

Product datasheet for **SC304925**

ARHGAP22 (NM_021226) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ARHGAP22 (NM_021226) Human Untagged Clone
Tag:	Tag Free
Symbol:	ARHGAP22
Synonyms:	RhoGAP2; RhoGap22
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_021226, the custom clone sequence may differ by one or more nucleotides

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ATGCTGAGCCCAAAGATCAGGCAGGCCAGGAGGGCCCGCTCCAAAAGCCTAGTGATGGGGGAGCAGAGCC
GGAGCCCTGGGCGGATGCCGTGCCCTCACAGGCTGGGCCCGTGCTGAAGGCGGGCTGGCTGAAGAAGCA
GAGGAGCATCATGAAGAAGTGGCAGCAGCGCTGGTTTGTGCTGCGTGGGGATCAGCTTTTCTACTACAAG
GACAAAGATGAGATCAAGCCCCAGGGATTTATTTCTCTACAAGGACACAGGTGACTGAACCTCCTCCTG
GCCCGAGGACCCAGGAAGCACCTCTTTGAGATCAGCCAGGTGGTGCCGGGGAGCGGGAGAAGGTGCC
GGCCAACCCCGAGGCGCTCCTGCTCATGGCCAGCTCCCAGCGTGACATGGAGGACTGGGTGCAGGCCATC
CGCCGAGTCATCTGGGCCCGCTGGGCGGAGGGATCTTTGGGCAGCGCCTAGAGGAAACAGTCCACCACG
AGCGGAAGTATGGCCCCCGCTGGCGCCCTGCTGGTGGAGCAGTGTGTGGACTTCATCCGGGAGCGCGG
GCTCACTGAGGAGGGCTGTTCCGCATGCCAGGCCAGGCCAACCTGGTGAGGGACCTGCAGGATTCCTTC
GACTGTGGGGAGAAGCCACTGTTTGACAGCACAAACAGACGTGCACACGGTGGCCTCCTGCTGAAGCTGT
ACCTGCGGGAGCTCCCCGAGCCCGTGGTCCCCTTCGCCAGGTACGAGGACTTCCTCAGCTGCGCCAGCT
GCTCACCAAGGACGAGGGGGAGGGCACTCTGGAGTTGGCTAAACAAGTGACAACTTCCTCAGGCAAAAT
TACAACCTGCTCAGATACATCTGCAAGTTTCTGGATGAAGTTCAGGCATACTCAAATGTCAACAAGTGA
GTGTCCAGAATCTGGCAACCGTTTTTGGACCTAACATTCTGCGGCCACAGGTAGAGGACCCAGTAACCAT
CATGGAAGGCACTTCCTCGTCCAGCACCTGATGACCGTCTCATCCGCAAAACACAGCCAGCTCTTCACG
GCACCGGTCCCGGAAGGGCCACCTCCCCGCGCGGGGGCTGCAATGCGCAGTGGGGTGGGGCTCCGAGG
AGGTACCAGGGACAGCCAAGGAGAGCCCGGGCCCGGGCTGCCCGCGCACAGGACCTTTCCTGGA
CGGGCGGCGGTGGCGGTGCTCTCCAGAACAGCCCCACGGGGCCGGGGAGCCGGTGCAGCCCTGGGAAG
AAGGTGCAGACCCTGCCAGTTGGAAGTCTCCTTCCGGCAGCCGAGTCCCTATCGGGAAGCCCGAAGG
GGGGCGGCTCATCCCTGGAGGTGCCATCATCTCCTCCGGCGGGAAGTGGCTTATGAACGGGCTGTCCTC
CCTGCGCGGACACCGCCGGGCTCGTCGGGAGACCGGCTCAAGGACTCGGGCTCCGTGCAGAGACTCTCC
ACCTACGACAATGTGCCCGCGCCGGGCTGGTCCCCGGCATAACCCAGCGTGGCCAGTATGGCGTGGTCCG
GGGCTCGTCCAGCGAGTCGTGGTGGGGGCTCACTCAGCAGCTGCACGGCTGCCGCGCCAGCGACTC
GTCTGCCCGCAGTTCCTGCACACCGACTGGGCCCTGGAGCCCTCCCCGCTCCCCAGCAGCAGCGAGGAC
CCCAAGTCCCTGGACCTGGACCACAGCATGGACGAGGCGGGCGGGTGCAGCAACAGCGAGCCAGCG
AGCCGGACAGCCCAACCGGGAACACGCGCGCCGCTCCGAGGCCCTACAGGGCTGGTCACTGAGCTCAG
GGCCGAGCTGTGCCGCCAGCGGACTGAGTACGAGAGGAGTGTGAAAAGAATCGAAGAAGGGAGTGTGAC
CTGAGAAAACGAATGTCCCGTTAGAAGAAGAAGTGGACCAGGAAAAGAAAAATACATCATGCTGGAAA
TAAAGCTGCGGAACTCTGAACGGGCGCGGGAGGATGCGGAGAGGAGGAACCAGCTGTTGCAGAGGGAAAT
GGAGGAGTTTTTTTCGACCTTAGGAAGCTTGACTGTTGGGGCAAAAGGTGCCAGGGCCCCAAAGTAA
    
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Restriction Sites: Please inquire
ACCN: NM_021226

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_021226.2](#), [NP_067049.2](#)

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]
Transcript Variant: This variant (3) uses an alternate in-frame splice site in the 5' coding region compared to variant 1. The resulting protein (isoform 3) is shorter compared with isoform 1.