

Product datasheet for **MC221447**

Arhgap17 (NM_001122641) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arhgap17 (NM_001122641) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Arhgap17
Synonyms:	5730403H17Rik; Nadrin; Nadrin2; Rich1; Wbp15
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC221447 representing NM_001122641
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAAGAAGCAATTCAACCCGATGAAGCAGCTGGCCAATCAGACTGTCCGAGAGCTGAGAAGACCGAAG
 TCCTCAGTGAAGATCTGCTACAGATTGAACGTCGCCTGGACACTGTGCGTTCAATGTGCCACCATTCA
 TAAGCGTTTGATAGCCTGCTTCCAAGGTCAGCATGGCACTGATGCCGAGAGGAGACATAAAAAGTTCT
 CTGACAGCTCTTGCCAGAACATGCAGGAGGCTTCAGCCCAGCTGGAAGAGTCTCTCTTGGGGAAGATGC
 TGGAGACCTGTGGGGACGCTGAGAACAGCTGGCTCTTGAACCTCACAAATGAAGTCTTTGTGGAGAA
 GGAGATCATGGACCCTCTACGGCATAGCAGAGGTGGAGATTCCAATATCCAGAAGCAAAGGAAGCAG
 CTTGCTAGATTGGTGTGGACTGGGATTAGTCAGAGCGAGATGGAACCAAGCACACAAGTCTTCAGGAA
 CCAACTTTCAGGGGCTTCCATCCAAAATAGATACCCTAAAGGAAGAGATGGATGAAGCTGGGAATAAAGT
 TGAACAGTGCAAGGATCAACTTGCAGCAGACATGTACAACCTCATGGCCAAGAAGGGGAGTATGGCAAG
 TTCTTCGTGACGTTATTAGAAGCCCAAGCAGATTACCATAGAAAAGCATTAGCAGTCTTAGAAAAGGCC
 TTCCCGAAATGCGCGCCCATCAAGATAAGTGGGCAGAGAAGCCAGCCTTCGGCACACCTCTGGAGGAACA
 CCTGAAGAGGAGTGGGCGTGAGATCGCCCTGCCTATTGAGGCCTGTGTCATGTTGTTGCTGGAGACTGGC
 ATGAAAGAGGAGGGCCTTTTTCGGATTGGAGCTGGAGCCTCCAAGTTGAAGAAGCTGAAAGCTGCTCTCG
 ACTGCTCCACATCGCATCTGGATGAATTCTATTCTGATCCCCATGCTGTCGCAGGTGCTTTAAAGTCTTA
 TCTGCGGGAGTTGCTGAGCCCTTAATGACTTTGACTCTGTATGAAGAATGGACACAAGTTGCAAGTGTG
 CAGGATCAAGACAAAAAATTCAATATTTATGGACAACATGTGAGAAGTTGCCGCCAAAAATTTTGTTA
 ACTTTAGGTATTTAATCAAGTTCTTGCAAAGCTTGCCAGACCAAGTAAATAAAATGAACTCTAG
 CAACATAGCCATTGTCTGGGCCCTAACCTCCTGTGGGCCAAACAAGAAGGAACGCTGGCTGAAATAGCG
 GCTGCCACATCGGTCCAGTGGTTGCAAGTATTGAGCCATCATCCAGCATGCAGATTGGTTCTTCCTG
 GAGAGGTAGAATCAATGTATCAGAAGCATTGTGCCACTTGCTACCCGAATTCTAATCACTCATCCCA
 TACTGAAATGACTCTGACTCGGGGACTCTGGAGAGGAAGCGACCTGCCAGCATGGCAGTATGGAAGGG
 GACTTGGTGAAGAAGGAGAGTCTCCAAAACCCAAAGACTCCGTGTGTCAGCTGTCCTGCAGCAGGAA
 GGAACAGCAACCAGATGACCACGGTCCCAAACCCAGGCTCAGACAGGTGGCAACTCCCATCAGCTCTCAGT
 AAGCACACCTCACAGTGCAGCCGGTCCCAGCCGCACACTCTGCGTGGGCTGTGAAGAAACCTGCCCCC
 GCACCCCCAAACCAGGAAACCTACCTCCTGGCCACCCTGGAGGACAGAGCTCTCCTGGCACAGGCACAT
 CCCCAAAGCCAAGCGCCCGAAGCCATCACCGCCTCAGCAGCAGCAGCAGCAACAACAGCAGCAACA
 ACAGCAGCAGCAGCAGACCCAGGCATGCGCCGCTGCTCCAGCAGCCTGCCTCCCATCCAGGCACCCAGC
 CACCCACCACACAGCCCCCACACAGCCTCGGTTGGGTGAACAGGGACCAGAGCCAGGCCCCACGCCAC
 CTCAAACCCACACACCTAGCACCCACCCCTGGCCAAAGCAGAATCCATCGAAAGTGAGACCACACA
 GCTGCACGGAACCCTCCCAAGACCACGGCCAGTGCCTAAGCCCGCAACCGGCTAGCGTGCACCCACC
 CCACATCCACCTGGCACCCACACGGTGGATGGTGGCCTTACATCCTCAGTGGCCACAGCCTCCAGAATCG
 TCACTGACACCAATTCTAGGGTTTCTGAATCACTTCGCAGCATCTTCTGAAATACATTCAGACTTGGC
 AAGCAAAGAAGTGCCTGGCCACATCTGCTGGACATAGACAATGACACAGAAAGTACTGCATT**GTGA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul
ACCN: NM_001122641
Insert Size: 2307 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](#)

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_001122641.1](#), [NP_001116113.1](#)

RefSeq Size: 3269 bp

RefSeq ORF: 2307 bp

Locus ID: 70497

UniProt ID: [Q3UIA2](#)

Cytogenetics: 7 F3

Gene Summary: Rho GTPase-activating protein involved in the maintenance of tight junction by regulating the activity of CDC42, thereby playing a central role in apical polarity of epithelial cells. Specifically acts as a GTPase activator for the CDC42 GTPase by converting it to an inactive GDP-bound state. The complex formed with AMOT acts by regulating the uptake of polarity proteins at tight junctions, possibly by deciding whether tight junction transmembrane proteins are recycled back to the plasma membrane or sent elsewhere. Participates in the Ca(2+)-dependent regulation of exocytosis, possibly by catalyzing GTPase activity of Rho family proteins and by inducing the reorganization of the cortical actin filaments. Acts as a GTPase activator in vitro for RAC1 (By similarity).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (3) lacks an exon in the 3' coding region compared to variant 1. The resulting protein (isoform c) is shorter but has the same N- and C-termini compared to isoform a.