

Product datasheet for **MG221642**

Rims1 (NM_053270) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rims1 (NM_053270) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Rims1
Synonyms:	C030033M19Rik; mKIAA0340; Rab3ip1; Rim; RIM1; RIM1a; RIM1alpha; Serg1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG221642 representing NM_053270 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCTCGGCCGTGGGGCCCCGAGGTCTCGCCACCCACGGTGCCTCCCCCTATGCAAGAACTGCCCCG
ACCTGAGCCACCTGACCGAGGAGGAGAGAACATTATCATGGCAGTGATGGACCGCAGAAGGAAGAGGA
GGAAAAAGAAGAGGCCATGCTCAAGTGTGTGTCAGGGACATGGCGAAGCCTGCTGCCTGCAAAACACCA
AGAAATGCTGAAAGCCAGCCCCATCAACCACCACTGAACATTTTCAGATGTGCTGTGTTCCAGAAAGC
CAAGCAGCGAAGAGGGAGGCCAGACAGAACTGGAGATTGCATCAACAGTTTGAAGCTACAAGGAACA
AGTGAGAAAAATCGGAGAGGAAGCCAGGCGTTACCGGGCGAGCACAAGATGATGCCCCGACGTGTGGA
ATCTGTATAAGACAAAGTTTGCTGATGGATGTGGCCATCTCTGCTCCTATTGTGCGACCAAGTTCTGTG
CACGCTGTGGAGGCCGAGTGTCTCTGCGATCGAACAATGAGGACAAAGTGGTTATGTGGGTATGCAATTT
ATGTGCAAGCAACAAGAGATATTAACGAAATCTGGAGCGTGGTTCTTCGGAAGTGGTCTCAGCAGCCC
AGTCAAGATGGGACTCTGAGTGACACGGCTACAGGTGCTGGATCTGAGGTGCAAGAGAAAAAGGAGTCC
GGCTCCAAGAGCGATCAAGGTCTCAGACGCCCTTGAAGTACAGCAGCTGTCTTTCCCAAGCACTGCTTC
CCATGGTGCACCACTGGACAGGAACAAAGGGGCGGAGCCCTCACAGCAAGCCTTGGGTCTGAACAGAAG
CAGGCATCAAGGTCAAGAAGTGAGCCACCAAGGAAAGGAAGGCTCCAGGGCTTTAGAGCAGAATG
GCAAGGGAGGCCAGAAGGTGAGCGCAAACGTGTCCCAAGTCTGTGGTGAACCCGGGGAAGGGACCGC
GGATGAACGCGGAGAGGAAGGAGAGGCGGAAACCCGAGGCTGGAGAAAGGGCGCTCTCAGGACTACCCG
GACCGGCTCGAGAAACGCGAGGATGGCAGGGTGGCTGAAGACGAAAAGCAGAGGAAGGAGGAGGAGGGCG
TGTCCACGCCGAGTACACGAGCTGCGAGGACGTGGAGCTGGAGAGCGAGAGCGTGAAGGAGAAAGGTGA
CTTGGACTACTGGTTGGATCCTGCCACGTGGCATAGCAGGAAACGTGCGCTATTAGTTCGCATCCTGTA
ACGTGGCAGCCATCTAAAGAGGGGACCGATTAATCGGCCGTGTTATTCTTAACAAAAGAACAACCATGC
CCAAAGAATCAGGTGCATTATTGGTCTCAAGGTGGTTGGAGAAAAATGACGGACTTAGGGCTCTTGG
TGCTTTCATACCAAAGTAAAGAAGGTAGCCTGGCAGATGTTGTCGGACACCTAAGAGCAGGGGATGAA



[View online »](#)

