

Product datasheet for **MR210303**

Arhgap17 (NM_001122643) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arhgap17 (NM_001122643) Mouse Tagged ORF Clone
Tag:	Myc-DDK
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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ORF Nucleotide
Sequence:

>MR210303 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGAAGCAATTCAACCCGATGAAGCAGCTGGCCAATCAGACTGTCCGAGAGCTGAGAAGACCGAAG
TCCTCAGTGAAGATCTGCTACAGATTGAACGTCGCCTGGACACTGTGCGTTCAATGTGCCACCATTCA
TAAGCGTTTGATAGCCTGCTTCCAAGGTCAGCATGGCACTGATGCCGAGAGGAGACATAAAAAGTTCT
CTGACAGCTCTTGCCAGAACATGCAGGAGGCTTCAGCCCAGCTGGAAGAGTCTCTCTTGGGGAAGATGC
TGGAGACCTGTGGGGACGCTGAGAACAGCTGGCTCTTGAACCTCACAAATGAAGTCTTTGTGGAGAA
GGAGATCATGGACCCTCTACGGCATAGCAGAGGTGGAGATTCCAATATCCAGAAGCAAAGGAAGCAG
CTTGCTAGGTTGGTGTGGACTGGGATTAGTCAGAGCGAGATGGAACCAAGCACACAAGTCTTCAGGAA
CCAACCTTCAGGGGCTTCATCCAAAATAGATACCCTAAAGGAAGAGATGGATGAAGCTGGGAATAAAGT
TGAACAGTGCAAGGATCAACTTGCAGCAGACATGTACAACCTCATGGCCAAGAAGGGGAGTATGGCAAG
TTCTTCGTGACGTTATTAGAAGCCCAAGCAGATTACCATAGAAAAGCATTAGCAGTCTTAGAAAAGGCC
TTCCCGAAATGCGCGCCCATCAAGATAAGTGGGCAGAGAAGCCAGCCTTCGGCACACCTCTGGAGGAACA
CCTGAAGAGGAGTGGGCGTGAGATCGCCCTCCCTATTGAGGCCTGTGTCATGTTGTTGCTGGAGACTGGC
ATGAAAGAGGAGGGCCTTTTTCGGATTGGAGCTGGAGCCTCCAAGTTGAAGAAGCTGAAAGCTGCTCTCG
ACTGCTCCACATCGCATCTGGATGAATTCTATTCTGATCCCCATGCTGTCGCAGGTGCTTTAAAGTCTTA
TCTGCGGGAGTTGCTGAGCCCTAATGACTTTTCACTTTATGAAGAATGGACACAAGTTGCAAGTGTG
CAGGATCAAGACAAAAAAGCTTCAATATTTATGGACAACATGTCAGAAGTTGCCGCCAAAAATTTTGTTA
ACTTTAGGTATTTAATCAAGTTCCTTGCAAAGCTTGCCAGACCAAGTACGTTAATAAAATGACTCCTG
CAACATAGCCATTGTCTGGGCCCTAACCTCCTGTGGGCCAAACAAGAAGGAACGCTGGCTGAAATAGCA
GCTGCCACATCGGTCCAGTGGTTGCGGTGATTGAGCCATCATCCAGCATGCAGATTGGTTCTTCCTG
GAGAGGTAGAATTCAATGTATCAGAAGCATTGTGCCACTTGCTACCCCGAATTCTAATCACTCATCCCA
TACTGAAATGACTCTGACTCGGGGACTCTGGAGAGGAAGCGACCTGCCAGCATGGCAGTGTGGAAGGG
GACTTGGTGAAGAAGGAGAGTCTCCAAAACCCAAAGACTCCGTGTGTCAGCTGTCCCTGCAGCAGGAA
GGAACAGCAACCAGATGACCACGGTCCCAAACCCAGGCTCAGACAGGTGGCAACTCCCATCAGCTCTCAGT
AAGCACACCTCACAGTGCAGCCGGTCCCAGCCGCACACTCTGCGTGGGCTGTGAAGAAACCTGCCCCC
GCACCCCCAAACCAGGAAACCTACCTCCTGGCCACCCTGGAGGACAGAGCTCTCCTGGCACAGGCACAT
CCCCAAAGCCAAGCGCCCGAAGCCCATACCGCCTCAGCAGCAGCAACAACAGCAGCAACAACAGCAGCA
GCAGCAGACCCAGGCATGCGCCGCTGCTCCAGCAGCCTGCCTCCATCCAGGCACCCAGCCACCCACCA
CCACAGCCCCCACACAGCCTCGGTTGGGTGAACAGGGACCAGAGCCAGGCCACGCCACCTCAAACCC
CCACACCCTAGCACCCACCCCTGGCCAAGCAGAATCCATCGCAAAGTGAAGCCACACAGCTGCACGG
AACCTCCCAAGACCACGGCCAGTGCCCAAGCCCGCAACCGGCTAGCGTGCCACCACCCCCACATCCA
CCTGGCACCCACAGGTGGATGGTGGCCTTACATCCTCAGTGCCACAGCCTCCAGAATCGTCACTGATG
TA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR210303 protein sequence
Red=Cloning site Green=Tags(s)

