

Product datasheet for **RG227921**

ARHGAP32 (NM_001142685) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ARHGAP32 (NM_001142685) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: ARHGAP32
Synonyms: GC-GAP; GRIT; p200RhoGAP; p250GAP; PX-RICS; RICS
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG227921 representing NM_001142685
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGACTGAAAGTGAGAGTAGCACTTTAGGGGATGACAGTGTCTTCTGGTTGGAGTCTGAAGTTATAA
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CACTCCTGCTGTCGGTGTGCCATGTTATCAAGAGGTACACTGCTCGGGCCCTGACGAACTGACCTTA
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CCACCACACTACAGAACACTGGAGTTCCTGATGAGACACTTGTCTTCTAGCTGACTATTGTTCCATCA
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CCCATCCACAGAGCAGGACCTATGCTACAGCGTTGGGTCAAGGGGCCTTCTGCCCGCAGAGTTGCCTT
GCAGCATCCTGAAACACAGATCCATGCAGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG227921 representing NM_001142685
 Red=Cloning site Green=Tags(s)

METESESSTLGDDSVFWLESEVVIQVTDCEEEEREKFRKMKSSVHSEEDDFVPELHRNVHPRERPDWEE
 TLSAMARGADVPEIPGDLTLKTCGSTASMKVKHVKKLPFTKGHPKMAECAHFHYENVEFGSIQLSLSEE
 QNEVMKNGCESKELVYLQIACQKSWIVKRSYEDFRVLDKHLHLCIYDRRFSQLSELPRSDTLKDSPES
 VTQMLMAYLSRLSAIAGNKINCPALTWMEIDNKGHLLVHEESSINTPAVGAHVIKRYTARAPDELTL
 EVGDIVSVIDMPPKVLSTWWRGKHGFQVGLFPGHCVELINQKVPQSVTNSVPKPVSKKHGKLLITFLRTFM
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 EFDSEHPDLTKEPYVQDIHVSGLCKLYFRELPNLLTYQLYEKFSDAVSAATDEERLIKIHDIQQLP
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 LQGKFHTIIEFPLERKRPQNMKKSPVGSWRSFNLGKSSSVSKRKLQRNESEPSEMAMALKGGRAEGT
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 SQCQTPGSTASSEPVSPLEKLSPFFTLDLSPTEKSSKPSFTTEKVYAFSPKIGRKLKSPSMSISEP
 ISVTLPPRVSEVIGTVSNTTAQNASSSTWDCVVEERDATNRSPTQIVKMKNETVAQEAYESEVQPLDQV
 AAEEVELPGKEDQSVSSSQKAVASGQTQTGAVTHDPPQDVPVSSVSLIPPPPPKNNVARMALALALAES
 AQQASTQSLKRPQTSQAGYTNYGDIAVATTEDNLSYSYSAVALDKAYFQTRPAEQFHLQNNAPGNCDDHP
 LPETTATGDPHTSNTTESGEGHQQVDLTGNQPHQAYLSDGPEKARITSVPLDSEKSDHVSFPEDQSGKN
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 TVYSSFARPDVTTEPFGPDNCLHFNMTNCPQYRQSVPPHKNLEQHVVYGARSEPPASMGRLRYNTYVAP
 GRNASGHHSKPCSRVEYVSSLSSSVRNTCYPEDIPPYPTIRRVQSLHAPPSSMIRSVPIRTEVPPDDEP
 AYCPRPLQYKPYQSSQARSYHVTQLQPYFENGRVHYRYSYSSSSSSYSPDGALCDVDAYGTVQLRP
 LHRLPNRDFAFYNPRLQGKSLYSYAGLAPRPRANVTGYFSPNDHNVSMPAAADVKHITYTSDWLEMEKY
 RMQSIRRESRARQKVKGPVMSQYDNMTPAVQDDLGGIYVIHLRSKSDPGKTGLLSVAEGKESRHAAKAIS
 PEGEDRFYRRHPEAEMDRAHHHGGHGSTQPEKPSLPQKQSSLRSRKL PDMGCSLPEHRAHQEASHRQFCE
 SKNGPPYPQAGQLDYGSKGIPDTSEPVSYHNSGVKYAASGQESLRLNHKEVRLSKEMERPWRQPSAPE
 KHSRDCYKEEHLTQSIVPPPKPERSHSLKLHHTQNVERDPSVLQYQPHGKRQSSVTVVSQYDNLEDYH
 SLPQHQRGVFGGGMGTYYPPGFPHPQSRTYATALGQGAFLPAELSLQHPETQIHAE

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

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_001142685.2](#)

RefSeq Size: 10111 bp

RefSeq ORF: 6264 bp

Locus ID: 9743

UniProt ID: [A7KAX9](#)

Cytogenetics: 11q24.3

Protein Families: Druggable Genome

Gene Summary: RICS is a neuron-associated GTPase-activating protein that may regulate dendritic spine morphology and strength by modulating Rho GTPase (see RHOA; MIM 165390) activity (Okabe et al., 2003 [PubMed 12531901]).[supplied by OMIM, Mar 2008]