

## Anti-ROCK1 Rabbit Monoclonal Antibody Catalog # ABO16813

### Specification

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#### Anti-ROCK1 Rabbit Monoclonal Antibody - Product Information

Application	WB, IHC, IP, FC
Primary Accession	<a href="#">Q13464</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

#### Description

Anti-ROCK1 Rabbit Monoclonal Antibody . Tested in WB, IHC, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

#### Anti-ROCK1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 6093

#### Other Names

Rho-associated protein kinase 1, 2.7.11.1, Renal carcinoma antigen NY-REN-35, Rho-associated, coiled-coil-containing protein kinase 1, Rho-associated, coiled-coil-containing protein kinase I, ROCK-I, p160 ROCK-1, p160ROCK, ROCK1

#### Application Details

WB 1:500-1:2000<br>IHC 1:50-1:200<br>IP 1:50<br>FC 1:50

#### Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

#### Immunogen

A synthesized peptide derived from human ROCK1

#### Purification

Affinity-chromatography

#### Storage

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

#### Anti-ROCK1 Rabbit Monoclonal Antibody - Protein Information

Name ROCK1

Function

Protein kinase which is a key regulator of the actin cytoskeleton and cell polarity (PubMed:<a href="http://www.uniprot.org/citations/10436159" target="\_blank">10436159</a>, PubMed:<a href="http://www.uniprot.org/citations/10652353" target="\_blank">10652353</a>, PubMed:<a href="http://www.uniprot.org/citations/11018042" target="\_blank">11018042</a>, PubMed:<a href="http://www.uniprot.org/citations/11283607" target="\_blank">11283607</a>, PubMed:<a href="http://www.uniprot.org/citations/17158456" target="\_blank">17158456</a>, PubMed:<a href="http://www.uniprot.org/citations/18573880" target="\_blank">18573880</a>, PubMed:<a href="http://www.uniprot.org/citations/19131646" target="\_blank">19131646</a>, PubMed:<a href="http://www.uniprot.org/citations/8617235" target="\_blank">8617235</a>, PubMed:<a href="http://www.uniprot.org/citations/9722579" target="\_blank">9722579</a>). Involved in regulation of smooth muscle contraction, actin cytoskeleton organization, stress fiber and focal adhesion formation, neurite retraction, cell adhesion and motility via phosphorylation of DAPK3, GFAP, LIMK1, LIMK2, MYL9/MLC2, TPPP, PFN1 and PPP1R12A (PubMed:<a href="http://www.uniprot.org/citations/10436159" target="\_blank">10436159</a>, PubMed:<a href="http://www.uniprot.org/citations/10652353" target="\_blank">10652353</a>, PubMed:<a href="http://www.uniprot.org/citations/11018042" target="\_blank">11018042</a>, PubMed:<a href="http://www.uniprot.org/citations/11283607" target="\_blank">11283607</a>, PubMed:<a href="http://www.uniprot.org/citations/17158456" target="\_blank">17158456</a>, PubMed:<a href="http://www.uniprot.org/citations/18573880" target="\_blank">18573880</a>, PubMed:<a href="http://www.uniprot.org/citations/19131646" target="\_blank">19131646</a>, PubMed:<a href="http://www.uniprot.org/citations/23093407" target="\_blank">23093407</a>, PubMed:<a href="http://www.uniprot.org/citations/23355470" target="\_blank">23355470</a>, PubMed:<a href="http://www.uniprot.org/citations/8617235" target="\_blank">8617235</a>, PubMed:<a href="http://www.uniprot.org/citations/9722579" target="\_blank">9722579</a>). Phosphorylates FHOD1 and acts synergistically with it to promote SRC-dependent non-apoptotic plasma membrane blebbing (PubMed:<a href="http://www.uniprot.org/citations/18694941" target="\_blank">18694941</a>). Phosphorylates JIP3 and regulates the recruitment of JNK to JIP3 upon UVB-induced stress (PubMed:<a href="http://www.uniprot.org/citations/19036714" target="\_blank">19036714</a>). Acts as a suppressor of inflammatory cell migration by regulating PTEN phosphorylation and stability (By similarity). Acts as a negative regulator of VEGF-induced angiogenic endothelial cell activation (PubMed:<a href="http://www.uniprot.org/citations/19181962" target="\_blank">19181962</a>). Required for centrosome positioning and centrosome-dependent exit from mitosis (By similarity). Plays a role in terminal erythroid differentiation (PubMed:<a href="http://www.uniprot.org/citations/21072057" target="\_blank">21072057</a>). Inhibits podocyte motility via regulation of actin cytoskeletal dynamics and phosphorylation of CFL1 (By similarity). Promotes keratinocyte terminal differentiation (PubMed:<a href="http://www.uniprot.org/citations/19997641" target="\_blank">19997641</a>). Involved in osteoblast compaction through the fibronectin fibrillogenesis cell-mediated matrix assembly process, essential for osteoblast mineralization (By similarity). May regulate closure of the eyelids and ventral body wall by inducing the assembly of actomyosin bundles (By similarity).

### Cellular Location

Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole {ECO:0000250|UniProtKB:P70335}. Golgi apparatus membrane; Peripheral membrane protein. Cell projection, bleb. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P70335}. Cell membrane {ECO:0000250|UniProtKB:P70335}. Cell projection, lamellipodium {ECO:0000250|UniProtKB:P70335}. Cell projection, ruffle {ECO:0000250|UniProtKB:P70335}. Note=A small proportion is associated with Golgi membranes (PubMed:12773565). Associated with the mother centriole and an intercentriolar linker (By similarity). Colocalizes with ITGB1BP1 and ITGB1 at the cell membrane predominantly in lamellipodia and membrane ruffles, but also in retraction fibers (By similarity). Localizes at the cell membrane in an ITGB1BP1-dependent manner (By similarity). {ECO:0000250|UniProtKB:P70335, ECO:0000269|PubMed:12773565}

### Tissue Location

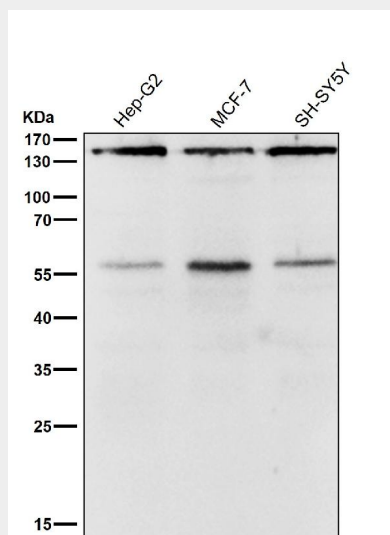
Detected in blood platelets.

## Anti-ROCK1 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-ROCK1 Rabbit Monoclonal Antibody - Images



All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.