

## Product datasheet for RC217556

### RHOC (NM\_175744) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** RHOC (NM\_175744) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** RHOC  
**Synonyms:** ARH9; ARHC; H9; RHOH9  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC217556 representing NM\_175744  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCTGCAATCCGAAAGAAGCTGGTGATCGTTGGGGATGGTGCCTGTGGGAAGACCTGCCTCCTCATCG  
 TCTTCAGCAAGGATCAGTTTCCGGAGGTCTACGTCCTACTGTCTTTGAGAACTATATTGCGGACATTGA  
 GGTGGACGGCAAGCAGGTGGAGCTGGCTCTGTGGGACACAGCAGGGCAGGAAGACTATGATCGACTGCGG  
 CCTCTCTCTACCCGGACTGATGTCATCCTCATGTGCTTCTCCATCGACAGCCCTGACAGCCTGGAAA  
 ACATTCCTGAGAAGTGGACCCCAGAGGTGAAGCACTTCTGCCCAACGTGCCATCATCCTGGTGGGGAA  
 TAAGAAGGACCTGAGGCAAGACGACACACCAGGAGAGAGCTGGCCAAGATGAAGCAGGAGCCCGTTCGG  
 TCTGAGGAAGGCCGGGACATGGCGAACCAGGATCAGTGCCTTTGGGTACCTTGAGTGCTCAGCCAAGACCA  
 AGGAGGGAGTGGCGGAGGTGTTTGAGATGGCCACTCGGGCTGGCTCCAGGTCCGCAAGAACAAGCGTCC  
 GAGGGGCTGTCCATTCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC217556 representing NM\_175744  
 Red=Cloning site Green=Tags(s)

MAAIRKKLVIVGDGACGKTCLLIVFSKQDFPEVYVPTVFENYIADIEVDGKQVELALWDTAGQEDYDRLR  
 PLSYPD TDVILMCF SIDSPD SLENIPEKWTPEVKHFCPNVPIILVGNKKDLRQDEHTRRELAKMKQEPVR  
 SEEGRDMANRISAFGYLECSAKTKEGVREVFEMATRAGLQVRKNKRRRGCPIL

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

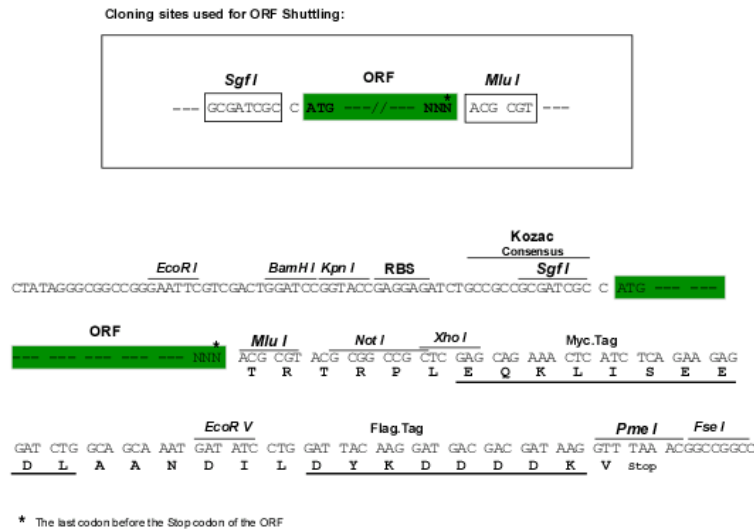


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**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6119\\_f10.zip](https://cdn.origene.com/chromatograms/mk6119_f10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_175744

**ORF Size:** 579 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:**

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\\_175744.5](#)

**RefSeq Size:** 1116 bp

**RefSeq ORF:** 582 bp

**Locus ID:** 389

UniProt ID: [P08134](#)

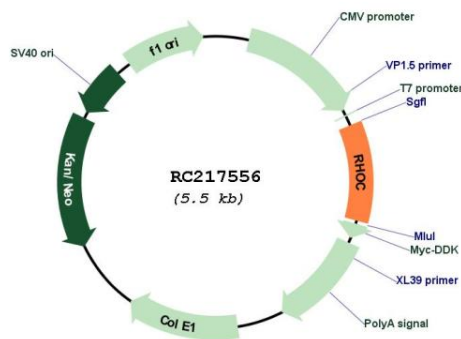
Cytogenetics: 1p13.2

Protein Families: Druggable Genome

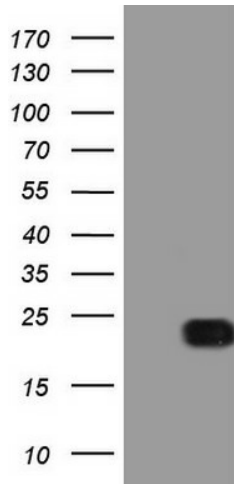
MW: 21.8 kDa

**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. The protein encoded by this gene is prenylated at its C-terminus, and localizes to the cytoplasm and plasma membrane. It is thought to be important in cell locomotion. Overexpression of this gene is associated with tumor cell proliferation and metastasis. Multiple alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq, Jul 2008]

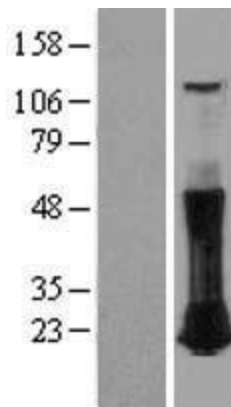
**Product images:**



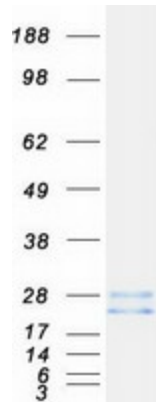
Circular map for RC217556



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RHOC (Cat# RC217556, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-RHOC (Cat# [TA806448]). Positive lysates [LY403579] (100ug) and [LC403579] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403579]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217556 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RHOC protein (Cat# [TP317556]). The protein was produced from HEK293T cells transfected with RHOC cDNA clone (Cat# RC217556) using MegaTran 2.0 (Cat# [TT210002]).