

## Product datasheet for RC213013

### RIM1 (RIMS1) (NM\_014989) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RIM1 (RIMS1) (NM_014989) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RIM1
Synonyms:	CORD7; RAB3IP2; RIM; RIM1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC213013 representing NM_014989 Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGCCCGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC  
GCC

ATGTCCTCGGCCGTGGGGCCCCGCGGTCTCGCCACCCACGGTGCCTCCCCCATGCAAGAGCTGCCCG  
ACCTGAGCCACCTGACCGAAGAGGAGAGAACATTATCATGGCAGTGATGGACCGGCAGAAGGAAGAGGA  
GGAAAAAGAAGAAGCCATGCTCAAGTGTGTTGTCAGGGACATGGCGAAGCCTGCTGCCTGCAAAACACCA  
AGAAATGCTGAAAACAGCCCCACCAACCTTCACCGAGATTGCATCAACAGTTTGAAGCTATAAGGAAC  
AAGTGAGAAAAATAGGGGAAGAAGCGCGCGGTTACCAGGGCGAGCACAAGACGATGCTCCGACTTGTGG  
AATCTGTCAAAAACAAAGTTTGTGCTGATGGGTGCGGTATCTCTGCTCCTATTGTGCGCACTAAGTTCTGT  
GCGCGCTGCGGAGGCCGCGTGTCTTACGGTCAAACAACGAGGACAAAGTGGTTATGTGGGTATGCAATT  
TATGTGCAAAAGCAACAAGAAATCTTAACCAATCTGGGCGATGGTTCTTTGGAAGTGGCCCTCAGCAGAC  
AAGTCAGGATGGAACCTGAGTGATACAGCTACAGGTGCTGGCTCTGAGGTACCAAGAGAAAAAGAAAGCA  
CGACTCCAAGAGCGATCGCGTCTCAGACACCCCTAAGCACAGCAGCTGCCTCCTCCAGGATGCTGCTC  
CTCCAGCGCACACCAGACAGGAGCAAAGGGGCTGAGCCCTCGCAGCAAGCCTTGGGGCCTGAACAGAA  
GCAGGCTTCATCCAGTCTAGAAGTGAACCTCCTAGAGAGAGAAAAGAACCCAGGGCTTCCGAGCAG  
AATGGCAAAGGAGCCCTGAAGAGCGAGCGGAAACGCGTGCCAAAGACCTCAGCGCAGCCCTGGAGGGGG  
CCGTGCAAGAACGGGAGCGCAAAGAAAGCGGGAAAGCCGAAGGCTTGAGAAAGGGCGATCACAGGATTA  
CCCAGACACGCCGAAAAACGGGATGAGGGCAAAGCGGCGGATGAGGAAAAGCAAAGAAAAGAGGAGGAT  
TATCAGACCAGGTACCGCAGCGACCCGAACCTAGCTCGGTACCCGGTGAACCCGCCCTGAGGAGCAGC  
AGATGCGCATGCACGCCGGGTGTCCCGCGCCAGGCACGAGCGGCCACAGCGACGTGGCGCTCCCGCG  
CACCGAGGCGGGCGCGGCTGCCGGAGGGCAAGGCCGCAAACGCGCGCCGGCGGCGCAGCCAGGGCTCG  
CCGCCGACTCGCCGCGGGCTTACTCGGCTGAGAGAACTGCGGAGACCAGGGCGCCGGCGCCAAGCAGC  
TAACGAACCACAGCCCGCGCGCCAGACATGGGCCGTTCCCGCAGAAGCCCCGGAGCTCAAAGCCCA  
GGAGCCCTCAGGAAGCAGAGCCGCTGGACCCAGCTCGGCGGTCTCATGCGGAAGGCCAAGCGCGAG



[View online »](#)

