

## Product datasheet for MR217352

### Arhgap6 (NM\_009707) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Arhgap6 (NM_009707) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Arhgap6
Synonyms:	A1504284; RhoGAPX-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR217352 representing NM_009707 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCCGCGCAGAGCCTGCTGCACAGTGTCTTCTCCTGCTCCTCGCCCGCTCGGGCGGCACGGCCTCGG  
CCAAGGGATTCTCCAAAAGGAAGCTGCGCCAGACGCGCAGCCTGGACCCAGCTCTGATCGGTGGTGCGG  
GAGCGAGATGGGCGCCGAGGGCGGCTGCGGGCTCCACAGTAAGCCGCCTCCATTCTCCACAGCTCTTA  
GCAGAGGGTCTCGTTCCCGCTTAGCTTCTTCTCCCGGAGTCAGCACCTTCGGGCTACCCGGTTCCAGA  
CTCCGAGACCTCTGTGCTCGTCTTTTTCCACCAAGTACCCCGCAAGAAAAGTCGCCTTCTGGCAGCTT  
CCACTTTGACTACGAGGTCCCACTGAGTCGCAGTGGTCTCAAGAAGAGCATGGCCTGGGACTTGCCTTCT  
GTCTGGCCGGTCCGGTCCGCTAGTAGCCGAGTCCCGCAAGCATCCTCAGTTCCTCCGGGGAGGCC  
CCAATGGCATCTTCTTCTCCTAGGAGATGGCTCCAGCAGAGGAAGTCCAGCCTCCACCTAACAGTCCG  
CAGTACCCTTACGTCGTGTGGAGGTCCGAGGGTACTTACCTGGAACAGCATGTCTGGTCGTAGCGTG  
CGCCTGAGGTCACTCCCATCCAGAGCCTCTCAGAGCTGGAGCGGGCAGCACTGCAGGAAGTGGCTTTT  
ATCAGTTGCAGCAGGACTGTGACCTGGGCTGTGAGTACCCATCCCAAGATGGACAAAAGAGAAAAGAA  
ATCTTTGAGAAAAGAACTGGATTCACTAGGGAAGGAAAAGAACAAAGACAAAGAATTCATCCACAGGCA  
TTTGAATGCCCTTATCCCAAGTCATTGCTAATGACCGGCATATAAACTGAAGCAAGACTTGCAGAGGG  
AGGAGCAGAAGGATGCATCATCGGATTTGTGCTTCCCTCCTCCATTTGGGAATAAAAAACAAAACAA  
AGAACTCTCAAGCAGTAACCTCATCTCAGCTCAACCTCAGAAAACACCAATGAGTCTACATCACCGAAT  
ACTCCAGAACCAGCTCCTCGGGCCAGGAGAAGGGCGCCATGTCCGTGGATTCCATCACTGATCTGGATG  
ACAACCAGTCTCGACTCCTAGAAGCTTTACAACCTCCTTGCTGCTGAGGCTCAGAGTAAAAAAGAAAA  
GGCCAGAGATAAGAAGCTGAGTCTGAATCTATTTACAGGCAGGTCCCGAGGCTGGTGGACAGCTGCTGT  
CAACATCTGAAAAACATGGCCTCCAGACAGTGGGGATATTCGAGTTGGAAGCTCAAAGAAGAGAGTAA  
GACAATTCGCTGAAGAATTTGACCGTGGGGTTGATGTCTGTCTGGAAGAGGAGCATAGTGTTCACGATGT  
GGCAGCCTTGTTAAAGGAGTTCCTTAGAGACATGCCTGACCCCTTCTCACAAGGGAGCTATACACTGCA



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TTTATCAACACTCTCCTGTTGGAGCCTGAGGAACAACTGGGCACCTTGCAACTCCTCATTTACCTTCTAC  
 CTCCTGCAACTGCGACACCCTCCACCGCTCCTACAGTTCCTCTCCATTGTGGCCAGGCATGCTGATGA  
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 GGACCAACCTGCTCCACAAGCAGAAGTCATCAGACAAAGAATATTCTGTTTCAGAGCTCAGCCAGAGCTG  
 AGGAGAGCACAGCCATCATAGCTGTGGTACAGAAGATGATTGAAAATTATGAAGCCTTGTTCATGGTTCC  
 CCCAGATCTCCAGAATGAAGTCTGATCAGCCTTCTAGAGACAGATCCAGATGTTGTGGACTACTTGCTC  
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 GGCATTCATCTACAGATTCCAACAAAGCCTCAGTGGAGACATCTCCCTTATGACAACAACTCCCCAGT  
 ATTGTCTGAGCGCTCCCTGCTGGCTATGCAAGAGGACAGGGCCCGGGGGGCTCGGAGAAGCTTTATAAA  
 GTGCCAGAGCAGTATACACTGGTGGGCCACTTGTTCATCGCAAAGTCAAAGTCAAGAGAAAAGTTCTCCTG  
 GACCAAGGCTTGAAAAGAAATGTCAGAGGAGCCTTTCAATATCTGGGAACTTGGCATTCAACATTAAA  
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 AGGCCTTGTCTTTCTCAAGGAAACCTTTCCCTGAAGTGGCCTCGGTGTCAAGGGAGCCGACAGGGC  
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 TCCGGTGTACGTGTCTGCAGCACTCCCACATCCAGGACGGCAGCAGGGGGACCAGGCGGCTGCAGCC  
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 TCCTTACCCGGGGTCAAGGAAAGCCTGCCACAACCTCTGCCAGCTGCCACTAGAGCCTCCCTGTGGAGG  
 CTCCAGAGGCATGAAGAAGTTGAGAAACAGCTGTGGAAGGAGGCCAGCAGGCCTCAGGGGAGCATCAGA  
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 AGCCAGCTGGCTCGACTGGCAGCGAGAGCGGTGGCAGATCTGGGAGCTTCTATCAACTGATAACCCGAC  
 GCCCTCCCGAAACCCTAGTA

