

Product datasheet for RC218325

RGP1 (NM_001080496) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RGP1 (NM_001080496) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RGP1
Synonyms:	KIAA0258
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218325 representing NM_001080496 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGATCGCC

ATGATTGAAGTGGTAGCAGAGCTCAGCCGGGTCCTGTATTTTGGCTGGGGAGGCGCTGGAGTGTGTAG
 TGACCGTCACCAACCCCTTCCGCCCACGGCCACTTCTGCATCCAGTGAGGCCCTGGCCTGGGCCAGTGC
 CCAAATCCACTGCCAGTTCATGCCAGTGAGAGTCGAGTAGCACTGCCTCCTCTGACTCTAGTCAGCCA
 GATGTCCAGCCCACAGCCAGACTGTCTTCTGCCACCCGAGGTGAGAGGGGCCAGTGTATCCTTTCTA
 CTCCACCGAAAATTCTATTCTGTGACCTGAGGCTTGATCCTGGAGAGTCCAAATCATACTCCTACAGTGA
 AGTGCTGCCCATAGAGGGACCACCTCCTTTCGGGGTCAGTCAGTCAAGTACGTCTACAACTGACCATT
 GGCTGCCAGCGTGTCAACTCCCCATCACTTTACTCAGAGTCCCTCTGAGGGTCTTGTGCTGACTGGCC
 TTCAGGATGTCCGGTTTCCCCAGGATGAGGCTGTAGCCCCATCCAGTCCATTCTTGGAGGAGGATGAAGG
 TGGGAAGAAAGATTATGGCTAGCTGAGCTGGCTGGGGAACGCCAATGGCTGCCACATCCTGCCGAGC
 CTCCATCTATAAATATCAGTGATGGCCGAGGGAAGTTGGGACGTTTGGCATCTTCAAATCTGTGTACA
 GACTTGGCGAGGACGTGGTGGGGACCTTAACTTAGGGGAAGGAACCGTAGCTTGTTCAGTTCCTCAGT
 CAGCTTACAGACCGAGGAGCGGTACAGCCTGAGTACCAGCGGCGACGTGGGCGAGGGGTGTCCCTCT
 GTGTACATGTGACTCAGCCCCGCCAGCAGGAATCCTGCCTACATACTAGAACAGCTTCTCCCTCC
 CAATCCCTCTCAGCTCCACCCAGGCTTCTGTACAGCCATTGTGTCCTTGAAGTGGAGATTGCATTTTGA
 ATTTGTAACGTCCCGAGAACCAGGATTGGTACTCTACCCCTGTGGAACAGCCGAACCTACCACCTGG
 ACAGGACCTGAGCAAGTACCTGTAGACCTTCAGCTGGGACCTGCCATCAAGGTGCTGCCTACTAGCC
 CCACCTGGCCTCATATGCTGCCCCAGGCCCCAGCACCAGCACCATAACCATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


[View online »](#)

Protein Sequence: >RC218325 representing NM_001080496
 Red=Cloning site Green=Tags(s)

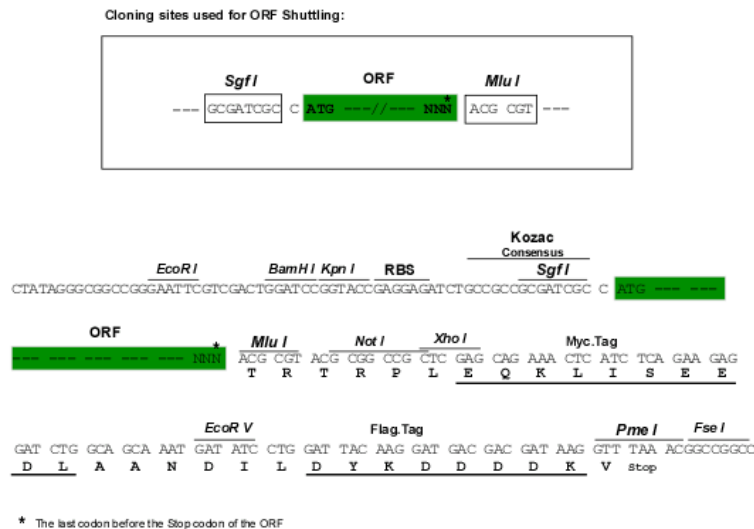
MIEVVAELSRGPVFLAGEALECVVTVTNPLPPTATSASSEALAWASAIHCQFHASESRVALPPDSSQP
 DVQPDSTVFLPHRGERGQCILSTPPKILFCDLRDPGESKSYSEVLPPIEGPPSFRGQSVKYVYKLT
 GCQRVNSPITLLRVPLRVLLTGLQDVRFPQDEAVAPSSPFLEEDEGGKDSWLAEAGERLMAATSCRS
 LHLYNISDGRGKVGTFGIFKSVYRLGEDVVGTLNLGEGTVACLQFSVSLQTEERVQPEYQRRRGAGGVPS
 VSHVTHARHQESCLHTTTRTSFSLPIPLSSTPGFCTAIVSLKWRLHFEFVTSREPLVLLPPVEQPEPTTW
 TGPEQVPVDTFSWDLPIKVLPTSPTLASAAGPSTSTITI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8021_e01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001080496

ORF Size: 1173 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001080496.3](#)

RefSeq Size: 1296 bp

RefSeq ORF: 1176 bp

Locus ID: 9827

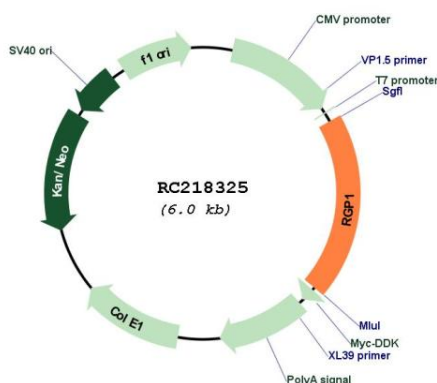
UniProt ID: [Q92546](#)

Cytogenetics: 9p13.3

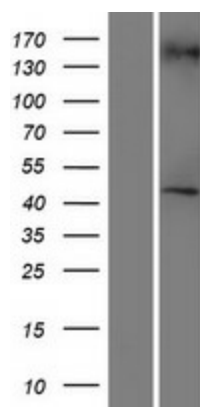
MW: 42.46 kDa

Gene Summary: The RIC1-RGP1 complex acts as a guanine nucleotide exchange factor (GEF), which activates RAB6A by exchanging bound GDP for free GTP and may thereby required for efficient fusion of endosome-derived vesicles with the Golgi compartment. The RIC1-RGP1 complex participates in the recycling of mannose-6-phosphate receptors.[UniProtKB/Swiss-Prot Function]

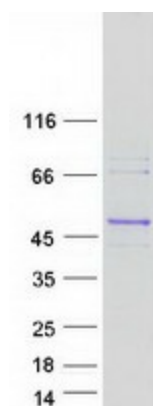
Product images:



Circular map for RC218325



Western blot validation of overexpression lysate (Cat# [LY421051]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218325 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RGP1 protein (Cat# [TP318325]). The protein was produced from HEK293T cells transfected with RGP1 cDNA clone (Cat# RC218325) using MegaTran 2.0 (Cat# [TT210002]).