

Product datasheet for **RC204022**

ARHGEF1 (NM_198977) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | ARHGEF1 (NM_198977) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | ARHGEF1 |
| Synonyms: | GEF1; IMD62; LBCL2; LSC; P115-RHOGEF; SUB1.5 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>RC204022 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAAGACTTCGCCGAGGGGCGCCCTCCCAGGCCCTCCCGCCTGGCTGTTCCCGTCAGCATCA
 TCGGGGCTGAGGATGAGATTTTGAGAACGAGCTGGAGACAACTCAGAAGAGCAAAACAGCCAGTTCCA
 GAGCCTGGAGCAGGTGAAGCGGCCCCAGCCACCTCATGGCCCTCCTGCAGCAGTGGCCCTGCAGTTT
 GAGCCAGGACCCCTGTTCTCCGGGTGCCGGTCCCTCCCAACGTCGCTTTGAACTTGACCGCACTAGGG
 CTGACCTCATCTCCGAGGATGTCCAGCGCGGTTCTGTCAGGAGTGGTCAAAGCCAGCAGGTAGCCGT
 GGGCCGCGAGCTGGAGGACTTCCGTTCCAAGCGGCTCATGGGCATGACGCCCTGGGAGCAGGAGCTGGCC
 CAGCTGGAGGCTTGGGTTGGGCGGACCGAGCCAGCTACGAGGCCGGGAGCGGCACGTGGCGGAGCGGC
 TGCTCATGCACCTGGAGGAGATGCAACATAACCATCTCTACCGACGAAGAAAAGAGTGTGCCGTGGTCAA
 CGCCATTGGCCTGTACATGCGCCACCTTGGGGTGGGACCAAGAGTGGAGACAAGAAGTCGGGGAGGAAC
 TTCTTCCGAAAAAGGTGATGGGGAACCGCGGTGGGACGAGCCTGCCAAGACCAAGAAGGGGCTGAGCA
 GCATCCTGGATGCCGCCCTGGAACCGGGGAGAGCCCCAGGTTCCAGATTTTCGACACCTCAAAGCAGA
 GTTTATGCCGAGAAGCCAGGTGCTACAGACCGGAAGGGAGGCGTGGGATGCCCTCTCGGGACCGGAAT
 ATCGGGGCTCCTGGGACGACACCCCTGGAGTCTCTGACCCCTCTGTCCCTGGACAGCCAGACCGGG
 AACCGGTGCTGACGCCCCCTGGAGTGGGGACTCATCCCGCAGGGCCCAATGAGCCTGGAGTCTT
 GGGCCCCAGAGGTACCGACGAGGGGGCCGAAACCGAGAGCCCGAGCCTGGAGATGAGGGGGAGCCG
 GGGCGTGGGACTGGAGCTTGAACAGAAGAGCCTCCCGCTGGCGGGAACCTGTCCTCCAGACACCC
 TGACAGCCTGCCAAGAGCCAGGTGAAGCGGCAGGAGTTCATCAGCGAGCTGCTGGTGAACAGAGCGGC
 CCACGTGCGCATGCTCGGGTGTGCACGACCTTCTTCCAGCCCATGGCAGAATGCCTGTTCTTCCCC
 TTGGAGGAGCTGCAGAACATCTTCCCCAGCCTGGACGAGCTCATCGAGGTGCATTCCCTGTTCTCGATC
 GCCTGATGAAGCGGAGGCAGGAGTGGCTACCTCATCGAGGAGATCGGAGAGCTGCTGCTGGCCCGTT
 TGATGGTGTGAGGGCTCCTGGTTCCAGAAAATCTCTCCCGTCTGTCAGCCGAGTCAATTTGCCTTA
 GAGCAGCTCAAAGCCAAGCAACGCAAGGACCCCGTTCTGTGCCTTCTGTCAGGAAGCTGAGAGCCGCC
 CGGGTGGCCGCTGCAGCTGAAGGACATGATCCCCAGGAGATGCAGCGGTGACCAAGTACCCCT
 GCTCTGCAGAGCATCGGCAGAACACAGAAGAGCCACAGAACGGGAGAAAAGTGGAGCTGGCAGCCGAG
 TGCTGCCGGAAATCTACACCAGTCAACCAAGCCGTGCGTGCATGGAGGACCTGCTGAGGCTCAAGG
 ACTATCAGCGGCCCTGGACTTGTCCCACCTTCGGCAGAGCAGCGACCCTATGCTGAGCGAGTTCAAGAA
 CCTGGACATACCAAGAAGAAATTTGGTCCACGAGGGCCACTGACGTGGCGGGTACTAAGGACAAGGCA
 GTGGAGGTGCATGTGCTGCTGCTGGACGACCTGCTGCTGCTCCAGCGCCAGGACGAGCGGCTGCTGC
 TCAAGTCCCATAGCCGGACACTGACGCCACGCCGATGGCAAGACCATGCTGCGGCCGTGCTGCGGCT
 CACCTCCGCCATGACCCGCGAGGTGGCCACCGATCACAAAGCCTTCTACGTCCTTTTACCTGGGACCAG
 GAGGCCAGATAACGAGCTGGTGGCACAGACTGTGTCGAGCGGAAAACTGGTGTGCTCTCATCACTG
 AGACTGCCGATCCCTGAAAGTCCCTGCCCTGCCTCTCGCCTAAGCCCCGGCCAGCCGAGCAGCAC
 CCGAGAACCCTCCTCAGCAGCTCTGAGAACGGCAATGGTGGCCGAGAGACGCTCCAGCTGATGCCCGG
 ACCGAGAGAAATCCTCAGTGACCTCTGCCCTTCTGCAGACCAGGCCCGAGGGCCAGCTCGCTGCCACGG
 CCCTTCGAAAAGTGTGTCCCTGAAGCAGTCTGTTTCCGGCGGAGGAAGACAATGGGGCGGGGCTCC
 TCGAGATGGGATGGGTTCCAGGGGCGGCCCTGAGCCAGCACGGACCCAGGAAATCCAGGAGAAC
 CTGCTCAGCTTGGAGGAGACCATGAAGCAGCTGGAGGAGTTGGAGGAGGAATTTGCCGCTGAGACCC
 TCCTGTCTCAGCTTGGGGGAACTGTCCCCAGCCTGGCTGCAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC204022 protein sequence
 Red=Cloning site Green=Tags(s)

