

Product datasheet for **RC201860**

RRAGB (NM_006064) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RRAGB (NM_006064) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RRAGB
Synonyms:	bA465E19.1; RAGB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201860 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAAGAATCTGACTCTGAGAAAACGACGGAGAAAGAAATCTGGGCGCGAGAATGGATCCACCACTAG
 GGGAAACCGGAAGGATCGCTTGGGTGGTGCTACCAAATACAGCCATGAAGAAAAAGGTGCTGTTGATGGG
 TAAAGTGGGTCTGGTAAGACCAGCATGAGGTCTATTATCTTTGCAAATTATATTGCCAGAGACACACGT
 CGCCTTGGCGCAACAATTGATGTAGAATTCTCATGTTTCGATTTCTGGGAAACCTGGTATTGAACCTGT
 GGGATTGTGGTGGCAAGACACCTTCATGGAAATTATTTCACTAGCCAACGGGACAACATCTTCCGAAA
 TGTGGAGGTTCTGATTTATGTCTTTGATGTGGAGAGCCGGAAGTGGAAAAGGACATGCACTATTACCAA
 TCATGCCTGGAGGCCATTCTGCAGAATTCTCCAGATGCCAAAATATTTTGCTTGGTACACAAAATGGATC
 TGGTACAGGAGGATCAACGGGACCTGATTTTAAAGAGCGAGAAGAAGATTTGAGGCGTTTGTCTCGCCC
 ATTGGAATGTTCTTGTTCGGAACATCTATCTGGGATGAAACCTCTATAAGGCTTGGTCCAGCATAGTT
 TATCAGCTGATTCCCAATGTTTCAGCAGCTGAAATGAACCTAAGGAATTTGCTGAAATTATCGAAGCTG
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 TGCCCATAGATTTGAGAAAATAAGCAACATTATTAAGCAGTTCAAGCTGAGCTGCAGCAAGCTGGCTGCC
 TCTTTCCAGAGTATGGAAGTCAGGAACCTAACTTCGCTGCTTTTCATTGACATCTTTACATCCAACACTT
 ATGTGATGGTTGTGATGCTGATCCGTCCATTCTTCTGCAGCTACTCTGATCAACATCCGCAATGCCAG
 GAAACACTTTGAAAAGCTGGAAAGAGTGGATGGACCAAAGCAGTGTCTTCTCATGCGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence: >RC201860 protein sequence
 Red=Cloning site Green=Tags(s)

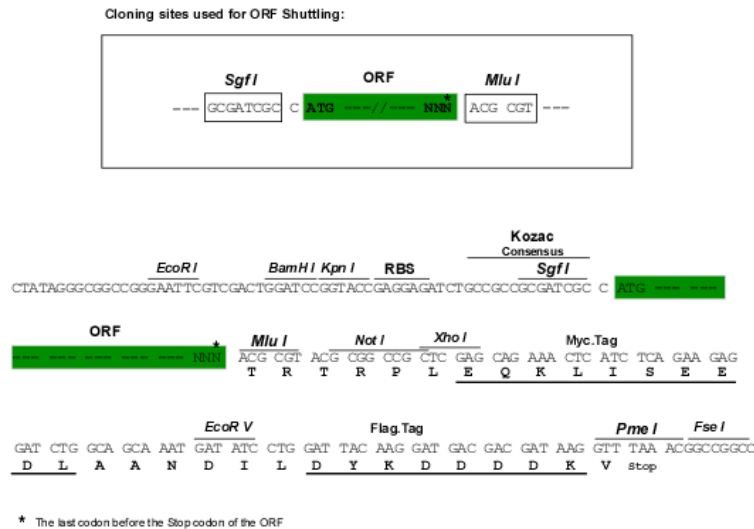
MEESDSEKTEKENLGPRMDPPLGEPEGSLGWLPNTAMKKKVLLMGKSGSGKTSMRSIIFANYIARDTR
 RLGATIDVEHSHVRFLGNLVLNLWDCGGQDTFMENYFTSQRDNIFRNVEVLIYVFDVESRELEKDMHYIQ
 SCLEAILQNSPDAKIFCLVHKMDLVQEDQRDLIFKEREEDLRRLSRPLECSCFRTSIWDETLYKAWSSIV
 YQLIPNVQQLEMLNRNFAEIIIEADEVLLFERATFLVISHYQCKEQDAHRFEKISNIQKFLSCSKLAA
 SFQSMVEVRNSNFAAFIDIFTSTNTYVMVMSDPSIPSAATLINIRNARKHFEKLERVDGPKQCCLLMR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6522_a07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006064

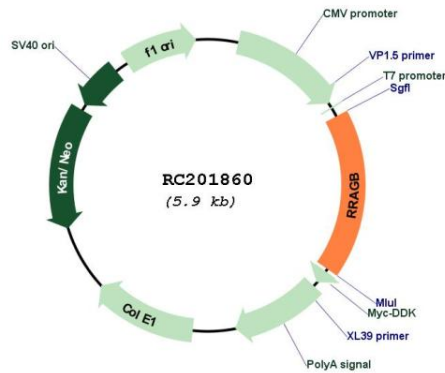
ORF Size: 1038 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

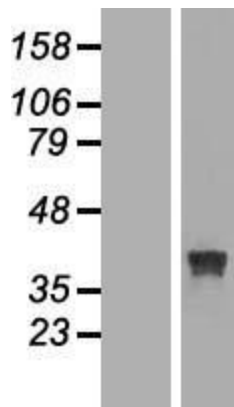
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<ol style="list-style-type: none"> 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:	<u>NM_006064.5</u>
RefSeq Size:	2143 bp
RefSeq ORF:	1041 bp
Locus ID:	10325
UniProt ID:	<u>Q5VZM2</u>
Cytogenetics:	Xp11.21
Domains:	Gtr1_RagA
MW:	40.2 kDa
Gene Summary:	Ras-homologous GTPases constitute a large family of signal transducers that alternate between an activated, GTP-binding state and an inactivated, GDP-binding state. These proteins represent cellular switches that are operated by GTP-exchange factors and factors that stimulate their intrinsic GTPase activity. All GTPases of the Ras superfamily have in common the presence of six conserved motifs involved in GTP/GDP binding, three of which are phosphate-/magnesium-binding sites (PM1-PM3) and three of which are guanine nucleotide-binding sites (G1-G3). Transcript variants encoding distinct isoforms have been identified. [provided by RefSeq, Jul 2008]

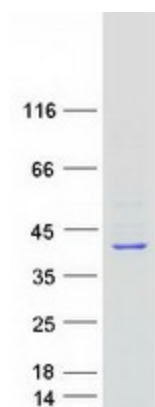
Product images:



Circular map for RC201860



Western blot validation of overexpression lysate (Cat# [LY416897]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201860 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RRAGB protein (Cat# [TP301860]). The protein was produced from HEK293T cells transfected with RRAGB cDNA clone (Cat# RC201860) using MegaTran 2.0 (Cat# [TT210002]).