

Product datasheet for **SC318975**

ARHGEF7 (NM_001113512) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ARHGEF7 (NM_001113512) Human Untagged Clone
Tag:	Tag Free
Symbol:	ARHGEF7
Synonyms:	BETA-PIX; COOL-1; COOL1; Nbla10314; P50; P50BP; P85; P85COOL1; P85SPR; PAK3; PIXB
Vector:	<u>pCMV6 series</u>



[View online »](#)

Fully Sequenced ORF: >NCBI ORF sequence for NM_001113512, the custom clone sequence may differ by one or more nucleotides

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ATGAATTCGCGGAGCAAACCGTTACGTGGCTCATCACTCTGGGGGTGCTGGAGTCGCC
AAAAAACCATCTCGGACCCGGAGGGCTTTCTGCAGGCGTCGCTGAAGGATGGGGTGGTC
CTCTGCAGGCTGCTGGAGCGCCTGCTCCCCGGGACCATCGAGAAAACGTTTGATGCAAA
GATTTGTATCAGGGGCAGAATTTAACAAGGTCCTCAGTTCCTTAGTGACTCTAAATAAA
GTAACAGCAGACATCGGGCTGGGAGTGACTCCGTGTGTGCCCGGCCCTCGTCTCACCCG
ATAAAGTCTTTTGA CTCCCTGGATCACAGTCTTTCACACTCGGACTTCAAAACTGTTC
CAGGGCCAGTATCGGAGTTTGGACATGACCGATAATAGCAACAATCAACTGGTAGTAAGA
GCAAAGTTAACTTCCAGCAGACCAATGAGGACGAGCTTTCCTTCTAAAAGGAGACGTC
ATCCATGTCACCCGTGTGGAAGAGGGAGGCTGGTGGGAGGGCACACTCAACGGCCGGACC
GGCTGGTTCACAGCAACTACGTGCGCGAGGTCAAGGCCAGCGAGAAGCCTGTGTCTCCC
AAATCAGGAACACTGAAGAGCCCTCCCAAAGGATTTGATACGACTGCCATAAACAAAAGC
TATTACAATGTGGTGCTACAGAATATTTTAGAAACAGAAAATGAATATTCTAAAGA ACTT
CAGACTGTGCTTCAACGTACCTACGGCCATTGCAGACCAGTGAGAAGTTAAGTTCAGCA
AACATTTTCATATTTAATGGGAAATCTAGAAGAAATATGTTCTTTCAGCAAAATGCTCGTA
CAGTCTTTAGAAGAATGCACCAAGTTGCCCGAAGCTCAGCAGAGAGTCCGAGGCTGCTTT
TTAAACCTGATGCCACAGATGAAAACCTGTACCTCACGTATTGTGCCAATCACCCCTTCT
GCAGTGAATGTCCTCACGGAACACAGTGAGGAGTTGGGGGAGTTCATGGAGACCAAAGGT
GCCAGCAGCCCTGGGATTCTCGTGCTGACCACGGGCTGAGCAAACCTTCATGCGCCTG
GATAAATACCCTACGCTGCTCAAAGAGCTCGAGAGACACATGGAGGATTATCATAACAGAT
AGACAAGATATTCAAAAATCCATGGCTGCCTTCAAAAACCTTTCAGCCCAATGTCAAGAA
GTCCGGAAGAGGAAAGAGCTTGAGCTGCAGATCCTGACGGAAGCCATCCGGAAGTGGGAG
GGCGATGACATTA AAAACTCTGGGCAACGTCACTTACATGTCCCAGGTCTTGATTCAAGTGT
GCCGGAAGTGAGGAAAAGAAATGAAAGATATCTTCTACTCTTCCCAAATGTTTTGCTAATG
TTGTCTGCCAGTCTAGGATGAGTGGCTTTATCTATCAGGGAAAGCTTCCAACGACAGGA
ATGACAATCACAAGCTTGAGGACAGTGAAAATCATAGAAATGCATTTGAAATATCAGGG
AGCATGATTGAGCGGATATTAGTGTCTGCAACAACCAGCAGGATCTGCAGGAATGGGTG
GAGCACCTACAGAAGCAAACGAAGGTCACGTCTGTGGGAAACCCACCATAAAGCCTCAT
TCAGTGCCATCTCATACCCTCCCCTCCCACCCGGTCACTCCGTCCAGCAAGCACGCAGAC
AGCAAGCCCGCGCGCTGACGCCGCTACCACACGCTGCCCCACCCCTCCCACCAGGC
ACCCCGCACACCACCATCAACTGGGACCCCTGGAGCCTCCGAAAACACCCAAGCCTGG
AGCCTGAGCTGCCTGCGGCCCGCCTCCCCTCCGGCCCTCAGCTGCTCTGCTACAAG
GAGGATCTTAGTAAGAGCCCTAAGACCATGAAAAGCTGCTGCCAAAGCGCAAACCTGAA
CGGAAGCCTTCAGATGAGGAGTTCGCGTCCCAGAAAAGCACAGCTGCTTTGGAAGAAGAT
GCTCAGATTCTGAAAGTCATTGAAGCTTACTGCACCAGCGCAAAAACAAGGCAAACACTC
AATTCAACATGGCAAGGCACTGACCTGATGCATAATCACGTCTTGGCTGATGATGACCAA
CCAAGCCTAGACTCCCTGGGCGCTCGCAGTAGCCTTTCTCGTTTGGAGCCTTCAGACCTC
TCGGAAGACTCTGACTATGACAGTATATGGACAGCCCATAGTTACAGAATGGGTTCTACA
TCTCGTAAGAGCTGTTGCTCATATATCTCTCACCAGAAC
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Restriction Sites: Please inquire
ACCN: NM_001113512

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001113512.1](#), [NP_001106984.1](#)

RefSeq Size: 5375 bp

RefSeq ORF: 2262 bp

Locus ID: 8874

UniProt ID: [Q14155](#)

Cytogenetics: 13q34

Protein Pathways: Regulation of actin cytoskeleton

Gene Summary: This gene encodes a protein that belongs to a family of cytoplasmic proteins that activate the Ras-like family of Rho proteins by exchanging bound GDP for GTP. It forms a complex with the small GTP binding protein Rac1 and recruits Rac1 to membrane ruffles and to focal adhesions. Multiple alternatively spliced transcript variants encoding different isoforms have been observed for this gene. [provided by RefSeq, Mar 2016]

Transcript Variant: This variant (4) lacks two alternate in-frame exons compared to variant 3. The resulting protein (isoform d) is shorter than isoform c.