GTTCTAGAGTGGAAATGGTAAACCCCTGCCGGGAGCAACAAACGAAGAAGTTTACAACATTATTTTGAAT
CAAAATCAGAACCTCAAGTTGAAATTTGTTTCAAGGCCTATTGGTGACATCCCCAGGATCCCTGAGAG
TCCCCACCTCTCTGGAGTCCAGTTCAAGTTCCTTTGAATCTCAGAAGATGAAAGGCCTTCCATTTCT
GTTATTTCTCAAACAGCCCTGGAGCTCTGAAAGATGCCCCACAAGTCTTACCAGGGCAACTCTCAGTGA
AGCTGTGGTATGATAAAGTGGGGACCAGCTGATTGTAATGTTCTACAAGCAACAGATCTACCCCTAG
AGTAGATGGGCGTCCCAGAAATCCCTATGTAAAAATGTATTTCTCCAGATAGAAGCGACAAGAGTAAA
AGAAGAACCAAAACGGTAAAGAACTTCTAGACC AAAATGGAATCAAACATTTGTCTACTCACAGCTAC
ATCGTTCGAGATTTTCGAGAGCGAATGTTAGAAATTAAGTGTGGGACCAGCCAAGAGTACAGGACGAGGA
GAGTGAATTTCTAGGAGAGATCCTCATAGAATTGAAACAGCACTTTTAGATGATGAGCCCCATTGGTAT
AAACTGCAGACACATGATGAATCTTCACTACCTCTGCCTCAGCCATCACCGTTCATGCCAGGCGGCATA
TCCACGGAGAAAGCTCCAGCAAAAAGCTACAAAGATCTCAGCGAATCAGTGATAGTGACATCTCAGATTA
TGAGGTTGATGATGGTATTGGCGTAGTGCCTCCAGTGGGTTATAGAGCTAGTGCTAGAGAGAGTAAAGCC
ACCACGTTAACAGTGCCAGAGCAGCAAAGAACCACACATCACCGCTCACGTTCCGTGTCTCCTCATCGG
GCGATGATCAGGGAAGGCCTCGTTCACGTTTACCAAATGTGCCATTACAGAGGAGCTTAGATGAAATCCA
TCCAACACGAAGGTCACGTTCTCCAACCGACACCATGATGCCTCCCGAAGCCTGGCCGATCACAGATCA
CGACATGCCGAAAAGTCAATATTCGTTCAGAGCCAGACAGTGAAGTCTCTCATGCTGCCAGAGCAAAACGAG
GACGAAGTGCAGAATGCCTACACATGACCAGTGAAGTGCAGCCCTCTCTTGACAGGGCTAGGAGTGTAG
TACCAACTGCTTGAGACCAGATACTAGTTTGCATTACCAGAACGAGAAAGGGGTAGATGGTCCCCCTCC
CTAGCTAGGAGGCGACCTGCTAGCCCCAGGATTCAAATCCAGCATGCGTCTCCGGAGAATGACAGGCACT
CCAGAAAGTCTGAAAGATCTAGCATCCAAAACAGTCTAGGAAAGGCACAGCCTCTGATGCAGACAGGGT
TCTCCCACCATGCCTTTCTAGAAGGGGATACGCAATCCCAAGAGCAACCGATCAACCGGTCATTAGGGGA
