

Product datasheet for RN217647

Arhgap35 (NM_001271132) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arhgap35 (NM_001271132) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Arhgap35
Synonyms:	Grif1; p190RhoGAP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>RN217647 representing NM_001271132 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATGATGGCAAGAAAGCAAGATGTCCGAATCCCCACCTACAACATCAGTGTGGTGGGATTGTCCGGCA
CTGAGAAGGAGAAAGGCCAGTGCAGCATTGGGAAGTCTTGTCTATGTAACCGCTTTGTGCCCAAGTGC
TGATGAGTTTACCTGGACCACACTTCTGTCCTCAGCACCAGTGACTTTGGTGGCGGGTGGTCAATAAT
GACCATTTTCTGACTGGGAGAAAGTTAGCCGCTCCCTGGAGGACTGTGTGGAATGTAAGATGCACATTG
TGGAGCAGACTGAGTTTATTGACGATCAGACTTTTCAACCTCATCGAAGCAGGCACTGCAGCCCTACAT
CAAGAGAGCCGCAGCCACCAAGCTTGCTTCAGCTGAAAAACTCATGTATTTTGCAGTACAGGAGTGGG
CTGGAGCAAGACTTTGAGCAGAAACAGATGCCAGATGGGAAGCTGCTGGTTGACGGTTTCTTCTGGGCA
TCGATGTTAGCAGGGGCATGAACAGGAACCTTCGATGACCAGCTCAAGTTTGTCTCCAATCTCTACAATCA
GCTTGCAAAAACAAAAAGCCATAGTAATAGTCTGACCAAGTGTGATGAGGGTGTGAGCGGTACATT
AGAGATGCACATACTTTTGCCTTAAAGCAAAAAGAACCTCCAGGTTGTAGAGACCTCTGCAAGGTCCAATG
TGAATGTGGACTTGGCTTTCAGCACCTTAGTGAACCTCATTGATAAGAGTCGAGGGAAGACGAAAATCAT
CCCTTACTTTGAAGCTCTCAAGCAGCAGAGTCAGCAGATAGCTACAGCAAAGGACAAGTATGAGTGGTTG
GTGAGCCGATTGTGAAAAGTCACAATGAGAAGTGGCTGAGTGCAGCCGAAAGATGCAGGCTCCCTG
AGTACCAGGACTATGTCTATCTGGAAGGACACAGAAAGCCAAGAAGCTTCTCCTGCAGCATTACCCG
CCTCAAGCATGAGCATATTGAGCGCCGGAGAAAGCTGTACCTGGCAGCCCTGCCATTGGCTTTTGAAGCC
CTCATACCTAATCTAGATGAAGTAGACCACCTGAGCTGCATTAAGCAAAAAGCTGTTAGAGACTAAGC
CAGAGTTCTTAAAGTGGTTTGTGACTTGAAGAGACCCATGGGATGAAACCAGCCACATTGACAACAT
GGAAAAATGAGCGGATTCCCTTTGACTTGTGATACTGTCCCTGCTGAGCAGTTGTATGAGACCCACTTG
GAGAAGCTGAGGAATGAGAGGAAGAGAGCTGAGATGCGAAGGGCTTTCAAAGAAAACCTGGAGACCTCTC
CTTTCATAACTCCTGGAAAACCTTGGGAAGAAGCTCGTAGTTTTATTATGAAGACTTCTACCAGTG
GCTGGAAGAATCTGTGTACATGGACATCTATGGCAAGCACAAAAGCAGATTATAGACCGGGCAAAGGAA



[View online »](#)