AAGGTGGAGACCATGCTGCGGAACGACTCTTTGAGCTCAGACCAGTCCGAGTCGGTGCGGCCGTCCTCCCGC  
 CCAAGCCGCACCCGGTCCAAGAGAGGCGGCAAGAAGCGGCAGATGTCGGTGAGCAGCTCTGAGGAGGAGGG  
 CGTGTGACGCCCCGAGTACACCAGCTGCGAGGACGTGGAGCTGGAGAGCGAGAGCGTCAGCGAGAAAAGGT  
 GATTTGGATTACTGGTTGGATCCTGCCACGTGGCAGCCGGGAGACATCACCTATTAGTTCGCATC  
 CTGTAACGTGGCAACCATCTAAAGAGGGGGACCGATTAATTGGACGTGTTATTCTTAACAAGAGAACAAC  
 CATGCCAAAAGACTCAGGTGCATTGCTGGGTCTGAAAGTTGTTGGAGGAAAAATGACTGACTTAGGACGA  
 CTTGGTGCCTTTCATCACCAAAAGTAAAGAAGGGTAGCCTAGCAGATGTAGTTGGACACCTAAGAGCAGGGG  
 ATGAAGTTCTAGAATGGAATGGTAAACCCCTGCCGGGAGCTACAAATGAAGAAGTTTACAACATTATTTT  
 AGAATCAAAATCAGAACCTCAAGTTGAAATATTGTTTCAAGGCCTATTGGTGACATTCCCCGGATTCTCT  
 GAGAGCTCCCACCCTCCACTGGAGTCCAGTTCAAGTTCCTTTGAATCTCAGAAGATGAAAAGGCCTTCCA  
 TTTCTGTATTTCTCCAACAAGTCTGGAGCTCTAAAAGATGCCCCACAAGTCTTACCAGGGCAACTTTC  
 TGTGAAGTTGGTATGATAAAGTGGGACACCAGCTGATTGTAATGTTCTGCAAGCAACAGATCTACCT  
 GCTAGAGTAGATGGACGTCCTCGAAATCCCTATGTAATAATGATTTTCTCCAGATAGAAGTGATAAAA  
 GTAAAAGGAGGACAAAACAGTAAAGAAAATACTAGAACCAAAATGGAATCAAACTTTTGTCTATTCACA  
 TGTACATCGTAGAGATTTTAGAGAACGAATGTTAGAAAATAACTGTGTGGGACCAACCAAGAGTGAAGAA  
 GAAGAAAGTGAATTTCTGGAGAGATCCTCATAGAATTGGAGACAGCGCTTTTAGATGATGAACCGCATT  
 GGTATAAACTTCAGACACATGATGAGTCTTCACTACCTCTGCCTCAGCCATCACCTTTTATGCAAGGGC  
 ACATATTCATGGAGAAAGCTCTAGCAAAAAGCTACAAAGATCTCAGCGAATCAGTGATAGTGACATCTCA  
 GATTATGAGGTTGATGATGGTATTGGCGTAGTTCCTCCAGTAGGCTATAGGTCTAGTGCTAGAGAAAAGTA  
 AATCTACAACATTAAGTGTCCAGAACAGCAAAGAACAACCTCATCACCGCTCACGTTTCACTATCTCTCA  
 TCGCGCAATGATCAGGGAAAGCCGCTTACGTTTACCAATGTCCATTACAGAGGAGTTTAGATGAA  
 ATTCATCCAACAAGAAGGTACGTTTCTCAACCAGACACCATGATGCCTCCCGAAGTCCAGTTGATCATA  
 GAACCAGAGATGTGGATAGTCAGTATTTATCAGAACAAGACAGTGAAGTCTTATGCTGCCAGGACAAA  
 ACGAGGACGAAGTGCAGAATGCCTACATACCAGACATCTTGTAGGCACTATAAAAACATTACCTCCC  
 AAGATGCCTTTATTACAGAGCAGTCTCACTGGAATATTTACAGCTCAATTCTGCCTGCACATACTAAGA  
 CCAATCAGTGACTAGACAGGACATTTCCCTTCATCATGAATGCTTAACTCAACAGTATTGAGATTTAC  
