

Product datasheet for RC201722

RHOD (NM_014578) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: RHOD (NM_014578) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: RHOD
Synonyms: ARHD; Rho; RHOHP1; RHOM
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC201722 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGACGGCGGCCAGGCCGCGGGTGAGGAGGCCACCAGGCGTGCGGTCCGTCAAGGTGGTCTGGTGG
 GCGACGGCGGCTGCGGGAAGACGTCGCTGCTGATGGTCTTCGCCGATGGGGCCTTCCCCGAGAGCTACAC
 CCCCACGGTGTGGAGCGGTACATGGTCAACCTGCAAGTCAAAGGCAAACCTGTGCACCTCCACATCTGG
 GACACAGCAGGGCAAGATGACTATGACCGCCTGCGGCCCTGTTCTACCCTGACGCCAGCGTCCTGCTGC
 TTTGCTTCGATGTCACCAGCCGAACAGCTTTGACAACATCTTTAACCGTGGTACCCAGAAGTGAATCA
 TTTCTGCAAGAAGTACCCATCATCGTCGTGGGCTGCAAGACTGACCTGCGCAAGGACAAATCACTGGTG
 AACAAAGCTCCGAAGAAACGGATTGGAGCCTGTGACCTACCACAGGGGCCAGGAGATGGCGAGGTCCTGGG
 GCGCGGTGGCCTACCTCGAGTGTCTGGCTCGGCTCCATGACAACGTCCACGCCGTCTCCAGGAGGCCCGC
 CGAGGTGGCCCTCAGCAGCCGCGGTGCAACTTCTGGCGCGGATTACCCAGGGCTTTTGCCTGGTGACC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC201722 protein sequence
 Red=Cloning site Green=Tags(s)

MTAAQAAGEEAPPVRSVKVVLVGDGGCGKTSLLMVFADGAFPESTPTVFERYMVNLQVKGKPVHLHIW
 DTAGQDDYDRLRPLFYPDASVLLLCFDVTSFNFDNIFNRWYPEVNHFKKVPPIIVVGCKTLRDKSLV
 NKLRRNGLEPVYHRGQEMARSVGAVAYLECSARLHDNVHAVFQEAEEVALSSRGRNFWRRTIQGFCVVT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

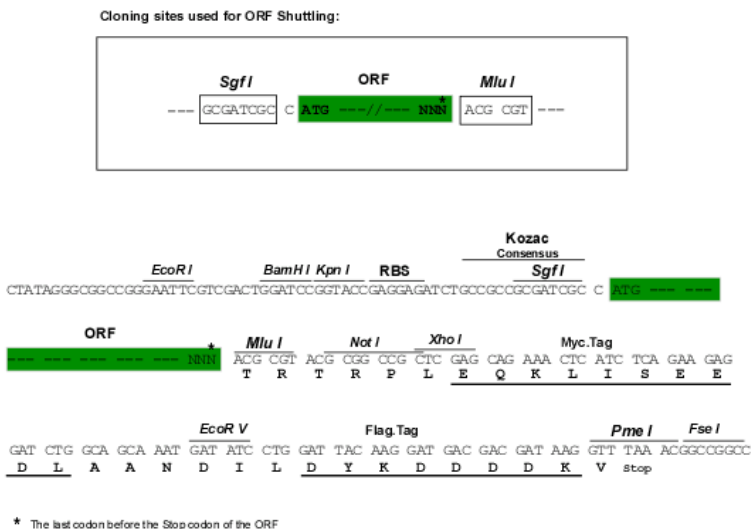


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Chromatograms: https://cdn.origene.com/chromatograms/mk6301_f01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_014578

ORF Size: 630 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_014578.4](#)

RefSeq Size: 1150 bp

RefSeq ORF: 633 bp

Locus ID: 29984

UniProt ID: [O00212](#)

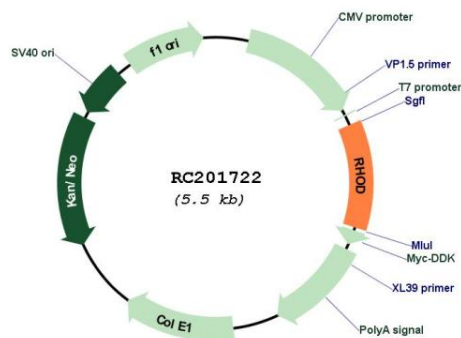
Cytogenetics: 11q13.2

Protein Pathways: Axon guidance

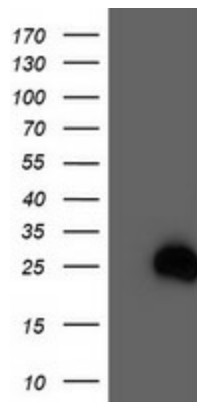
MW: 23.5 kDa

Gene Summary: Ras homolog, or Rho, proteins interact with protein kinases and may serve as targets for activated GTPase. They play a critical role in muscle differentiation. The protein encoded by this gene binds GTP and is a member of the small GTPase superfamily. It is involved in endosome dynamics and reorganization of the actin cytoskeleton, and it may coordinate membrane transport with the function of the cytoskeleton. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2014]

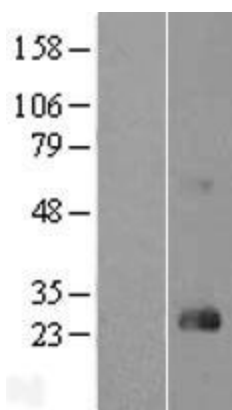
Product images:



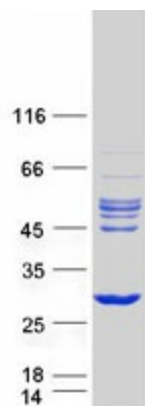
Circular map for RC201722



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RHOD (Cat# RC201722, 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-RHOD (Cat# [TA503891]). Positive lysates [LY415197] (100ug) and [LC415197] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY415197]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201722 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RHOD protein (Cat# [TP301722]). The protein was produced from HEK293T cells transfected with RHOD cDNA clone (Cat# RC201722) using MegaTran 2.0 (Cat# [TT210002]).