AAGCATACCACTCGTCCCGGTCGAGCGAGCACTCTAGTATCAGAACCCTGTGTTCTATGCACCACCTTG
CCCCGGAGGGTTCAGCGCCGCTTCTCCGCTTCTGACAAGAACGCACCGACAAGGAAAGCCCAACAGT
ACCTCCAGCTGACACATCCTTTGGCAGTGCCCGCGGAAGACAGTCCACAGGTGCCGGTCCGAAGCGGC
AGTATAGAACAAGCGAGCTTAGTGTGGAGGAACGACGAGACAGATGAAATGAAGGTACACCGATTTA
AGCAGACAACAGGGTCTGGGTCTAGTCAAGAACTTGACCACGAGCAATACTCCAAGTACAACATACATAA
AGATCAGTACAGAAGCTGTGATAACCGCTCCGCCAAGTCATCAGATAGTGATGTCAGTGTGTGTCGCC
ATTTCCAGAGCCAGCAGCACCTCACGCCTCAGCAGCACAAGCTTTATGTCAGAGCAGTCTGAGCGCCCA
GGGGCAGGATCAGTTCATTTACCCCAAAATGCAAGGCAGACGGATGGGGACTTCAGGAAGAGCCATCAT
CAAGAGCACCAAGTGAAGTGGAGAGATATATACTGGAGCACAATGACGGCAGCCAGTCCGACACGGCC
GTGGGTACCGTTGGAGCTGGTGGAAAGAAGCGGAGGTCCAGCCTGAGTGCCAAAGTGGTAGCCATTGTGT
CTCGAAGAAGCAGAAGCAGATCAGACTCAGCCAGACAGAGTCCGGCCACAAGAAGTAAAAAGCACCAT
TCAGAGGAGTACGGAACGGGAATGGCGCTGAAATGCGGAAGATGGTGAGACAGCCAGCCGGGAGTCC
ACGGATGGCAGCATCAACAGTTATAGTCTAGAAGGAACTTAATATTTCTGGAGTTCGCGTGGGACCTG
ACAGTCAGTTCAGTGATTTCTTGATGGACTGGGGCCAGCCAGCTTGTCCGGCCGCAAAACCTAGCCAC
CCCAGCCATGGGCGATATCCAAATCGGGATGGAGGATAAGAAGGGTCAGTTGGAGGTTGAGGTTATCAGA
GCCCCGAGCCTTACAAAAAACCTGGCTCCAAATCTACACCTGCTCCCTATGTGAAAGTTTATCTTTTGG
AAAATGGAGCCTGATTTGCCAAAAAGAAGACAAGAATTGCACGGAAAACCTCTCGATCCCTTGTATCAGCA
GTCCCTGGTTTTTGTGAAAGTCCACAGGGTAAAGTCTTCAGGTGATTGTCTGGGGTACTATGGAAGA
ATGGACCACAAAATGCTTTATGGGTGTGGCTCAAATCTTGTGGAAGAATTGATCTGTCCAGCATGGTGA
TTGGATGATATAATTGTTCCCTCCATCCTCCCTGGTGGATCCCACACTACTCCCTGACCCGCGGGG
TTCCAATCATCACTGGAAGTTCGTCTGGGCCTCCCTGCATCCGGTCA

ACGGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG221642 representing NM_053270
 Red=Cloning site Green=Tags(s)

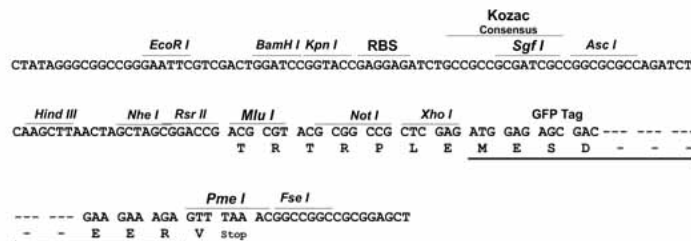
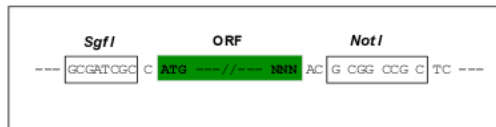
MSSAVGPRGPRPPTVPPPMQELPDL SHL TEEERNIIMAVMDRQKEEEEEKEEAMLCVVDRMAKPAACKTP
 RNAESQPHQPPLNIFRCVCVPRKPSSEEGPDRNWRLHQQFESYKEQVRKIGEEARRYQGEHKDDAPT
 ICHKTKFADGCGHLCSYCRKFCARCGGRVSLRSNNEDKVVMMWCNLCKRQOEILTKSGAWFFGSGPQQP
 SQDGTLSDTATGAGSEVPREKKARLQERSRSQTPLESTA AVSSQDTASHGAPLDRNKGAEP SQQALGPEQK
 QASRSRSEPPRRERKKAPGLSEQNGKGGQKSERKRVPKSVVQPGEGTADERERKERRETRRLEKGRSQDYP
 DRLEKREDGRVAEDEKQRKEEEGVSTPEYTSCEDEVESESSEKGDLDYWLDPATWHSRETSPISSHPV
 TWQPSKEGDRILGRVILNKRTTMPKESGALLGLKVVGKMTDLGRLGAFITKVKKGLADVGHLAGDE
 VLEWNGKPLPGATNEEVYNIILESKSEPQVEIIVSRPIGDIPIPESSHPPLESSSSSFESQKMERPSIS
 VISPTSPGALKDAPQVLPQLSVKLWYDKVGHQLIVNVLQATDLPPRVDGRPRNPYVKMYFLPDRSDKSK
 RRTKTVKLLLEPKWNQTFVYSHVHRRDFRERMLEITVWDQPRVQDEESEFLGEILIELETALLDDEPHWY
 KLQTHDESSLPLPQSPFMPRRHIHGESSKQLQRSQRISDSIDSYEVDGIGVPPVGYRASARESKA
 TTLTVPEQQRTHHRSRSVSPHRGDDQGRPRSRLPNVPLQRSLEIHPTRRSRSPTRHHDASRSLADHRS
 RHAESQYSSEPDSELLMLPRAKRGRSAECLHMTSELQPSLDRARSASTNCLRPDTSLSHSPEERERGWSPS
 LARRRPASPRIQIQHASPENDRHSRKSERSIQQSRKGTASDADRVLPPCLSRGYAIPRATDQPVI
 RGHHTTRSRSSEHSSIRTLCSMHHLAPGGSAPPSPLLTRTHRQGSPTQSPPADTSFGSRRGRQLPQVPVRS
 SIEQASLVVEERTRQMKMKVHRFKQTTGSGSSQELDHEQYSKYNHDKQYRSCDNASAKSSSDSDVSDVSA
 ISRASSTRLSSTSFMSERPRGRISSTFKMQGRRMGTSGRAIIKSTSVSGEITYLEHNDGSSQSDTA
 VGTVGAGGKRRSSLSAKVVAIVSRRSRSTSQLSQTESGHKKLSTIQRSTETGMAAEMRKMVRQPSRES
 TDGINSYSSEGNLIFPGVVRGPD SQFSDFLDGLGPAQLVGRQTLATPAMGDIQIGMEDKKGQLEVEVIR
 ARSLTQKPGSKSTPAPYVKVYLLLENGACIAKKKTRIAKTLDPL YQQLVFDESPQKVLQVIWGDYGR
 MDHKCFMGVAQILLEELDLSMVI GWYKLFPPSSSLVDPTLTPLTRRASQSSESSSGPPCIRS

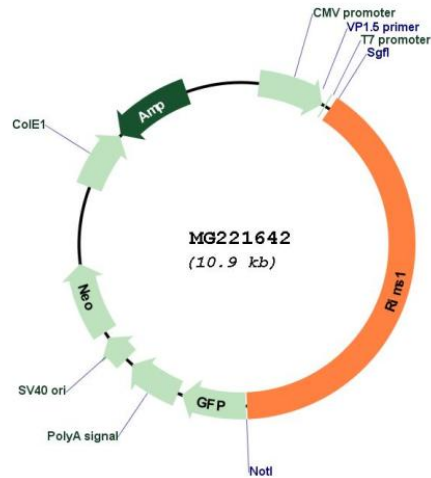
TRPLE - GFP Tag - V

Restriction Sites: SgfI-NotI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:


ACCN: NM_053270

ORF Size: 4389 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_053270.2](#)

RefSeq Size: 4392 bp

RefSeq ORF: 4392 bp

Locus ID: 116837

UniProt ID: [Q99NE5](#)

Cytogenetics: 1 A5

Gene Summary: Rab effector involved in exocytosis (PubMed:11797009). May act as scaffold protein that regulates neurotransmitter release at the active zone. Essential for maintaining normal probability of neurotransmitter release and for regulating release during short-term synaptic plasticity (PubMed:11797009). Plays a role in dendrite formation by melanocytes (By similarity).[UniProtKB/Swiss-Prot Function]