 TGATGAAATACTGGTTAGTGAATGCAGCCCTTCTTGACAGGGCTAGGAGTGCTAGTACCAACTGCTTG  
 AGACCAGATACTAGTTTGCATTACCAGAACGAGAAAAGGGTAGATGGTCCCCTCCCTAGATAGGAGAC  
 GACCTCTAGTCCAGGATTCAAATCCAGCATGCGTCTCCGGAGAATGACAGGCACTCCAGAAAGTCTGA  
 AAGATCTAGCATCAAAAACAGACTAGGAAAGGCACTGCCTCTGATGCAGAAAGGGTTCTCCAACATGT  
 CTTTCTAGAAGGGGACACGCAGCCCAAGAGCAACTGATCAGCCAGTATTAGGGGAAAACATCCTGCTC  
 GCTCAAGGTGAGTGCAGTACTAGTATCAGAACACTGTGTTCTATGCACCACCTTGCCCTGGAGGGTC  
 GGCACCCTTCTCCGCTTCTGACAAGAATGCACCGACAGAGAAGTCCAACAACATCTCCTCCAGCAGAC  
 ACATCGTTCAGCAGTCCGAGGGGAAGACAGCTCCCAAGTCCAGTGCAGTGCAGAAAGCGGCAGTATAGAACAAG  
 CAAGCTTAGTAGTGGAGGAGCGAACAAGACAGATGAAAATGAAAGTGCATCGATTTAAGCAGACAACAGG  
 GTCTGGTTCTAGTCAAGAAGTTCATCGCGAGCAATATTCCAAGTATAACATACATAAAGATCAGTACAGA  
 AGCTGTGATAACGTCTCTGCCAATCATCAGATAGTGTGTCAGTGATGTTTCCGCCATTTCCCGAACCA  
 GCAGTGCCTCACGCTCAGCAGCACAAGCTTTATGTGAGAGCAATCTGAGCGCCCAGGGGTAGAATCAG  
 TTCATTTACCCCAAAAATGCAAGGCAGACGGATGGGACTTCAGGAAGATCCATCATGAAGAGCACCAGT  
 GTCAGTGGAGAGATGTACACACTGGAGCATAATGACGGCAGCCAGTGCAGACACAGCTGTGGGTACAGTTG  
 GAGCAGGTGAAAAGAAACGGAGATCCAGCCTTAGTGCCAAAGTGGTTGCCATAGTGTCTCGAAGGAGTAG  
 AAGCACATCCCAGCTTAGTCAAACAGAGTGGGCCACAAAAAGTTAAAAAGTACCATCCAGAGAAGCACA  
 GAAACAGGCATGGCAGCTGAAATGAGAAAGATGGTAAGGCAGCCGAGCCGAGAGTCTACTGATGGCAGCA  
 TCAACAGTTACAGCTCTGAGGGCAATTTAATATTTCTGGAGTGCAGTGGGAGCTGACAGTCAATTCAG  
 TGATTTTCTTGATGGATTGGGACCAGCCAGCTTGTGGCCGCAAAACCTTGCCACCCCTGCAATGGGT  
 GATATACAAATAGGAATGGAGGACAAAAAGGGCAATTAGAAGTGAAGTCAATTAGAGCAGCAAGCCTCA  
 CAAAAAGCCTGGTTCCAATCTACACCTGCTCCATATGTCAAAGTATATCTTTGGAAAATGGGGCCTG  
 TATAGCCAAGAAGAAGACAAGAATTGCAGGAAAACCCCTTGATCCTTTGTATCAGCAGTCTCTGGTTTTT  
 GATGAAAGTCCACAGGTTAAAGTCTTTCAGGTGATTGTCTGGGGAGACTATGGCAGAATGGACCACAAAT  
 GCTTTATGGGTGTGGCTCAGATCTTGTGGGAAGAACTCGACCTGTCCAGCATGGTGATCGGATGGTACAA  
 ATTGTTCCACCGTCTCACTGGTGGATCCACACTCACTCCCCTCACCCGGCGGGCTTCCAGTCATCT  
 CTGAAAGTTCAACTGGGCTCCCTGTATTGATCA

