

Product datasheet for **SC304289**

ARHGEF4 (NM_015320) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ARHGEF4 (NM_015320) Human Untagged Clone
Tag:	Tag Free
Symbol:	ARHGEF4
Synonyms:	ASEF; ASEF1; GEF4; SMIM39; STM6
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_015320 edited
 GCACCCCCACTTGCTCCACACCTTTGTCCTCCAGTTTAGTTTCTCCAGAACACAGGAGG
 AAAAGTGAACCGACCATCAAGTGCACAGCCACCCAGGAAGCGGTAGGTACCTACCTTCA
 GGTATCTTTCCGAAAAGTCTGGCTGGCGTCCCCGGCAGCCCTCGGGCCAGCAGGCT
 GGAATCGCACACACCCTGCCTTCCAGCTCTGCCTGCTGCCTGGCATATGAAAACCCGGG
 ACGCCCTGCAGACCCACGAGCCCAAGCCCTGAGTCCCAGGCCTAGTGCTCAGCGGATG
 GGTCTCCACTACCCGGGAGGGGTAGCGCCATCTCCATGGTTTCTTGGAAAGCTACAGC
 TACGTGGACAGCAGTTACGGGGACCCTGAAAGACCCAAGATTCCCAAGGGCCAGACCAGT
 TTCCTGCTTTCTGTCAGACGCTAAACCAAGATGAGCAGAAGGAAGAGAGCAGGGAAGGA
 GGCCAGGGTCCGCGCGGCTTGGGCACAGTGCCCTGGCTCAGGGACCTTCTGGGAGTGAG
 AACCATGCCCCTGGGAAGAACCAGCAGGTGAGAAGCCAGTTGCTCTCACAGTCAGAAG
 GCATTCCACATGGAGCCTGCCAGAACCCCTGCTTCACTACTGACATGGTGACATGGGCC
 CTCTCTGCATCTCTGCAGAGACTGTGCGTGGGGAGGCTCCTTACAGCCTAGGGGCATC
 CCTCACCGCTCGCCCGTCACTGTGGATGACCTGTGGCTGGAGAAGACACAGAGAAAGAAG
 TTGCAGAAGCAGGCCACATCGAAAGGAGGCTGCACATAGGGGCAGTGCACAAAGATGGA
 GTCAAGTCTGGAGAAAGACGATCATTACCTCTCCAGAGTCTTTGAATCTCCCTAGAAGA
 AGCCATCCACTCTCCAGAGTGTCCAACGGGACTGAACCACATGGGCTGGCCAGAGCAC
 ACACCAGGCACTGCCATGCCTGATGGAGCTCTGGACACAGCTGTCTGCGTGACGAAGTG
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 GGAGGGGTGGGAGCAGCTGGCTATCAATGAGCTCATCAGCGATGGCAGTGTGGTCTGC
 GCTGAAGCACTCTGGGACCATGTCAACATGGACGACCAGGAGCTGGGCTCAAAGCTGGG
 GACGTCATCGAAGTGATGGATGCCACCAACAGAGAGTGGTGGTGGGGCCGGTTCGCCGAT
 GGCGAGGGCTGGTTCCAGCCAGCTTCGTTGCGCTGAGGGTGAATCAGGACGAGCCCGG
 GATGACGACGCCCTCTGGCCGGGAACAGCGGAGCGGAGGACGGCGGGCGGAGGCGCAG
 AGCAGCAAGGACCAGATGCGGACCAACGTCATCAACGAGATCCTCAGCACTGAGCGGGAC
 TACATCAAGCACCTGCGGACATCTGCGAGGGCTACGTCGGCAGTGCCGCAAGCGCGCA
 GACATGTTCCAGCGAGGAGCAGCTGCGTACCATCTTCGGGAACATCGAGGACATCTACCGC



