

## Product datasheet for **MG209784**

### Arhgap24 (BC025502) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Arhgap24 (BC025502) 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)



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**ORF Nucleotide Sequence:**

>MG209784 representing BC025502  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGACAGCCAATCATGAGAGCTATCTCCTCATGGCGAGCACCCAGAATGACATGGAAGACTGGTGAAGT  
 CCATCCGCCGAGTCATATGGGGACCTTTTGGAGGAGGTATTTTGGACAGAACTGGAAGACACAGTCCG  
 ATATGAAAAGAGGTACGGGAACCGGCTGGCACCCATGCTGGTGGAGCAGTGTGTGGACTTCATCCGACAG  
 CGGGGGCTGAAGGAAGAAGGCTCTTCCGGCTGCCGGGCCAGGCGAACCTGGTCAAGGAGCTCCAGGATG  
 CGTTCCGACTGTGGAGAGAAGCCCTCCTTCGACAGCAACACCGACGTCCACACTGTGGCATCCCTGCTGAA  
 ATTGTATCTCCGAGAACTTCAGAGCCCGTTCCTTATGCAAAGTATGAAGACTTTTTGTCTGCGCC  
 ACGCTGCTCAGTAAGGAGGAAGAAGCAGGTGTTAAGGAGCTAATGAAACAAGTGAAGAGTTTGCCTGTGG  
 TTAACAACAACCTTCTGAAGTACATTTGCAGGTTCTGGATGAAGTGCAGTCTATTCCAGGATTAACAA  
 GATGAGCGCACAGAACTTGGCAACTGTCTCGGTCTAACATCCTGCGCCAAAGGTGGAAGATCCCTTG  
 ACCATCATGGAGGGCACTGTGGTGGTCCAGCAGTTAATGTCAGTATGATTAGTAAGCATGATCGACTCT  
 TCCCCAAAGACACAGAACCACAAAGCAAGCCCCAAGACGGCCGAACAGCAATAATAACGATGGTCATAA  
 GAAAGCCACCATGGGTGAGTTCAGAACAAAGAAAAAATAATACCAAGGAGAGCCCCGTGAGAAGGTGC  
 TCTTGGGACAAGCCTGAATCCCCCAGAGAAGCAGCGTGGACAATGGATCCCCCAGAGCCCTATCAGGCA  
 GCAAAACCAACAGCCCAAGGAACAGTATCCACAAGCTGGATATTTCCAGGAGCCCCCTCTCATGGTCAA  
 AAAGAACCAGCCTTCAACAAGGCGAGTGGGATTTGTCACCAACGGGTCAATCAGCAGCAGCAATGCAGAA  
 GGTGTCGAGAAGCCTCAAACACTCCTAATGGGAGTTTACAAGCCAGAAGGACCTTCTCACTGAAGAGTT  
 CTGGTACCAAAATGGGCACTCACAGTGTACAGAATGGCACTGTCCGCATGGGTATTCTGAACACTGACAC  
 ACTAGGGAATTCCTTGAACGGCCGGAGCATGAGTTGGCTGCCCAATGGCTATGTGACCCCTGAGAGATAAC  
 AACAGAAAGGAGCCAGCAGGAGAGTCAAGCCAGCACAAACAGACTCTCCACCTACGACAATGTCCACCAGC  
 AGTTCTCCTCGATGAGCCTCGACGACAAGCACAGCGTGGACAGTGCCACGTGGTCCACCTCCTCCTGCGA  
 AATCTCCCTCCCTGAGAACTCCAATTCCTGCCGCTCCTTACCACCACGTGCCAGAGCAAGACTTCTAC  
 GTTGGGAACCTTGGAGACCCTGTTTTAGACGGCCACCTCAGGATGATCTTTCCCATCCCGGGACTATG  
 AGAACAAAAGTGACCGCAGGAGCGTAGGGGGCCGAAGCAGCCGCGCCACGAGCAGCAGCGATAACAGCGA  
 GACATTCGTGGGCAACACCAGCAGCAACCACAGTGCACCTCACAGTTTAGTTTCCAGCCTGAAGCAGGAG  
 ATGACCAAACAGAAGATCGAGTATGAGTCCAGGATAAAAAGCTTAGAACAGCGGAATTTGACTTTGGAAA  
 CGGAAATGCTGAGCCTCCATGACGAACTGGATCAAGAGAGGAAAAAGTTACCATGATAGAAATCAAGAT  
 GAGAAAACGCTGAGCGCGCAAAGGAGGATGCGGAGAAAAGGAACGACATGCTCCAGAAGGAGATGGAGCAG  
 TTCTTCTCCACATTTGGAGACCTGACAGTGAACCCAGGAGAAGCGAGAGAGGAAACACAATCTGGATCC  
 AG

**ACGCGT**ACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG209784 representing BC025502  
 Red=Cloning site Green=Tags(s)

MTANHESYLLMASTQNDMEDWVKSIRRVIWGPFGGGIFGQKLEDTVRYEKRYGNRLAPMLVEQCVDIFRQ  
 RGLKEEGLFRLPGQANL VKELQDAFDCGEKPSFDSNTDVHTVASLLKLYLRELPEPVVYAKYEDFLSCA  
 TLLSKEEEAGVKELMKQVKS LPPVNYNLLKYICRFLDEVQSYSGVNKMSAQNLATVFGPNILRPKVEDPL  
 TIMEGTVVVQQLMSVMI SKHDRLF PKDTEPQSKPQDGPNSNNNDGHKKA TMGQLQNKENNNTKESPVRR  
 SWDKPESQORSSVDNGSP TALSGSKTNSPRNSIHKLDISRSPPLMVKKNPAFNKGSIVTNGSFSSNAE  
 GVEKPQTTPNGSLQARRTSSLKSSGTKMGTHSVQNGTVRMGILNTDTLGNLSLNGRSMSWLPNGYVTLRDN  
 KQKEPAGESGQHNRLSTYDNVHQQFSSMSLDDKHSVDSATWSTSSCEISLPENSNSCRSSTTTCPEQDFY  
 VGNFEDPVLDPGPDLLSHPGDYENKSDRRSVGGRSSRATSSSDNSETFVNGTSSNHSALHSLVSSLKQE  
 MTKQKIEYESRIKSLQNRNLTLETEMLSLHDELQERKKFTMIEIKMRNAERAKEDAERNDMLQKEME  
 FFSTFGDLTVEPRRSERGNTIWIQ

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** BC025502

**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:** [BC025502](#), [AAH25502](#)

**RefSeq Size:** 2911 bp

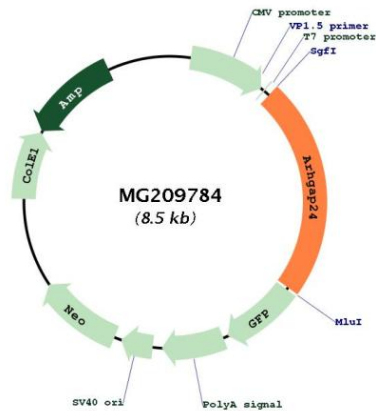
**RefSeq ORF:** 1964 bp

**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]

**Product images:**



Circular map for MG209784