

Product datasheet for **MR216395**

Arhgap17 (NM_001122642) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arhgap17 (NM_001122642) 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:

>MR216395 representing NM_001122642
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAAGAAGCAATTCAACCCGATGAAGCAGCTGGCCAATCAGACTGTCCGAGAGCTGAGAAGACCGAAG
 TCCTCAGTGAAGATCTGCTACAGATTGAACGTCGCCTGGACACTGTGCGTTCAATGTGCCACCATTACACA
 TAAGCGTTTTGATAGCCTGCTTCCAAGGTCAGCATGGCACTGATGCCGAGAGGAGACATAAAAAGTTCTCT
 CTGACAGCTCTTGCCAGAACATGCAGGAGGCTTCAGCCCAGCTGGAAGAGTCTCTCTTGGGGAAGATGC
 TGGAGACCTGTGGGGACGCTGAGAACAGCTGGCTCTTGAACCTCACAAACATGAAGTCTTTGTGGAGAA
 GGAGATCATGGACCCTCTACGGCATAGCAGAGGTGGAGATTCCAATATCCAGAAGCAAAGGAAGCAG
 CTTGCTAGATTGGTGTGGACTGGGATTAGTCAGAGCGAGATGGAACCAAGCACACAAGTCTTCAGGAA
 CCAACTTTCAGGGGCTTCCATCCAAAATAGATACCCTAAAGGAAGAGATGGATGAAGCTGGGAATAAAGT
 TGAACAGTGAAGGATCAACTTGCAGCAGACATGTACAACCTCATGGCCAAGAAGGGGAGTATGGCAAG
 TTCTTCGTGACGTTATTAGAAGCCCAAGCAGATTACCATAGAAAAGCATTAGCAGTCTTAGAAAAGGCC
 TTCCCGAAATGCGCGCCCATCAAGATAAGTGGGCAGAGAAGCCAGCCTTCGGCACACCTCTGGAGGAACA
 CCTGAAGAGGAGTGGGCGTGAGATCGCCCTGCCTATTGAGGCCTGTGTCATGTTGTTGCTGGAGACTGGC
 ATGAAAGAGGAGGGCCTTTTTCGGATTGGAGCTGGAGCCTCCAAGTTGAAGAAGCTGAAAGCTGCTCTCG
 ACTGCTCCACATCGCATCTGGATGAATTCTATTCTGATCCCCATGCTGTGCGCAGGTGCTTTAAAGTCTTA
 TCTGCGGGAGTTGCTGAGCCCTAATGACTTTTCACTGTATGAAGAATGGACACAAGTTGCAAGTGTG
 CAGGATCAAGACAAAAAATCAATATTTATGGACAACATGTGAGAAGTTGCCGCCAAAAATTTTGTTA
 ACTTTAGGTATTTAATCAAGTTCTTGCAAAGCTTGCCAGACCACTGACGTTAATAAAATGACTCCTTAG
 CAACATAGCCATTGTCTGGGCCCTAACCTCCTGTGGGCCAAACAAGAAGGAACGCTGGCTGAAATAGCG
 GCTGCCACATCGGTCCACGTGGTTGCAAGTATTGAGCCATCATCCAGCATGCAGATTGGTTCTTCCCTG
 GAGAGGTAGAATTCAATGTATCAGAAGCATTGTGCCACTTGCTACCCCGAATTCTAATCACTCATCCCA
 TACTGAAATGACTCTGACTCGGGGACTCTGGAGAGGAAGCGACCTGCCAGCATGGCAGTGTGGAAGGG
 GACTTGGTGAAGAAGGAGAGTCTCCAAAACCCAAAGACTCCGTGTGTCAGCTGTCCCTGCAGCAGGAA
 GGAACAGCAACCAGATGACCACGGTCCCAAACCCAGGCTCAGACAGGTGGCAACTCCCATCAGCTCTCAGT
 AAGCACACCTCACAGTGCAGCCGGTCCCAGCCCGCACACTCTGCGTGGGCTGTGAAGAAACCTGCCCCC
 GCACCCCCCAAACCCAGGAAACCTACCTCCTGGCCACCCTGGAGGACAGAGCTCTCCTGGCACAGGCACAT
 CCCCAAAGCCAAAGCGCCCGAAGCCATCACCGCCTCAGCAGCAGCAGCAGCAACAACAGCAGCAACA
 ACAGCAGCAGCAGCAGACCCAGGCATGCGCCGCTGCTCCAGCAGCCTGCCTCCCATCCAGGCACCCAGC
 CACCCACCACACAGCCCCCACACAGCCTCGGTTGGGTGAACAGGGACCAGAGCCAGGCCCCACGCCAC
 CTCAAACCCACACACCTAGCACCCACCCCTGGCCAAAGCAGAATCCATCGAAAGTGAGACCACACA
 GCTGCACGGAACCCTCCAAAGACCACGGCCAGTGCCAAAGCCCGCAACCGGCCCTAGCGTGCCACCACCC
 CCACATCCACCTGGCACCCACACGGTGGATGGTGGCCTTACATCCTCAGTGCCACAGCCTCCAGAATCG
 TCACTGATGCCCTTCCCGGTGCCCTCACAGGTGGGAAGGTTCCAGAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR216395 representing NM_001122642
Red=Cloning site Green=Tags(s)

