

## Product datasheet for RC217072

### RTN4RL2 (NM\_178570) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RTN4RL2 (NM_178570) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RTN4RL2
Synonyms:	NgR2; NGRH1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC217072 representing NM_178570 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTGCCGGGCTCAGGCGCTGCTGCAAGCTCCCGCTCGGCCTGCCTCCTGCTGATGCTCCTGGCCC  
TGCCCTGGCGGCCCCAGCTGCCCATGCTCTGCACCTGCTACTCATCCCGCCACCCTGAGCTGCCA  
GGCCAACAATTCTCCTCTGTGCCGCTGTCCCTGCCACCCAGCACTCAGCGACTTCTCTGCAGAACAAC  
CTCATCCGCACGCTGCGCCAGGCACCTTTGGTCCAACCTGCTCACCTGTGGCTTTCTCCAACAACC  
TCTCCACCATCTACCCGGGCACCTTCCGCCACTTGCAAGCCCTGGAGGAGCTGGACTCGGTGACAACCG  
GCACCTGCGCTCGCTGGAGCCCGACACCTTCCAGGGCCTGGAGCGGCTGCAGTCGCTGCATTTGTACCGC  
TGCCAGCTCAGCAGCCTGCCCGCAACATCTTCCGAGGCCTGGTCAAGCCTGCAGTACCTCTACCTCCAGG  
AGAACAGCCTGCTCCACCTACAGGATGACTTGTTCGCGGACCTGGCCAACCTGAGCCACCTTCTCTCCA  
CGGGAACCGCCTGCGGCTGCTCACAGAGCACGTGTTTCGCGGCCTGGGCAGCCTGGACCGGCTGCTGCTG  
CACGGGAACCGGCTGCAGGGCGTGACCCGCGGGCCTTCCGCGGCTCAGCCGCCTACCATCCTTACC  
TGTTCAACAACAGCCTGGCCTCGCTGCCCGCGAGGCGCTCGCCGACCTGCCCTCGCTCGAGTTCCTGCG  
GCTCAACGCTAACCCCTGGGCGTGCGACTGCCGCGCGGGCCGCTCTGGGCTGGTCCAGCGCGCGCGC  
GTGTCCAGCTCCGACGTGACCTGCGCCACCCCGGAGCGCCAGGGCCGAGACTGCGCGGCTCCCGC  
AGGCCGACTTCCAGGCGTGTCCGCCCGCGCACCCACGCGCGGCGAGCCGCGCCCGCGCAACAGCTC  
CTCCAACCACTGTACGGGGTGGCCGAGGCCGGGGCGCCCGAGCCGATCCCTCCACCCTTACCGAGAT  
CTGCCTGCCAAGACTCGCGGGGGCGCCAGGGCGGGGACGCGCCTACTGAGGACGACTACTGGGGGGCT  
ACGGGGGTGAGGACCAGCGAGGGGAGCAGATGTGCCCGGCGCTGCCTGCCAGGCGCCCGGACTCCCG  
AGGCCCTGCGCTCTCGGCCGGCTCCCCAGCCCTCTGCTTTGCCTCCTGCTCCTGGTGCCCCACCACCTC

**ACGGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC217072 representing NM\_178570  
Red=Cloning site Green=Tags(s)

MLPGLRRLQLAPASACLLMLLLALPLAAPSCPMLCTCYSSPPTVSCQANNFSSVPLSLPPSTQRLFLQNN  
 LIRTLRPGTFGSNLLTLWLFNNLSTIYPGTFRHLQALEELDLDGDNRHLSLEPDTFQGLERLQSLHLYR  
 CQLSSLPGNIFRGLVSLQYLQENSLHLQDDLADLANLSHLFLHGNRLRLLTEHVFRGLGSLDRLLL  
 HGNRLQGVHRAAFRGLSRLTILYLFNNSLASLPGALADLPSLEFLRLNANPWACDCRARPLWAWFQRAR  
 VSSSDVTCATPPERQGRDLRALREADFQACPPAAPTRPGSRARGNSSNHLYGVAEAGAPPADPSTLYRD  
 LPAEDSRGRQGGDAPTEDDYWGGYGGEDQRGEQMCPGAACQAPPDSRGPALSAGLPSPLLCLLLLVPHHL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8017\\_f12.zip](https://cdn.origene.com/chromatograms/mk8017_f12.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_178570

**ORF Size:** 1260 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\\_178570.3](#)

**RefSeq Size:** 1263 bp

**RefSeq ORF:** 1263 bp

**Locus ID:** 349667

**UniProt ID:** [Q86UN3](#)

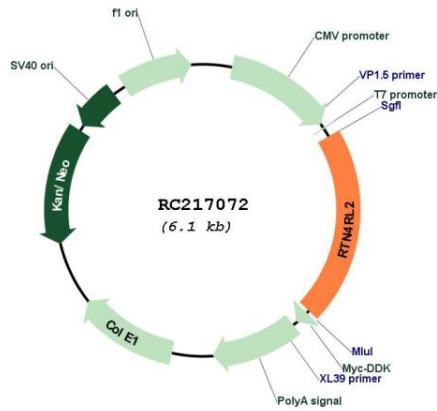
**Cytogenetics:** 11q12.1

**Protein Families:** Druggable Genome

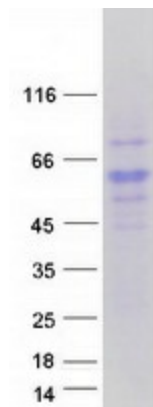
**MW:** 45.9 kDa

**Gene Summary:** Cell surface receptor that plays a functionally redundant role in the inhibition of neurite outgrowth mediated by MAG (By similarity). Plays a functionally redundant role in postnatal brain development. Contributes to normal axon migration across the brain midline and normal formation of the corpus callosum. Does not seem to play a significant role in regulating axon regeneration in the adult central nervous system. Protects motoneurons against apoptosis; protection against apoptosis is probably mediated by MAG (By similarity). Like other family members, plays a role in restricting the number dendritic spines and the number of synapses that are formed during brain development (PubMed:22325200). Signaling mediates activation of Rho and downstream reorganization of the actin cytoskeleton (PubMed:22325200).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC217072



Coomassie blue staining of purified RTN4RL2 protein (Cat# [TP317072]). The protein was produced from HEK293T cells transfected with RTN4RL2 cDNA clone (Cat# RC217072) using MegaTran 2.0 (Cat# [TT210002]).