

Product datasheet for **MG209791**

Arhgap24 (BC023344) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arhgap24 (BC023344) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Arhgap24
Synonyms:	MGC38749
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>MG209791 representing BC023344
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACAGCCAATCATGAGAGCTATCTCCTCATGGCGAGCACCCAGAATGACATGGAAGACTGGTGAAGT
CCATCCGCCGAGTCATATGGGGACCTTTTGGAGGAGGTATTTTGGACAGAACTGGAAGACACAGTCCG
ATATGAAAAGAGGTACGGGAACCGCTGGCACCCATGCTGGTGGAGCAGTGTGTGGACTTCATCCGACAG
CGGGGGCTGAAGGAAGAAGGCTCTTCCGGCTGCCGGCCAGGCGAACCTGGTCAAGGAGCTCCAGGATG
CGTTCCGACTGTGGAGAGAAGCCCTCCTTCGACAGCAACACCGACGTCCACACTGTGGCATCCCTGCTGAA
ATTGTATCTCCGAGAACTCCAGAGCCCGTTCCTTATGCAAAGTATGAAGACTTTTTGTCTGCGCC
ACGCTGCTCAGTAAGGAGGAAGAAGCAGGTGTTAAGGAGCTAATGAAACAAGTGAAGAGTTTGCCTGTGG
TTAACTACAACCTTCTGAAGTACATTTGCAGGTTCTGGATGAAGTGCAGTCTATTCCAGGATTAACAA
GATGAGCGCACAGAACTGGCAACTGTCTCGGTCTAACATCTGCGCCAAAGGTGGAAGATCCCTTG
ACCATCATGGAGGCACTGTGGTGGTCCAGCAGTTAATGTCAGTATGATTAGTAAGCATGATCGACTCT
TCCCCAAAGACACAGAACCACAAAGCAAGCCCCAAGACGGCCGAAACAGCAATAATAACGATGGTCATAA
GAAAGCCACCATGGGTGAGTTCAGAACAAAGAAAACAATAATACCAAGGAGAGCCCCGTGAGAAGGTGC
TCTTGGGACAAGCCTGAATCCCCCAGAGAAGCAGCGTGGACAATGGATCCCCCAGAGCCCTATCAGGCA
GCAAAACCAACAGCCCAAGGAACAGTATCCACAAGCTGGATATTTCCAGGAGCCCCCTCTCATGGTCAA
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GGTGTGAGAGAAGCCTCAAACACTCCTAATGGGAGTTTACAAGCCAGAAGGACCTTCTCACTGAAGAGTT
CTGGTACCAAAATGGGCACTCACAGTGTACAGAATGGCACTGTCCGCATGGGTATTCTGAACACTGACAC
ACTAGGGAATTCCTTGAACGGCCGGAGCATGAGTTGGCTGCCCAATGGCTATGTGACCCCTGAGAGATAAC
AAACAGAAGGAGCCAGCAGGAGAGTCAAGCCAGCACAAACAGACTCTCCACCTACGACAATGTCCACCAGC
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AATCTCCCTCCCTGAGAACTCCAATTCCTGCCGCTCCTTACCACCACGTGCCAGAGCAAGACTTCTAC
GTTGGAACTTTGAGGACCCTGTTTTAGACGGCCACCTCAGGATGATCTTTCCCATCCCGGGACTATG
AGAACAAAAGTGACCGCAGGAGCGTAGGGGGCCGAAGCAGCCGCGCCACGAGCAGCAGCGATAACAGCGA
GACATTCGTGGGCAACACCAGCAGCAACCACAGTGCACCTCACAGTTTAGTTTCCAGCCTGAAGCAGGAG
ATGACCAAACAGAAGATCGAGTATGAGTCCAGGATAAAAAGCTTAGAACAGCGGAATTTGACTTTGGAAA
CGGAAATGCTGAGCCTCCATGACGAACTGGATCAAGAGAGGAAAAAGTTACCATGATAGAAATCAAGAT
GAGAAAACGCTGAGCGCGCAAAGGAGGATGCGGAGAAAAGGAACGACATGCTCCAGAAGGAGATGGAGCAG
TTCTTCTCCACATTTGGAGACCTGACAGTGAACCCAGGAGAAGCGAGAGAGGAAACACAATCTGGATCC
AG

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG209791 representing BC023344
 Red=Cloning site Green=Tags(s)

MTANHESYLLMASTQNDMEDWVKSIRRVIWGPFGGGIFGQKLEDTVRYEKRYGNRLAPMLVEQCVD FIRQ
 RGLKEEGLFRLPGQANL VKELQDAFDCGEKPSFDSNTDVHTVASLLKLYLRELPEPVVYAKYEDFL SCA
 TLLSKEEEAGVKELMKQVKS LPPVNYNLLKYICRFLDEVQSYSGVNMMSAQNLATVFGPNILRPKVEDPL
 TIMEGTVVVQQLMSVMI SKHDRLFPKDTEPQSKPQDGPNSNNNDGHKKA TMGQLQNKENNNTKESPVRR
 SWDKPESQORSSVDNGSPTALSGSKTNSPRNSIHKLDISRSPPLMVKKNPAFNKGSIVTNGSFSSNAE
 GVEKPQTTPNGSLQARRTSSLKSSGTKMGTHSVQNGTVRMGILNTDTLGNLSLNGRSMSWLPNGYVTLRDN
 KQKEPAGESGQHNRLSTYDNVHQFSSMSLDDKHSVDSATWSTSSCEISLPENSNSCRSSTTTCPEQDFY
 VGNFEDPVL DGGPQDDL SHPGDYENKSDRRSVGGRSSRATSSSDNSETFVNGTSSNHSALHSLVSSLKQE
 MTKQKIEYESRIKSLQNRNLTLETEMLSLHDEL DQERKKFTMIEIKMRNAERAKEDA EKRNDMLQKEME
 FFSTFGDLTVEPRRSERGNTIWIQ

TRTRPLE - GFP Tag - V

Restriction Sites:

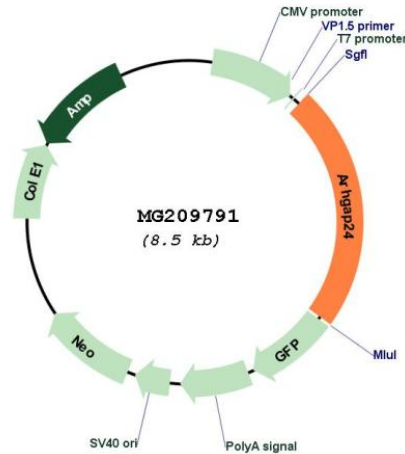
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: BC023344

ORF Size: 1964 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: [BC023344](#), [AAH23344](#)

RefSeq Size: 2732 bp

RefSeq ORF: 1964 bp

Locus ID: 231532

Cytogenetics: 5 E5

Gene Summary: Rho GTPase-activating protein involved in cell polarity, cell morphology and cytoskeletal organization. Acts as a GTPase activator for the Rac-type GTPase by converting it to an inactive GDP-bound state. Controls actin remodeling by inactivating Rac downstream of Rho leading to suppress leading edge protrusion and promotes cell retraction to achieve cellular polarity. Able to suppress RAC1 and CDC42 activity in vitro. Overexpression induces cell rounding with partial or complete disruption of actin stress fibers and formation of membrane ruffles, lamellipodia, and filopodia. Isoform 2 is a vascular cell-specific GAP involved in modulation of angiogenesis (By similarity).[UniProtKB/Swiss-Prot Function]