

Product datasheet for **RC216415**

RTN4RL1 (NM_178568) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RTN4RL1 (NM_178568) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RTN4RL1
Synonyms:	NgR3; NGRH2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC216415 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTTCGCAAAGGGTGTGTGTGGAGTTGCTGCTGCTGTTGGTAGCTGCGGAGCTGCCCTGGGTGGT
 GCTGCCACGGGACTGTGTGTGCTACCCGGCGCCATGACGGTCAGCTGCCAGGCGACAACCTTTGAGC
 CATCCCGGAGGGCATCCCGTGGACAGCGAGCGGTCTTCTGCAGAACACCGCATCGGCCTCCTCCAG
 CCCGGCCACTTACGCCCCGCATGGTCACCCTGTGGATCTACTCGAACACATCACCTACATCCACCCCA
 GCACCTTCGAGGGCTTCTGTGCACCTGGAGGAGCTGGACCTCGGCGACAACCGGCAGCTGCGGACGCTGGC
 ACCCGAGACCTTCCAGGGCCTGGTGAAGCTTACGCCCTCTACCTCTACAAGTGTGGGCTCAGCGCCTTG
 CCGGCCGCGTCTTTGGCGGCTGCACAGCCTGCAGTACCTCTACCTGCAGGACAACCACATCGAGTACC
 TCCAGGACGACATCTTCTGTGGACCTGGTCAACCTCAGCCACCTGTTTCTCCACGGCAACAAGCTGTGGAG
 TCTGGGCCGGGCACCTCCGGGCTGGTGAACCTGGACCGTCTTTGCTGCACGAGAACCAGCTGCAG
 TGGGTCCACCACAAGGCATTCCACGACCTCCGACGGCTGACCACCTCTTCTCTTCAACAACAGCCTCT
 CGGAGCTGCAGGGTGAAGTGCCTGGCCCCCTGGGGCCCTGGAGTTCTCCGCTCAATGGCAACCCCTG
 GGACTGTGGTGTGCGCGCGCTCCCTGTGGGAATGGTGCAGAGGTTCCGGGGCTCCAGCTCCGCTGTC
 CCCTGTGTGTCCTGGCTGCGGCACGGCCAGGACCTGAAGTGTGAGGGCCGAGGACTTCCGGAAT
 GCACGGGACCAGCGTCCCGCACCAGATCAAGTCAACACGCTCACACCACCGACAGGGCCGCCGCAA
 GGAACACCACTACCCCCAGGCCACCAGGAGCAAGGGCCACCCGACGGCCCCCGGCCGACAGG
 AAGCCGGGAAGAAGTGCACCAACCCAGGAACCGCAATCAGATCTAAGGCGGGCCCGGAAACAGG
 CCCCAGCTGCCAGACTATGCCCCAGACTACCAGCACAAGTTCAGTTTTGACATCATGCCTACGGCCG
 GCCCAAGAGGAAGGCAAGTGTGCCCGCAGGACCCCATCCGTGCCCCAGCGGGGTGCAGCAGGCTCC
 TCGGCCAGTTCCTGGGGCCTCCCTCCTGCCTGGACTGGGCTGGCGTCACTCTCCGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC216415 protein sequence
 Red=Cloning site Green=Tags(s)

MLRKGCCVELLLLLVAAELPLGGGCPDRDCVYPAPMTVSCQAHNFAAIEGIPVDSERVFLQNNRIGLLQ
 PGHFSPAMVTLWIYSNNITYIHPSTFEGFVHLEELDLGDNRLRLAPETFQGLVKLHALYLYKCGLSAL
 PAGVFGGLHSLQYLQLDNHIEYLQDDIFVDLVNLSHLFLHGNKLSLGPFTFRGLVNLDRLLLHENLQ
 WVHHKAFHDLRRLTTLFLFNNSLSELQGECLAPLGALEFLRLNGNPWDCGCRARSLWEWLQRFGRSSAV
 PCVSPGLRHGQDLKLLRAEDFRNCTGPASPHQIKSHTLTTTDRARKEHHSHPHGPTRSKGGHPGPRPGR
 KPGKNCTNPRNRNQISKAGAGKQAPELPDYAPDYQHKFSFDIMPTARPKRKGKCARRTPIRAPSGVQQAS
 SASSLGASLLAWTLGLAVTLR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6472_b01.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_178568

ORF Size: 1323 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_178568.4](#)

RefSeq Size: 3183 bp

RefSeq ORF: 1326 bp

Locus ID: 146760

UniProt ID: [Q86UN2](#)

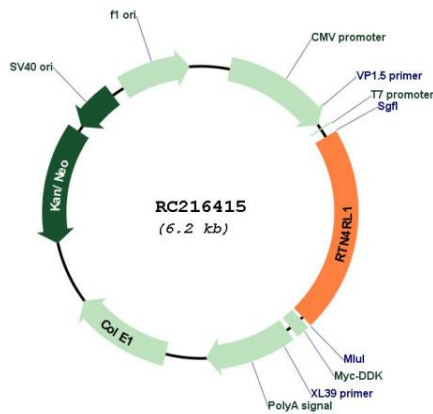
Cytogenetics: 17p13.3

Protein Families: Druggable Genome

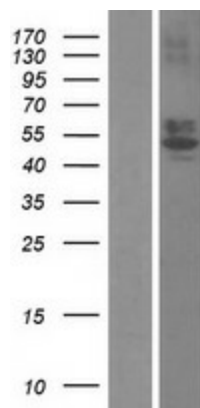
MW: 49.1 kDa

Gene Summary: Cell surface receptor. Plays a functionally redundant role in postnatal brain development and in regulating axon regeneration in the adult central nervous system. Contributes to normal axon migration across the brain midline and normal formation of the corpus callosum. Protects motoneurons against apoptosis; protection against apoptosis is probably mediated by MAG. Plays a role in inhibiting neurite outgrowth and axon regeneration via its binding to neuronal chondroitin sulfate proteoglycans. Binds heparin (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 RC216415



Western blot validation of overexpression lysate (Cat# [LY405871]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216415 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).