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TGCCAGAAGGCCTTCGTGAAGGCCCTGGAGCAGAGGTTCAACCGCGAGCGCCACACCTG
 AGCGAGCTGGGTGCCTGCTTCTGGAGCATCAAGCCGACTTCCAGATCTACTCGGAGTAC
 TGCAATAACCACCCCAACGCCTGCGTGGAGCTCTCCCGGCTACCAAGCTCAGCAAGTAC
 GTGTACTTCTTCGAGGCCTGCCGCTGCTGCAGAAGATGATTGACATCTCCCTGGATGGC
 TTCCTGCTGACTCCGGTGCAGAAGATCTGCAAGTACCCTCTGCAGCTGGCCGAGCTGCTC
 AAATACACGCACCCCAAGCAGGGACTTCAAGGATGTTGAAGCCGCCTTGCATGCCATG
 AAGAACGTGGCCAGCTCATCAACGAGCGGAAGCGGAGACTTGAGAACATCGACAAGATT
 GCTCAGTGGCAGAGCTCCATAGAGGACTGGGAGGAGAAGATCTTTGGTCAGGAGCTCA
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 GACGTGTTGTAACAAGGGCCGCTGGACATGGACGGCCTGGAGGTGGTGGACCTGGAG
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 ATCTTGTTTTTTAACAACAAACAATGGAGAAAAAGAATTGATTCTTAGTGACACAGAAG
 ATTGCTTACGCTCGTGAGCGTGAGAAGCCATAAGAGAGAGACCGAATTCTGTGGCTCAG
 CACACAGGACTGACCCACAGCCAGGCAGCGGGTGTGTGGAGATGGCGCCCTGTCCTGCC
 AAGGGGGCCAGGAGCAGAGCCAGGGCCTGGCGAGCTGGCGTGGAGCCACAGGATTCAG
 CAGCATGGACAGTCACTTTGCACTATTCTTCTCAAGCCAGAAACCACATTTAATTTT
 ATAAATAAATTTATGAAAAGTAAAAAAAAAAAAAAAAAAAA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_015320 unedited
 NGTCAGCATTTGTATACGACTCATATAGGGCGGCCGGAATTCGCACCAGGCACCCAC
 TTGCCTCCACACCTTTGTCTCCAGTTTGTCTTCCAGACACAGGAGGAAAAGTGAACC
 GACCATCAAGTGCACAGCCACCCAGGAAGGCGGTAGGTACCTACCTTCAGGTATCTTTCC
 GGAAAAGTCTGGCTGGCGTCCCCGGCAGCCCTCGGGCCAGCAGGCTGGAATCGCACA
 CACCCTGCCTTCCAGCTGCTGCTGCTGCTGGCATAATGAAAACCCGGGACGCCCTGCAG
 ACCCACAGCCCCAAGCCCTGAGTCCCAGGCCTAGTGTCTCAGCGGATGGGTCTCCACTA
 CCCCAGGAGGGGTAGCGCCATCTCCATGGTTTCTTTGGAAGCTACAGCTACGTGGACAG
 CAGTTTCAGGGGACCCTGAAAGACCCAAGATTTCCCAAGGGCCAGACCAGTTTCTGCTTTC
 TCTGCAGACGCTAAACCAAGATGAGCAGAAGGAAGAGAGCAGGGAAGGAGGCCAGGGTCC
 GCGCGGCTTGGGCACAGTGCCTGGCTCAGGGACCTTCTGGGAGTGAAGCCACATGCC
 CTGNGAAGAACCAGCANGTGAAGAGCCAGTTGCTCTCACAGTCAGAAGGCATTCCACAT
 GGAGCCTGCCAGAACCCCTGCTTACCAGTGCATGGTGCATGGGCCCTCCTCTGCAT
 CTCTGCAAAGACTGTGCGTGGGGAGGGCTTTCACAGCCTAGGGGCATCCCTCACCAGTC
 GCCCGTCAAGTGTGGATGACCTGTGGCTGGGAAANACCCGAAAAGAGTTGCAAAGCCAG
 CCCACATCGAAAGGAGGCTGCCA

3' Read Nucleotide Sequence:

>OriGene 3' genomic read for NM_015320 unedited
 CCTGGNGATGGCACTTCCGGCCAGAAGCACTGGGGAGGGTCACAGGGTGCCCCGGGATC
 TGTTTCAGAAACAGCTATGACCGCGGCCCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTT
 TACTTTTCATAAATTTATTTATGAAATTAATGTGGTTTCTGGCTTGGAGAAGGAATAGT
 GCAAGAGTGACTGTCCATGCTGTGAATCCTGTGGGCTCCACGCCAGCTCGCCAGGCCCT
 GGCTCTGCTCCTGGCGCCCTTGGCAGGACAGGGCGCCATCTCCACACACCCGCTGCCTG
 GGCTGTGGGTCAGTCCTGTGTGCTGAGCCACAGAATTCGGTCTCTCTTATGGCTTCTC
 ACGCTCACGAGCGTAAGGCAATCTTCTGTGTCCTAAGAATCAATTCTTTTTCTCCATTG
 TTTGTTGTAGAAAAACAAGATGCCAAAATCCAAACAAAACCAGGAACGAGGTGGTTCTG
 GAGTACCGCACAGCAGCAGGCAGACTGACCACACTCCCGACTGGGAGTATGCAGCCGAC
 TGCACCGTCTTGTCTTTTCCGCTACACCACACACACAAGTGAAGAGGGTGTCCAGCAGC
 CAGCGGTGTCTTGAGGGGCTGGGAGGCCAAAGGCGGGCTCCGGGCCAACACAAGGGTGTG
 GAATTCCTGGCTTCTGCCCTCCCAAGTGGCAAGCTGCCTGGCACCCTGGCCGGGCTGGG
 GACTTGGAGAACTAGAGGGCANAGGGGCACATGGCCTGGCATTGCAGGCCACAGAAGGCC
 AGAGAGTCTGCCCGAGAAATGAAAGGAGGTTAAGTTTCCACGAAAGAGGTCCCACGCA
 G

Restriction Sites:

Please inquire

ACCN:

NM_015320

Insert Size:

3700 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).

OTI Annotation:

There is 1 nucleotide difference between the OriGene clone and the NCBI reference ORF. OriGene considers these to be polymorphisms and to reflect the natural differences between individuals. These result in the substitution of 1 aa.

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_015320.2](#), [NP_056135.2](#)

RefSeq Size: 3667 bp

RefSeq ORF: 2073 bp

Locus ID: 50649

UniProt ID: [Q9NR80](#)

Cytogenetics: 2q21.1

Protein Families: Druggable Genome

Protein Pathways: Regulation of actin cytoskeleton

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 protein encoded by this gene may form complex with G proteins and stimulate Rho-dependent signals. Multiple alternatively spliced transcript variants encoding different isoforms have been found, but the full-length nature of some variants has not been determined. [provided by RefSeq, Jun 2013]
Transcript Variant: This variant (1) encodes the longer isoform (a).