

Product datasheet for **MC216714**

Arhgef4 (NM_183019) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arhgef4 (NM_183019) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Arhgef4
Synonyms:	9330140K16Rik; Asef; ENSMUSG00000070955
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

Fully Sequenced ORF: >MC216714 representing NM_183019
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATGACCAGGAGCTGGGCTTCAAAGCTGGGGATGTCATCGAAGTGATGGATGCCACCAACAGGGAAAT
 GGTGGTGGGGCCGAGTGGCAGATGGCGAGGGGTGGTCCCTGCCAGCTTTGTACGGCTGCGCGTGAACCA
 GGATGAGCCCGGGATGACTATGAGGCCCGCGGGCCGGGGCTAGAGAGGCCGATGACAGCGGTCCAGAG
 GCTCAGAGCTGCAAGGACCAGATGCGCACAAATGTCATCAATGAGATCCTCAGCACTGAGCGAGACTACA
 TCAAGCACCTTCGCGACATCTGCGAGGGCTATGTCGCCAGTGCCGAAACGGGAGGATATGTTCAAGTGA
 AGAGCAGCTGCGCACCATCTTTGGGAACATCGAGGACATCTACCGCTGCCAAAAGGCATTTGTGAAGGCT
 TTGGAGCAGAAGTTCAACACGGAGCGGCCACACCTGAGCGAGTTGGGGCCTGCTTCTGGAACACCAAG
 CAGACTCCAGATCTATTCTGAGTACTGCAACAACCCCAATGCCTGCGTGGAGCTCTCCCGGCTCAC
 GAAGCTCAGCAAGTACGTACTTCTTCGAGGCCCTGCCGCTGCTGCAAAGGATGATTGACATCTCGCTG
 GATGGCTTTCTGCTGACCCCGGTGACAGAAATCTGCAAGTATCCCTCCAGCTGGCGGAGCTGCTCAAGT
 ACACACACCCCGAGCACAGGGACTTTAAGAATGTTGAAGCTGCCTTGACGCCATGAAGAATGTGGCCCA
 GCTCATCAACGAACGAAACGAAGACTTGAAAACATCGACAAGATTGCTCAGTGGCAGAGCTCCATAGAG
 GACTGGGAGGGGGAAGACCTTCTGGTCAGGAGCTCGGAACTCATCCACTCGGGGAGCTGACCCGCGTGA
 CACAGCCTCAAGCCAGGAGTCAAGAGAGAAATGTTTTTCTCTTTGACCGCAGCTCATCTACTGTAAAAA
 GGATCTGCTTCGCGGGACGTGCTGTACTACAAGGGCCGGCTGGACATGGATGACCTGGAGGTGGTAGAT
 GTGGAAGATGGGAAGGACCGAGACCTCCATGTGAGTGTCAAGAAGCCTTCCGTCTGTACTGTGGTACCA
 CGGGGGACAGCCACCTACTGTGTGCCAGGAAGCCAGAACAGAAGCAGCGCTGGCTGAAGGCCTTTGCCAG
 AGAGAGGAGCAGGTGCGGCTGGACCAGGAGACAGGCTTCTCCATCACCAGCTGCAGAGGAAGCAGGCC
 ATGCTGAACGCCAGCAAGCAGCAGGCCACGGGGAAGCCTAAAGCTGTGGGAGGCCAGGATACCTGACCC
 GCCACAAGCATCCATCATTGCCTGCCAGCCGGCCCGCAGCAAGTGTGGTGTAGCAGAGCCAGGCGC
 GAAGCCATCTAACTTCTGGCACAGCATCAGCAGACTGGCGCCTTCCGCAAGTGA

ACCGGTACGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_183019
- Insert Size:** 1455 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).
- 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_183019.2](#), [NP_898840.2](#)

RefSeq Size: 2738 bp

RefSeq ORF: 1455 bp

Locus ID: 226970

UniProt ID: [Q7TNR9](#)

Cytogenetics: 1 B

Gene Summary: Acts as guanine nucleotide exchange factor (GEF) for RHOA, RAC1 and CDC42 GTPases. Binding of APC may activate RAC1 GEF activity. The APC-ARHGEF4 complex seems to be involved in cell migration as well as in E-cadherin-mediated cell-cell adhesion (By similarity). Required for MMP9 up-regulation via the JNK signaling pathway in colorectal tumor cells. Involved in tumor angiogenesis and may play a role in intestinal adenoma formation and tumor progression.[UniProtKB/Swiss-Prot Function]