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MKKQFNRMKQLANQTVGRAEKTEVLSDLLQIERRLDTVRSMCHSHKRLIACFQGQHGTDERRHKKLP
LTALAQNMQEASQLEESLLGKMLETCGDAENQLALELSQHEVFVEKEIMDPLYGIAEVEIPNIQQRKQ
LARLVLDWDSVRARWNQAHKSSGTNFQGLPSKIDTLKEEMDEAGNKVEQCKDQLAADMYNFMAKEGEYK
FFVTLLEAQADYHRKALAVLEKALPEMRAHQDKWAEKPAFGTPLEEHLKRSGREIALPIEACVMLLLETG
MKEEGLFRIGAGASKLKKLKAALDCSTSHLDEFYSDPHAVAGALKSYLRELPEPLMTFSLYEWTQVASV
QDQDKKLQYLWTTQCQLPPQNFVNFRLIKFLAKLAQTSVNMKTPSNIAIVLGNLLWAKQEGTLAEIA
AATSVHVAVIEPIIQHADWFFPGEVEFNVSEAFVPLATPNSNHSSTGNDSDSGTLERKPASMAVMEG
DLVKKESPPKPKDSVSAAPVPAAGRNSNQMTTPVNPQAQTGGNSHQLSVSTPHSAAGSPHTLRRAVKPPAP
APPKPGNLPFGHPGGQSSPGTGTSPKPSARSPSPPPQQQQQQQQQQQQQQTPGMRRCSSLPPIQAPS
HPPPQPPTQPRLGEQPEPGPTPPQTPPSTPPLAKQNPSSQSETTLHGTLPRPRPVKPRNRSPVPP
PHPPGHTVDGGLTSSVPTASRIVTDALPGALTGGEGFQN
    
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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_001122642

ORF Size: 2220 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: [NM_001122642.1](#), [NP_001116114.1](#)

RefSeq Size: 3317 bp

RefSeq ORF: 2223 bp

Locus ID: 70497

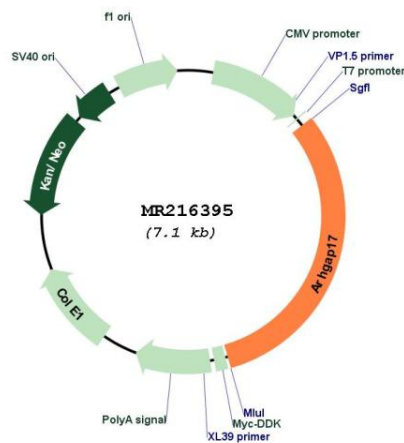
UniProt ID: [Q3UIA2](#)

Cytogenetics: 7 F3

MW: 81.5 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 MR216395