

Product datasheet for **RG204530**

ARHGEF1 (NM_004706) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ARHGEF1 (NM_004706) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ARHGEF1
Synonyms:	GEF1; IMD62; LBCL2; LSC; P115-RHOGEF; SUB1.5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG204530 representing NM_004706
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTTCTCTTTCCACCTGGAGCAGCCCTGCAGAGCCAGGGAGATGGAAGACTTCGCCCGAGGGGCGG
 CCTCCCCAGGCCCTCCCGCCTGGCCTGGTTCCTCGTCAGCATCATCGGGGCTGAGGATGAGGATTTTGA
 GAACGAGCTGGAGACAACTCAGAAGAGCAAAACAGCCAGTTCCAGAGCCTGGAGCAGGTGAAGCGGCGC
 CCAGCCCACCTCATGGCCCTCCTGCAGCAGTGGCCCTGCAGTTTGAAGCAGGACCCCTGCTTGTGTGTC
 TGCATGCCGACATGCTGGGCTCACTGGGCCCAAGGAGGCCAAGAAGGCCTTCTGGACTTCTACCACAG
 CTTCTGGAGAAGACAGCGGTTCTCCGGGTGCCGGTCCCTCCCAACGTCGCTTTGAACTTGACCGCACT
 AGGGCTGACCTCATCTCCGAGGATGTCCAGCGGGTTCGTGCAGGAGGTGGTCAAAGCCAGCAGGTAG
 CCGTGGGCGGCAGCTGGAGGACTTCCGTTCCAAGCGGCTCATGGGCATGACGCCCTGGGAGCAGGAGCT
 GGCCAGCTGGAGGCTTGGGTTGGCGGGACCGAGCCAGCTACGAGGCCGGGAGCGGCAGCTGGCGGAG
 CGCTGCTCATGCACCTGGAGGAGATGCAACATACCATCTCTACCGACGAAGAAAAGAGTCTGCCGTGG
 TCAACGCCATTGGCCTGTACATGCGCCACCTTGGGGTGGCGGACCAAGAGTGGAGACAAGAAGTCGGGGAG
 GAATTCTTCCGAAAAAGGTGATGGGGAACCGCGGTGGACGAGCCTGCCAAGACCAAGAAGGGGCTG
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 CAGAGGTTGATGCCGAGAAGCCAGGTGCTACAGACCGGAAGGGAGGCGTGGGGATGCCCTCTCGGGACCG
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 CGGAACCAAGTGTGACGCCCCCTGGAGTGGGGACTCATCCCCGAGGGCCCAATGAGCCTGGAGT
 CTTGGCGCCCCAGAGAGTACCGAGAGGGGGCCGAAACCGAGAGCCCCGAGCCTGGAGATGAGGGGA
 GCCGGGGCGGTCCGGACTGGAGCTTGAACCAGAAGAGCCTCCCGGCTGGCGGGAACCTCGTCCCCCAGAC
 ACCCTGCACAGCCTGCCAAGAGCCAGGTGAAGCGGCAGGAGTGCATCAGCGAGCTGCTGGTGCAGAGG
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 CTTAGAGCAGCTCAAAGCAAGCAACGCAAGGACCCTCGGTTCTGTGCCTTCGTGCAGGAAGCTGAGAGC
 CGCCCGGGTGGCGCCGCTGCAGCTGAAGGACATGATCCCCACGGAGATGCAGCGGCTGACCAAGTACC
 CCCTGCTCCTGCAGAGCATCGGGCAGAACAGAGGCCACAGAACCGGAGAAAAGTGGAGCTGGCAGC
 CGAGTGTGCCGGAAAATTCTACACCACGTCAACCAAGCCGTGCGTGACATGGAGGACCTGCTGAGGCTC
 AAGGACTATCAGCGGCGCCTGGACTTGTCCCACCTTCGGCAGAGCAGCGACCCTATGCTGAGCGAGTTCA
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 GGCAGTGGAGGTGCATGTGCTGTGCTGGACGACCTGCTGCTGCTCCAGCGCCAGGACGAGCGGCTG
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 GCACCCGAGAACCCTCCTCAGCAGCTCTGAGAACGGCAATGGTGGCCGAGAGACGTCTCCAGTGATGC
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 CTCCTCGAGATGGGGATGGGGTCCAGGGGGCGGCCCTGAGCCAGCACGGACCCAGGAAATCCAGGA
 GAACCTGCTCAGCTTGGAGGAGACCATGAAGCAGCTGGAGGAGTTGGAGGAGGAATTTGCCGCTGAGA
 CCCCTCTGTCTCAGCTTGGGGGAACTCTGTCCCCAGCCTGGTGCCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG204530 representing NM_004706
 Red=Cloning site Green=Tags(s)