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MKKQFNRMKQLANQTVGRAEKTEVLSDLLQIERRLDTVRSMCHSHKRLIACFQGGHGTDAERRHKKLP
LTALAQNMQEASQLEESLLGKMLETCGDAENQLALELSQHEVFVEKEIMDPLYGIAEVEIPNIQQRKQ
LARLVLDWDSVRARWNQAHKSSGTFNQGLPSKIDTLKEEMDEAGNKVEQCKDQLAADMYNFMAKEGEYK
FFVTLLLEAQADYHRKALAVLEKALPEMRAHQDKWAEKPAFGTPLEEHLKRSGREIALPIEACVMLLLETG
MKEEGLFRIGAGASKLKKLKAALDCSTSHLDEFYSDPHAVAGALKSYLRELPEPLMTFSLYEWTQVASV
QDQDKKLQYLWTTCCQKLPPQNFVNFYRLIKFLAKLAQTSVNMKTPSNIAIVLGNLLWAKQEGTLAEIA
AATSVHVAVIEPIIQHADWFFPGEVEFNVSEAFVPLATPNSNHSSTGNDSDSGTLERKPASMAVMEG
DLVKKESPPKPKDSVSAAPVPAAGRNSNQMTTVPNQAQTGGNSHQLSVSTPHSAAGSPHTLRRAVKPPAP
APPKPGNLPPGHPGGQSSPGTGTSPKPSARSPPPPQQQQQQQQQQQQTPGMRRCSSLPPIQAPSHPP
PQPPTQPRLEGEQPEPGTPPPQTPTPPSTPPLAKQNPSSQSETTLHGTLPRPRPVKPRNRPSVPPPPHP
PGTHTVDGGLTSSVPTASRIVTDV
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001122643

ORF Size: 2175 bp

OTI Disclaimer: 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 Size: 3318 bp

RefSeq ORF: 2184 bp

Locus ID: 70497

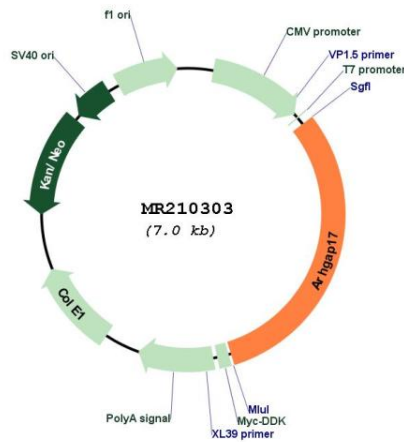
UniProt ID: [Q3UIA2](#)

Cytogenetics: 7 F3

MW: 79.4 kDa

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]

Product images:



Circular map for MR210303