCACAGCACAGCTTTGCCCATCATTTGAGGAAGCTGAAGC  
AACTCCGTCAACGATTTTGCCTGATATTGTTATGGAAGCGCCATTAATTTCTCTCTTCCAAGCACTGGT



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GCTTCTGTAGCGCAGCCAGTGCATCCCCACTAGAAGTACCGTCTCCAGTTAGTTATGACGGTATAAAGC  
 TTGAGCCTGAAAAATCCCCACCATATGAAGAAGCCATGAGTGTAGCACTAAAAACATCGGACTCAAAGGA  
 AGAAATTAAGAGCCTGAAAGTTTTAATGCAGCTGCTCAGGAAGCAGAAGCTCCTTATATATCCATTGCA  
 TGTGATTAATTAAGAAAACAAAGCTCTCCACTGAGCCAAGTCCAGAGTTCTCTAATTATTCAGAAATAG  
 CAAAATTTGAGAAGTCGGTGCCTGATCACTGTGAGCTCGTGGATGATTCCCTACCCGAATCTGAACCAGT  
 TGACTTATTTAGTGATGATTCAATTCCTGAAGTCCCACAAACACAAGAGGAGGCTGTGATGCTAATGAAG  
 GAGAGTCTCACTGAAGTGTCTGAGACAGTAACACAACACAACATAAGGAGAGACTTAGTGCTTCACCTC  
 AGGAGGTAGGAAAGCCATATTTAGAGTCTTTTCAGCCCAATTTACATATTACAAAAGATGCTGCATCTAA  
 TGAAATCCAACATTGACCAAAAAGGAGACAATTTCTTTGCAAATGGAAGAGTTTAATACTGCAATTTAT  
 TCCAATGATGACTTACTTTCTTCTAAGGAAGACAAAATGAAAGAAAGTGAACATTTTCCGATTCATCTC  
 CCATTGAGATAATAGATGAGTTTCCACATTTGTCAGTGCTAAAGATGATTCTCCTAAGGAGTACACTGA  
 CCTAGAAGTATCCAACAAAAGTGAATTTGCTAATGTCCAGAGCGGGCCAATTCGTTGCCTTGCTCAGAA  
 TTGCCCTGTGACCTTTCTTCAAGAATACATATCCTAAAGATGAAGCACATGTCTCAGATGAATTCTCCA  
 AAAGTAGTCCAGTGTATCTAAGGTGCCCTTATTGCTTCCAAATGTTTCTGCTTTGGAATCTCAAATAGA  
 AATGGGCAACATAGTTAAACCCAAAGTACTTACGAAAGAAGCAGAGGAAAACTTCTTCTGATACAGAG  
 AAAGAGGACAGATCCCTGACAGCTGTATTGTGACGAGAGCTGAATAAAACCTTCAAGTTGTTGACCTCCTGT  
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 GTTCAGCATTGTGAGTGAACGGCTACATTGCCTTGGCCTGCTCTGTGACTATCAGCTTTAGGATA  
 TATAAGGGTGTGATCCAAGCTATCCAGAAATCAGATGAAGGCCACCCATTGAGGATATTTGGAATCTG  
 AAGTTGCCATATCAGAGGAATGGTTGAGAAATATAGTAATTCTGCTCTTGGTCTATGTGAACAGCACAAT  
 AAAAGAATTGAGGCGTCTCTTCTTAGTTGATGATTTAGTTGATCCCTGAAGTTGACAGTGTGATGTGG  
 GTATTTACTTACGTTGGTGCCTTGTTCATGGTTTGACACTACTGATTTAGCTGTGATCCTCTTCA  
 GTATTCCTGTTATATGAACGGCATCAGGCGCAGATAGATCATTATCTAGGACTTGCAAACAAGAGCGT  
 TAAGGATGCCATGGCCAAAATCCAAGCAAAAATCCCTGGATTGAAGCGCAAAGCAGAAATGA

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_194051
- Insert Size:** 3141 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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\\_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]  
Transcript Variant: This variant (5) uses a different segment for its 5' end, compared to variant 1. The resulting protein (isoform D) has a shorter and distinct N-terminus when it is compared to isoform A. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.