



Mouse Monoclonal Antibody **ROCK1** conjugated to Sepharose Beads

CatalogNo: **ANT8179-M**

Size 200ul

Storage Store at 4 °C for frequent use

Description

This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified beads. It is useful for immunoprecipitation.

ROCK1 (ANT0005R) Rabbit mAb

Formulation: Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg ANaN3.

Host Species

- Rabbit

MW

- 158kD (Calculated)
- 158kD (Observed)

Reactivity

- Human,Mouse,Rat,

Isotype

- IgG,Kappa

Applications

- WB,IHC,IF,IP,ELISA

Recommended Dilution Ratios

IP

Basic Information

Clonality Monoclonal

Clone Number ANT0005R

Immunogen Information

Sequence Rho-associated protein kinase 1

Target Information

Gene name >>cGMP-PKG signaling pathway;>>cAMP signaling pathway;>>Chemokine signaling pathway;>>Sphingolipid signaling pathway;>>Vascular smooth muscle contraction;>>TGF-beta signaling pathway;>>Axon guidance;>>Focal adhesion;>>Tight junction;>>Platelet activation;>>Leukocyte transendothelial migration;>>Regulation of actin cytoskeleton;>>Oxytocin signaling pathway;>>Pathogenic Escherichia coli infection;>>Shigellosis;>>Yersinia infection;>>Human cytomegalovirus infection;>>Pathways in cancer;>>Proteoglycans in cancer;>>MicroRNAs in cancer

Protein Name ROCK1

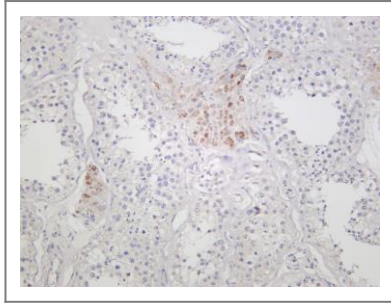
Organism	Gene ID	UniProt ID
Human	6093 ;	Q13464 ;
Mouse	19877 ;	P70335 ;
Rat	81762 ;	Q63644 ;

Cellular Localization Cytoplasm, Membrane

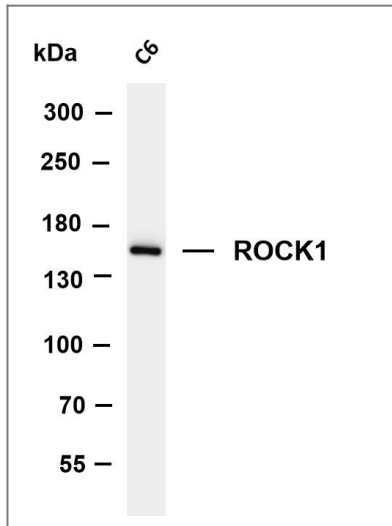
Tissue specificity Detected in blood platelets.

Function Catalytic activity:ATP + a protein = ADP + a phosphoprotein.,Domain:The C-terminal autoinhibitory domain interferes with kinase activity. RHOA binding leads to a conformation change and activation of the kinase. Truncated ROCK1 is constitutively activated.,enzyme regulation:Activated by RHOA binding.,Function:Protein kinase that phosphorylates a large number of important signaling proteins, and thereby regulates the assembly of the actin cytoskeleton, cell migration, invasiveness of tumor cells, smooth muscle contraction and neurite outgrowth. Necessary for apoptotic membrane blebbing. Plays a role in smooth muscle contraction. Required for centromere positioning and centromere-dependent exit from mitosis.,miscellaneous:Inhibited by Y-27632.,ANTM:Autophosphorylated on serine and threonine residues. Phosphorylated upon DNA damage, probably by ATM or ATR.,PTM:Cleaved by caspase-3 during apoptosis. This leads to constitutive activation of the kinase and membrane blebbing.,similarity:Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family.,similarity:Contains 1 AGC-kinase C-terminal domain.,similarity:Contains 1 PH domain.,similarity:Contains 1 phorbol-ester/DAG-type zinc finger.,similarity:Contains 1 protein kinase domain.,similarity:Contains 1 REM (Hr1) repeat.,subcellular location:Associated with the mother centriole and an intercentriolar linker (By similarity). A small proportion is associated with Golgi membranes.,subunit:Binds RHOA (activated by GTP). Interacts with ADD1, GEM, RHOB, RHOC, MYLC2B and VIM (By similarity). Binds RHOE, PPP1R12A, LIMK1 and LIMK2. Interacts with TSG101.,tissue specificity:Detected in blood platelets.,

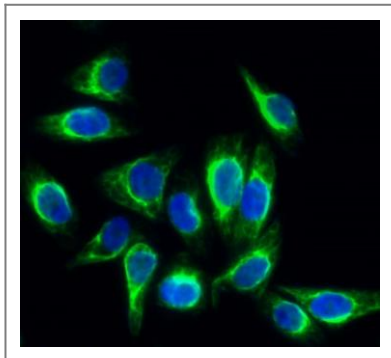
Validation Data



Human testis was stained with anti-ROCK1 (ANT0005R) rabbit antibody



Various whole cell lysates were separated by 4-8% SDS-PAGE, and the membrane was blotted with anti-ROCK1 (ANT0005R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: C6 Predicted band size: 158kDa Observed band size: 158kDa



Immunofluorescence analysis of HeLa cell. 1, Rock-1 Antibody(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). 3 DAPI(blue) 10min.

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Contact Antagene Inc Tel 1-866-964-2589 Email: info@antageneinc.com