

Product datasheet for **RG220614**

ARHGAP22 (NM_021226) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ARHGAP22 (NM_021226) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ARHGAP22
Synonyms:	RhoGAP2; RhoGap22
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RG220614 representing NM_021226
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCTGAGCCAAAGATCAGGCAGGCCAGGAGGCCCGCTCCAAAAGCCTAGTGATGGGGGAGCAGAGCC
GGAGCCCTGGGCGGATGCCGTGCCCTCACAGGCTGGGCCCGTGCTGAAGGCGGGCTGGCTGAAGAAGCA
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GCCCGGAGGACCCAGGGAAGCACCTCTTTGAGATCAGCCAGGTGGTCCCGGGGAGCGGGAGAAGGTGCC
GGCCAACCCGAGGCGCTCCTGCTCATGGCCAGCTCCCAGCGTGACATGGAGGACTGGGTGCAGGCCATC
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GCTCACC AAGGACGAGGGGGAGGGCACTCTGGAGTTGGCTAAACAAGTGAGCAACCTTCCTCAGGCAAT
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TAAAGTCTCGGAACTCTGAACGGGCGGGGAGGATGCGGAGAGGAGGAACCAGCTGTTGCAGAGGGAAT
GGAGGAGTTTTTTTCGACCCTAGGAAGCTTGACTGTTGGGGCAAAGGTGCCAGGGCCCCAAAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG220614 representing NM_021226
Red=Cloning site Green=Tags(s)

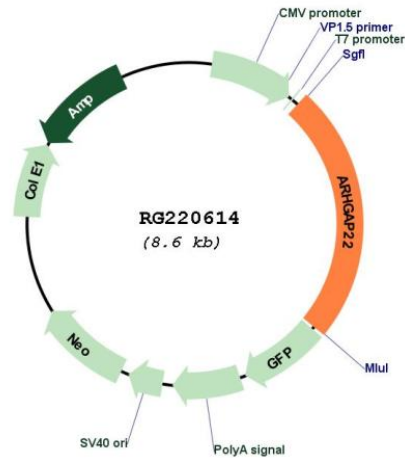
MLSPKIRQARRARSKSLVMGEQSRSPGRMPCPHRLGPVLKAGWLKKQRSIMKNWQQRWFVLRGDQLFYYK
 DKDEIKPQGFISLQGTQVTELP GPEDPGKHLFEISPGGAGEREKVPANPEALLMASSQRDMEDWVQAI
 RRVIWAPLGGGIFGQRL EETVHHERKYGPRLAPLLVEQCVD F IRERGLTEEGLFRMPGQANLVRDLQDSF
 DCGEKPLFDSTTDVHTVASLLKLYLRELPEPVVFPARYEDFLSCAQLLTKDEGEGTLELAKQVSNLPQAN
 YNLLRYICKFLDEVQAYSNVNKMVSQNLATVFGPNILRPQVEDPVTIMEGTSLVQHLMTVLIRKHSQLFT
 APVPEGPTSPRGLQCAVWGSEEVTRDSQGEPPGGLPAHRTSSLDGA AVAVLSRTAPTGPSRCSGPK
 KVQTLPSWKSSFRQPRSLSGSPKGGSSLEVPIISSGGNWMNGLSSLRGHRRASSGDRLKDSGSVQRLS
 TYDNVPAPGLVPGIPSVASMAWSGASSESSVGGSLSSCTACRASDSSARSSLHTDWALEPSPLPSSSED
 PKSLDLDHSMDEAGAGASNSEPSPTREHARRSEALQGLVTELRAELCRQRTEYERSVKRIEESAD
 LKRMSRLEEELDQEKKKYIMLEIKLRNSERAREDAERRNQLLQREMEEFFSTLGS LTVGAKGARAPK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_021226

ORF Size: 2094 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:

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_021226.4](#)

RefSeq Size: 2775 bp

RefSeq ORF: 2097 bp

Locus ID: 58504

UniProt ID: [Q7Z5H3](#)

Cytogenetics: 10q11.22-q11.23

Gene Summary: This gene encodes a member of the GTPase activating protein family which activates a GTPase belonging to the RAS superfamily of small GTP-binding proteins. The encoded protein is insulin-responsive, is dependent on the kinase Akt and requires the Akt-dependent 14-3-3 binding protein which binds sequentially to two serine residues. The result of these interactions is regulation of cell motility. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2011]