GAGTTC AAGAGTTGCTTTGGAGTATTCAGAATTGTTTTATGAGCTGGAGCTGGATGCTAAACCCAGTA
 AGGAAAAGATGGGTGTTATCCAGGATGTTCTGGGTGAAGAGCAACGATTTAAAGCATTGCAGAACTCCA
 AGCAGAGCGTGATGCCCTCATTCTGAAGCACATTCATTTTGTGTACCACCAACAAGGAGACATGCCCA
 AGCTGTCCAGCTTGCCTAGATGCTAAGATTGAACATTTGATCAGTTCTCGCTTTATCCGACCATCTGATA
 GGAATCAGAAGAACTCTTTGCTGACCCCAATATTGATAGGATCAATTTGGTTATTTAGGCAAAGATGG
 CCTTGCCCGAGAGTTAGCCAATGAAATTCGAGCTCTTTGTACAAATGATGACAAGTATGTAATAGATGGT
 AAAATGATAGCTTTCTCTGAGGCCAATAGAGGGGAATGTTCCGCTTCCCTGTGAACCTTTCCAGACAC
 CAACCTTCCAACCCCATGGCTGTCTCGCTTTACAATTCAAAGGAGTCGCTGTCTATGTGGTGGAGAG
 TATAGAGAAGAGCAGAGAATCTACACTGGGCAGCGGGATAATCACTTAGTCCACCTCCCCTTGACTTTA
 ATTTTAGTTAACAGAGAGGGGACACAAGTGGAGAGACTCTGCACAGCTTAATACAGCAAGGCCAGCAGA
 TTGCTAGCAAACCTCAGTGTGTCTTTCTGATCCTGCGTCTGCTGGCATTGGTTATGGACGCAACATTAA
 CGAGAAGCAGATCAGTCAAGTCTGAAGGGACTCCTGGACTCTAAGCGCAACTTAAACCTGGTTAGTTCT
 ACTGCTAGTATCAAAGATTTGGCTGATGTGGACCTTGAATTGTCATGTGTCTCATGTGTGGTATCCTT
 TTAGTGACAGTACATTCTCTCCTGTCTGCAGTCCCAAATGTAATCTTCCCCTGTGGGAGCAG
 CAACTCTGTTTTACTTGAACCTCAATTGGAGTACACAAGAAGCGCATTGAGCTGTCTGTTCTTTCATAC
 CATTCTCATTAGCATCCGAAAGAGCCGGTGGTTTCATGGGTACATTGTTTTTTTATTACGCCAAACGTA
 AGGCCTCCTGGCAATGTACGTGCCTTCTTTGTGAAGTGCAGGATATTATCCCATCCAGCTTGTCCG
 ACTCACTGATGGCGCTATAGATGTCTGGACAATGACTTAAGTCGAGAGCAGCTAACAGAGGGAGAGGAA
 ATTGACACAAGAAATGATGGGAGATTCACAAGCATCCCTTGTAGCCAGCCCAAGCATAAACTCGAGCTCT
 TCCATCCCTTTTTTAAAGATGTGGTGGAGAAAAAGAACATAATCGAGGCCACACACATGTACGATAATGT
 GGCTGAGGCCGTCAGCACCCTGAGGAGGTATCAACTCCCCAGGGCTGGGTCAACCCCTGCAATTCA
 AACTTACAGGACTCAGAAGAAGATGTGGAGCTCCATCGTACCACCTTTTTCGGGAAGATGCGACATTGC
 CCTCCCTGTCCAAGATCATTCCAAGTCTCAATGGAGCTGGAGGGAAACGACGGGCTGTCTTTCATAAT
 GAGCAACTTTGAGAGTAACTGAACAACAAGTACCTCCACCAGTCAAACCAAAGCCTCCTGTGCATTTT
 GAGATCACAAGATCTTTCTTACTTAGACCAAGGTATCGGGAGGGACAGAGGAAGTCTATGTCTTCTA
 GCCCTGGATGCCTCAGGATGGATTTGATCCTTCTGACTACGCAGAGCCCATGGATGCTGTGGTCAAGCC
 AAGGAATGAGGAAGAAAACATACTCAGTGCCCCACGACAGCACCAGGGCAAGATCATTACCATTGCG
 AACATCAACAAAGCCAGTCCAATGGCAGTGGCAATGGTCTGACAGTGAGATGGACACAAGCTCTTAG
 AGCGAGGCCGCAAAGTATCTGACAGTGAAGCCTGTGCTGTACAGGACGAGATGCACCCGCTGGGGCG
 GTTTGCTAGTTACCGCACCAGCTTCAAGTGGGAGTGTGATGAGCTGGGACCCATCCGAAAGAAAGAG
 GAGGACCAGGCATCCCAAGTTATAAAGGGGACAATGCTGTCTTCTTATGAAACAGATGAGGACCCCA
 GGAGGAGGAATACCTTTCGAAGTCTAAGGAGGAACACCAAGAAACCAAAGCCCAAACCCCGACCATCCAT
 CACAAAGGCAACCTGGGAGAGTAACTATTTGGGGTGCCTTTAACAAACAGTGGTACTCCAGAGAAGCCG
 ATACCCATTTTCAATTGAAAGATGCATTGAGTACATTGAAGCCACAGGACTAAGCAGAGAAGGCATCTACC
 GGGTCAGCGGAAACAAGTCAAGAAATGAAAGTTTGCAAAGACAGTTTGTCAAGATCACAATCTGGACCT
 GGCAGAGAAGACTTCACTGTGAACACTGTGGCAGGGGCCATGAAGAGTTTTTCTCGGAGCTACCAGAC
 CCCCTGGTACCATACAGCATGCAGATTGACTTGGTGGAAAGCTCACAAGATCAACGACAGGGAGCAGAAGC
 TGCATGCTCTGAAGGAAGTGTGAAGAAGTCCCTAAGGAGAACCATGAAGTCTTCAAATATGTCATCTC
 CCACCTGAACAGAGTCAAGCACAACAACAAGTGAATCTTATGACCAGTGAGAACCCTGTCCATCTGCTTC
 TGGCCCAAGTTGATGCGGCTGACTTCAAGCAGCATGGACGCATCACAGCCACTCGATCCTACCAGACCA
 TCATCGAGCTCTTCAAGCAGTGCCTTCTTCTTCTACAACCGCCGATCAGTGAGCCACCGGGGGC
 TGCGCCTGGCTCCCCTCAGCCATGGCACCCTGTCCCCTTCTCACCTCTACACCTGCTACCAGTCAAG
 CCATCACCTCCCAGTCACTCTCCAACCCCTCAGTCCCAATGCAGCCATTGCTCTCCTCAGCTCC
 AAGCCGAACACACGCTGTGA

ACCGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001271132
Insert Size: 4500 bp

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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:	<ol style="list-style-type: none">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:	<u>NM_001271132.1, NP_001258061.1</u>
RefSeq Size:	8364 bp
RefSeq ORF:	4500 bp
Locus ID:	306400
UniProt ID:	<u>P81128</u>
Cytogenetics:	1q21
Gene Summary:	<p>Rho GTPase-activating protein (GAP). Binds several acidic phospholipids which inhibits the Rho GAP activity to promote the Rac GAP activity (PubMed:9852136, PubMed:20439493). This binding is inhibited by phosphorylation by PRKCA (By similarity). Involved in cell differentiation as well as cell adhesion and migration, plays an important role in retinal tissue morphogenesis, neural tube fusion, midline fusion of the cerebral hemispheres and mammary gland branching morphogenesis (PubMed:9852136, PubMed:20439493). Transduces signals from p21-ras to the nucleus, acting via the ras GTPase-activating protein (GAP) (By similarity). Transduces SRC-dependent signals from cell-surface adhesion molecules, such as laminin, to promote neurite outgrowth. Regulates axon outgrowth, guidance and fasciculation (By similarity). Modulates Rho GTPase-dependent F-actin polymerization, organization and assembly, is involved in polarized cell migration and in the positive regulation of ciliogenesis and cilia elongation (By similarity). During mammary gland development, is required in both the epithelial and stromal compartments for ductal outgrowth (By similarity). Represses transcription of the glucocorticoid receptor by binding to the cis-acting regulatory sequence 5'-GAGAAAAGAACTGGAGAACTC-3'; this function is however unclear and would need additional experimental evidences (By similarity).</p> <p>[UniProtKB/Swiss-Prot Function]</p>