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAGGTTTAA

**Protein Sequence:**

>MR217352 representing NM\_009707  
 Red=Cloning site Green=Tags(s)

MSAQSLLHSVFSCSSPASGGTASAKGFSKRKLRQTRSLDPALIGCGSEMGAEGGLRGSTVSRSLHSPQLL  
 AEGLGSRLASSPRSQHLRATRFQTPRPLCSSFSTPSTPQEKSPSGSFHFDYEVPLSRSGLKSMAWDLPS  
 VLAGSGSASSRSPASILSSSGGPNIGFSSPRRWLQQRKFQPPNSRSHPYVWVRSEGDFTWNSMGRSV  
 RLRSVPIQSLSELERARLQEVAFYQLQQDCDLGCQITIPKDGQKRKSLRKKLDSLKKEKNKDKDEFIPQA  
 FGMPLSQVIANDRAYKQDLQREEQKDASSDFVSSLLPFGNKKQNKELSSSNSSLSTSETPNESTSPN  
 TPEPAPRARRRGAMSVDSITDLDDNQSRLLLEALQLSLPAEAQSKKEKARDKLSLNPIYRQVPRLDVSCC  
 QHLEKHGLQTVGIFRVGSSKKRVRQLREEFDRGVDVCLLEEHVHDVAALLKEFLRDMPPDLLTRELTYA  
 FINTLLLEPEEQGLTLQLLIYLLPPCNCIDLHRLQLFLSIVARHADDNVSKDGEVTVGNKMTSLNLATIF  
 GPNLLHKQKSSDKEYSVQSSARAEESTAI IAVVQKMIENYEALFMVPPDLQNEVLISLLETDPDVVDYLL  
 RRKASQSSSPDILQTEVSFSGMGRHSSTDSNKASSGDISPYDNNSPVLSERLLAMQEDRARGGSEKLYK  
 VPEQYTLVGHLSPPKSKSRESSPGPRLGKEMSEEPFNIWGTWHSTLKSQKDPGTMGYSYGDIFESSLRP  
 RPCSLSQGNLSLWPRCQGSPTGLDSGTQVIRRTQTAATVEQCSVHLPVSRVCSTPHIQDGRGTRRPA  
 SSDPFLSLNSTEDLAEGKEDVAWLQSQARPVYQRPQESGKDDRRPPPPYPGSGKPATTSALPLEPPLWR  
 LQRHEEGSETAVEGGQASGEHQTRPKLSSAYSLSASEQDKQNLGEASWLDWQRRERQIWELLSTDNDP  
 ALPETLV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9094\\_b11.zip](https://cdn.origene.com/chromatograms/mm9094_b11.zip)

**Restriction Sites:**

SgfI-MluI

## Cloning Scheme:



ACCN: NM\_009707

ORF Size: 2961 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\\_009707.4](#), [NP\\_033837.2](#)

RefSeq Size: 5515 bp

RefSeq ORF: 2964 bp

Locus ID: 11856

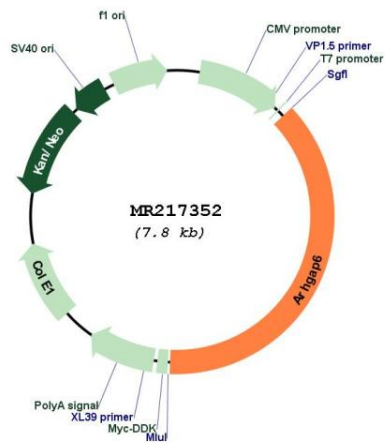
UniProt ID: [O54834](#)

Cytogenetics: X F5

MW: 108.8 kDa

Gene Summary: GTPase activator for the Rho-type GTPases by converting them to an inactive GDP-bound state. Could regulate the interactions of signaling molecules with the actin cytoskeleton. Promotes continuous elongation of cytoplasmic processes during cell motility and simultaneous retraction of the cell body changing the cell morphology (By similarity). [UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR217352