

Product datasheet for SC321534

RHOA (NM_001664) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: RHOA (NM_001664) Human Untagged Clone

Tag: Tag Free Symbol: RHOA

Synonyms: ARH12; ARHA; EDFAOB; RHO12; RHOH12

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-AC (PS100020)E. coli Selection:Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_001664.2

GTTCTCTCGTTAGTCCACGGTCTGGTCTTCAGCTACCCGCCTTCGTCTCCGAGTTTGCGA CTCGCGGACCGGCGTCCCCGGCGCGAAGAGGCTGGACTCGGATTCGTTGCCTGAGCAATG GCTGCCATCCGGAAGAACTGGTGATTGTTGGTGATGGAGCCTGTGGAAAGACATGCTTG CTCATAGTCTTCAGCAAGGACCAGTTCCCAGAGGTGTATGTGCCCACAGTGTTTGAGAAC TATGTGGCAGATATCGAGGTGGATGGAAAGCAGGTAGAATTGGCTTTGTGGGACACAGCT GGGCAGGAAGATTATGATCGCCTGAGGCCCCTCTCCTACCCAGATACCGATGTTATACTG ATGTGTTTTTCCATCGACAGCCCTGATAGTTTAGAAAACATCCCAGAAAAGTGGACCCCA GAAGTCAAGCATTTCTGTCCCAACGTGCCCATCATCCTGGTTGGGAATAAGAAGGATCTT CGGAATGATGAGCACACAGGCGGGAGCTAGCCAAGATGAAGCAGGAGCCGGTGAAACCT GAAGAAGGCAGAGATATGGCAAACAGGATTGGCGCTTTTGGGTACATGGAGTGTTCAGCA AAGACCAAAGATGGAGTGAGAGAGGTTTTTGAAATGGCTACGAGAGCTGCTCTGCAAGCT AGACGTGGGAAGAAAAATCTGGGTGCCTTGTCTTGTGAAACCTTGCTGCAAGCACAGCC CTTATGCGGTTAATTTTGAAGTGCTGTTTATTAATCTTAGTGTATGATTACTGGCCTTTT TCATTTATCTATAATTTACCTAAGATTACAAATCAGAAGTCATCTTGCTACCAGTATTTA GAAGCCAACTATGATTATTAACGATGTCCAACCCGTCTGGCCCACCAGGGTCCTTTTGAC ACTGCTCTAACAGCCCTCCTCTGCACTCCCACCTGACACACCAGGCGCTAATTCAAGGAA TTTCTTAACTTCTTGCTTCTTCTAGAAAGAGAAACAGTTGGTAACTTTTGTGAATTAGG CTGTAACTACTTTATAACTAACATGTCCTGCCTATTATCTGTCAGCTGCAAGGTACTCTG GTGAGTCACCACTTCAGGGCTTTACTCCGTAACAGATTTTGTTGGCATAGCTCTGGGGTG GGCAGTTTTTTGAAAATGGGCTCAACCAGAAAAGCCCAAGTTCATGCAGCTGTGGCAGAG TTACAGTTCTGTGGTTTCATGTTAGTTACCTTATAGTTACTGTGTAATTAGTGCCACTTA ATGTATGTTACCAAAAATAAATATCTACCCCAGACTAGATGTAGTATTTTTTGTATAA

Restriction Sites: Please inquire



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ACCN: NM_001664

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 customercom care team at customercom 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: <u>NM 001664.2</u>, <u>NP 001655.1</u>

RefSeq Size: 1926 bp
RefSeq ORF: 582 bp
Locus ID: 387
UniProt ID: P61586

Domains:

Cytogenetics: 3p21.31

Protein Families: Druggable Genome

Protein Pathways: Adherens junction, Axon guidance, Chemokine signaling pathway, Focal adhesion, Leukocyte

transendothelial migration, Neurotrophin signaling pathway, Pathogenic Escherichia coli infection, Pathways in cancer, Regulation of actin cytoskeleton, T cell receptor signaling pathway, TGF-beta signaling pathway, Tight junction, Vascular smooth muscle contraction,

Wnt signaling pathway

ras, RAS, RHO, RAB



Gene Summary:

This gene encodes a member of the Rho family of small GTPases, which cycle between inactive GDP-bound and active GTP-bound states and function as molecular switches in signal transduction cascades. Rho proteins promote reorganization of the actin cytoskeleton and regulate cell shape, attachment, and motility. Overexpression of this gene is associated with tumor cell proliferation and metastasis. Multiple alternatively spliced variants have been identified. [provided by RefSeq, Sep 2015]

Transcript Variant: This variant (1) encodes the longest isoform (1). Both variants 1 and 2 encode the same protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.