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
TGGATTACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC213013 representing NM\_014989

Red=Cloning site Green=Tags(s)

MSSAVGPRGPRPPTVPPMQELPDLSHL TEEERNIIMAVMDRQKEEEEEKEEAMLCVVVRDMAKPAACKTP  
RNAENQPHQPSRRLHQQFESYKEQVRKIGEEARRYQGEHKDDAPTCGICHKTKFADGCGHLCSYCRKTKFC  
ARCGGRVSLRSNNEDKVMWVCNL CRKQQEILTKSGAWFFGSGPQQTSDGTLSDTATGAGSEVPREKKA  
RLQERSRSQTPLSTAAASSQDAAPPSAPPDRSKGAEPSQQALGPEQKQASSRSRSEPPREKKTPLGLSEQ  
NGKGALKSERKRVPKTSAQPVGAVEERERKERRESRRLKGRSQDYPTPEKRDEGKADEEKQRKEED  
YQTRYRSDPNLARYPVKPPPEEQMRMHARVSRARHERRHSDVALPRTEAGAALPEGKAGRAPAAARAS  
PPDSPRAYSAERTAETRAPGAKQLTNHSPAPRHGVPVPAEAPLKAQEPLRKQSRDPSSAVLMRKAKRE  
KVETMLRNDLSLSDQSESVRPSPPKPHRSKRGGKQMSVSSSEEEGVSTPEYTSCEDEVESESSEKQ  
DLDYWLDPATWHSRETSPISSHPVTWQPSKEGDRLIGRVILNKRTTMPKDSGALLGLKVVGKMTDLGR  
LGAFITKVKKGLADVVGHLAGDEVLEWNGKPLPGATNEEVYNIILESKSEPQVEIIVSRPIGDIPRIP  
ESSHPPLESSESSSFESQKMERPISVISPTSPGALKDAPQVLPQQLSVKLVYDKVGHQLIVNVLQATDLP  
ARVDGRPRNPYVKMYFLPDRSDKSKRRTKTVKKILEPKWNQTFVYSHVHRRDFRERMLEITVWDQPRVQE  
EESEFLGEILIELETALLDDEPHWYKLQTHDESSLPLPQPSPFMPRRHIHGESSKLLQRSQRISDSDIS  
DYEVDGIGVPPVGYRSSARESKSTTLTVPEQQRTTHHRSRSVSPHRGNDQGKPRSRLPNVPLQRSLE  
IHPTRRSRSPTRHHDASRSPVDHRTRDVSQYLSEQDSELLMLPRAKRGRSAECLHTTRHLVRHYKTLPP  
KMPLLQSSSHWNIYSSILPAHTKTKSVTRQDISLHHECFNSTVLRFTDEILVSELQPFDRARSASTNCL  
RPDTSLSHSPEERERGRWSPSLDRRRPPSPRIQIQHASPENDRHSRKSERSSIQKQTRKGTASDAERVLPTC  
LSRRGHAAPRADQPVIRGKHPARSRSSEHSSIRTLCSMHHLVPGGSAPPSPLLTRMHRQRSPTQSPPAD  
TSFSSRRGRQLPQVPVRSQSGSIEQASLVVEERTQMKMKVHRFKQTTGSGSSQELDREQYSKYNIHKDQYR  
SCDNVSAKSSSDSDVSAISRTSSASRLSSTFMSEQSERPRGRISSTFTPKMQGRRMGTSGRSIMKSTS  
VSGEMYTLEHNDGSQSDTAVGTGAGGKKRRSSLAKVVAIVSRRSRSTSQLSQTESGHKKLKSTIQRST  
ETGMAAEMRKMVRQPSRESTDGSINSYSSEGNLIFPGVRLGADSQFSDFLDGLGPAQLVGRQTLATPAMG  
DIQIGMEDKKGQLEVEVIRARSLTQKPGSKSTPAPYVKVYLLENGACIAKKKTRIAKKTLDPL YQQLVF  
DESPQGVQLQVIVWGDYGRMDHKCFMGVAQILLEELDLSSMVIWYKLFPPSSLVDP TLTPLTRRASQSS  
LESSTGPPCIRS

SGPTRRRLQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

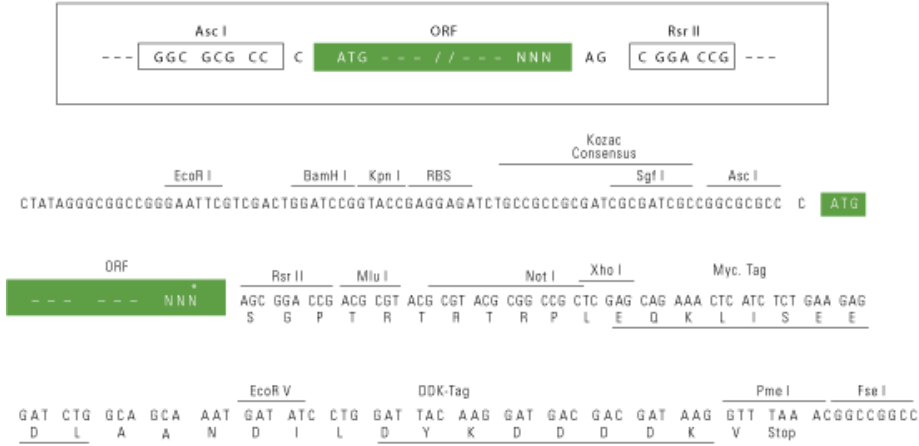
[https://cdn.origene.com/chromatograms/mk8024\\_e09.zip](https://cdn.origene.com/chromatograms/mk8024_e09.zip)

**Restriction Sites:**

Ascl-RsrII

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_014989

**ORF Size:** 5076 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\\_014989.5](#), [NP\\_055804.2](#)

**RefSeq Size:** 5079 bp

**RefSeq ORF:** 5079 bp

**Locus ID:** 22999

**UniProt ID:** [Q86UR5](#)

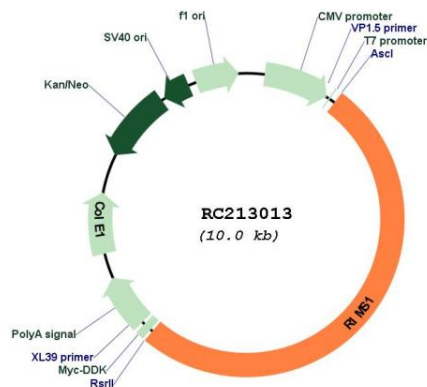
**Cytogenetics:** 6q13

**Domains:** C2, PDZ, RPH3A\_effector

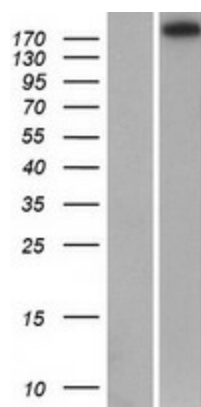
**MW:** 188.9 kDa

**Gene Summary:** The protein encoded by this gene is a RAS gene superfamily member that regulates synaptic vesicle exocytosis. This gene also plays a role in the regulation of voltage-gated calcium channels during neurotransmitter and insulin release. Mutations have suggested a role cognition and have been identified as the cause of cone-rod dystrophy type 7. Multiple transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Mar 2012]

### Product images:



Circular map for RC213013



Western blot validation of overexpression lysate (Cat# [LY414883]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213013 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).