MASLSTWSSPAEPREMEDFARGAASPGPSRPGLVPVSIIGAEDDFENELETNSEEQNSQFQSLEQVKRR
 PAHLMALLQHVALQFEPGPLLCLHADMLGSLGPKEAKKAFDFYHSFLEKTAVLRVPPVAVAFELDRT
 RADLISEDVQRRFVQEVVQSQQVAVGRQLEDFRSKRLMGMPWEQELAQLEAVVGRDRASYEARERHVAE
 RLLMHLEEMQHTISTDEEKSAAVVNAIGLYMRHLGVRTKSGDKKSGRNFFRKKVMGNRRSDEPAKTKKGL
 SSILDAAARWNRGEPQVPDFRHLKAEVDAEKPGATDRKGGVGMPSRDRNIGAPGQDTPGVSLHPLSLDSPD
 REPGADAPLELDGSSPQGPMSLESLAPPESTDEGAETESPEPGDEGEPGRSGLELEPEEPPGWRELVPD
 TLHSLPKSQVKRQEVISELLVTEAAHVRLRVLHDLFFQPMACLEFFPLEELQNIFFSLDELIEVHSLFL
 DRLMKRRQESGYLIEEIGDVLARFDGAEGSWFQKISSRFCSRQSFALQLKAKQRKDP RFCAFVQEAES
 RPRCRRLLQKDMIPTMQRLTKYPLLLQSIGQNTTEETEREKVELAAECCREILHHVNQAVRDMEDLLRL
 KDYQRRDLSHLRQSSDPMLSEFKNLDIKKKL VHEGPL TWRVTDKAVEVHVLLDLLLQLRQDERL
 LLKSHSRTLTPTPDGKMLRPVLR L TSAMTREVATDHKAFYVLF TWDQEAQIYELVAQTVSERKNWCALI
 TETAGSLKVPAPASRPKPRPSPSSTREPLLSSSENGNGGRETSPADARTERILSDLLPFCRPGPEGQLAA
 TALRKVLSLKQLLFP AEEDNGAGPPRDGDGVPGGPLSPARTQEIQENLLSLEETMKQLEEELEEEFCRLR
 PLLSQLGGNSVPPQPGCT

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

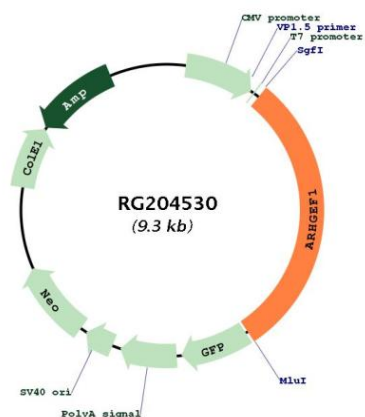
Cloning Scheme:



ACCN: NM_004706

ORF Size:	2784 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_004706.3 , NP_004697.2
RefSeq Size:	3236 bp
RefSeq ORF:	2739 bp
Locus ID:	9138
UniProt ID:	Q92888
Cytogenetics:	19q13.2
Domains:	RhoGEF, PH
Protein Pathways:	Regulation of actin cytoskeleton, Vascular smooth muscle contraction
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 RG204530