MEDFARGAASPGPSRPLVPSIIIGAEDEDFENELETNSEEQNSQFQSLEQVKRRPAHLMALLQHVALQF
 EPGPLVLRVPPVNVAFELDRTRADLISEDVQRRFVQEVVQSQQVAVGRQLEDFRSKRLMGMPWEQELA
 QLEAWVGRDRASYEARERHVAERLLMHLEEMQHTISTDEEKSAAVVNAIGLYMRHLGVRTKSGDKKSGRN
 FFRKKVMGNRRSDEPAKTKKGLSSILDAARWNRGEPQVPDFRHLKAEVDAEKPGATDRKGGVGMPSRDRN
 IGAPGQDTPGVSLHPLSLDSPREPADAPLELGDSSPQGPMSLESLAPPESTDEGAETESPEPGDEGEP
 GRSGLELEPEEPPGWRELVPPDTLHSLPKSQVKRQEVISELLVTEAAHVRLRVLHDLFFQPMAECLFFP
 LEELQNIIFPSLDELIEVHSLFLDRLMKRRQESGYLIEEIGDVLLARFDGAEGSWFQKISSRFCSRQSFAL
 EQLKAKQRKDPRFCAFVQEAESRPRCRLQLKDMIPTMQRLTKYPLLLQSIGQNTTEETEREKVELAAE
 CCREILHHVNQAVRDMEDLLRLKDYQRRLDL SHLRQSSDPMLSEFKNLIDITKKKL VHEGPLTWRVTKDKA
 VEVHVLDDLLLLQRQDERLLKSHSRTL TPTPDGKTMRLRPVLR L TSAMTREVATDHKAFYVLF TWDQ
 EAQIYELVAQTVSERKNWCALITETAGSLKVPAPASRPKPRPSPSSTREPLLSSSENGNGGRETSPADAR
 TERILSDLLPFCRPGPEGQLAATALRKVLSLKQLL FPAEEDNGAGPPRDGDGVPGGGPL SPARTQEIQEN
 LLSLEETMKQLEEEEF CRLRPLLSQLGGNSVPPQPGCT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

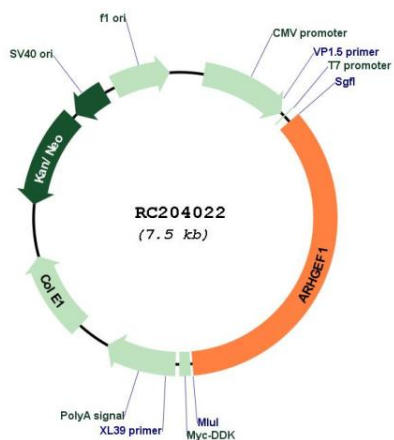
SgfI-MluI

Cloning Scheme:

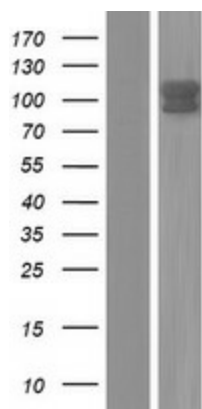


| | |
|-------------------------------|---|
| ACCN: | NM_198977 |
| ORF Size: | 2637 bp |
| OTI Disclaimer: | The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally 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: | <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: | NM_198977.2 |
| RefSeq Size: | 3137 bp |
| RefSeq ORF: | 2640 bp |
| Locus ID: | 9138 |
| UniProt ID: | Q92888 |
| Cytogenetics: | 19q13.2 |
| Protein Pathways: | Regulation of actin cytoskeleton, Vascular smooth muscle contraction |
| MW: | 98.8 kDa |
| Gene Summary: | Rho GTPases play a fundamental role in numerous cellular processes that are initiated by extracellular stimuli that work through G protein coupled receptors. The encoded protein may form complex with G proteins and stimulate Rho-dependent signals. Multiple alternatively spliced transcript variants have been found for this gene, but the full-length nature of some variants has not been defined. [provided by RefSeq, Jul 2008] |

Product images:



Circular map for RC204022



Western blot validation of overexpression lysate (Cat# [LY404700]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204022 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).