产品货号: APRab17313



### 产品概述 (Summary)

产品名称 (Production Name) Rock-1 Rabbit Polyclonal Antibody

描述 (Description) Rabbit polyclonal Antibody

宿主 (Host) Rabbit

**应用 (Application)** WB,IHC,ICC/IF,ELISA

种属反应性 (Reactivity) Human, Mouse, Rat, Monkey

## 产品性能 (Performance)

偶联物 (Conjugation)Unconjugated修饰 (Modification)Unmodified

同种型 (Isotype) IgG

克隆 (Clonality) Polyclonal 形式 (Form) Liquid

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid 存放说明 (Storage)

freeze/thaw cycles.

Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% 储存溶液 (Buffer)

New type preservative N.

纯化方式 (Purification) Affinity purification

## 免疫原信息 (Immunogen)

基因名 (Gene Name) ROCK1

ROCK1; Rho-associated protein kinase 1; Renal carcinoma antigen NY-REN-35;

别名 (Alternative Names) Rho-associated; coiled-coil-containing protein kinase 1; Rho-associated,

coiled-coil-containing protein kinase I; ROCK-I; p160 ROCK-1; p160ROCK

基因 ID (Gene ID) 6093.0

Q13464.The antiserum was produced against synthesized peptide derived 蛋白ID (SwissProt ID)

from human Rock-1. AA range:262-311

## 产品应用 (Application)

稀释比 (Dilution Ratio) WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000

蛋白分子量 (Molecular Weight) 158kDa

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### 研究背景 (Background)

This gene encodes a protein serine/threonine kinase that is activated when bound to the GTP-bound form of Rho. The small GTPase Rho regulates formation of focal adhesions and stress fibers of fibroblasts, as well as adhesion and aggregation of platelets and lymphocytes by shuttling between the inactive GDP-bound form and the active GTP-bound form. Rho is also essential in cytokinesis and plays a role in transcriptional activation by serum response factor. This protein, a downstream effector of Rho, phosphorylates and activates LIM kinase, which in turn, phosphorylates cofilin, inhibiting its actin-depolymerizing activity. A pseudogene, related to this gene, is also located on chromosome 18. [provided by RefSeq, Aug 2015], catalytic activity:ATP + a protein = ADP + a phosphoprotein., domain:The C-terminal auto-inhibitory 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., PTM: 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.,

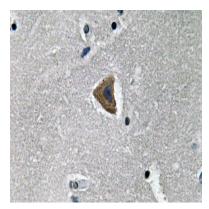
#### 研究领域(Research Area)

Chemokine; Vascular smooth muscle contraction; WNT; WNT-T CELLTGF-beta; Axon guidance; Focal adhesion; Leukocyte transendothelial migration; Regulates Actin and Cytoskeleton; Pathogenic Escherichia coli infection;

# 图片 (Image Data)

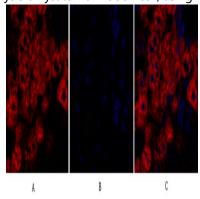
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Immunohistochemistry analysis of Rock-1 antibody in paraffin-embedded human brain tissue.

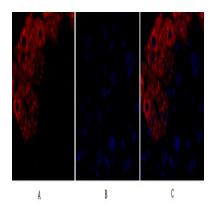
Western blot analysis of lysate from COS7 cell, using Rock-1 antibodys.



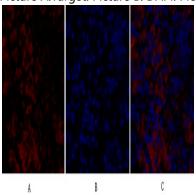
Immunofluorescence analysis of mouse-liver tissue. 1,Rock-1 Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

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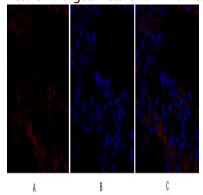




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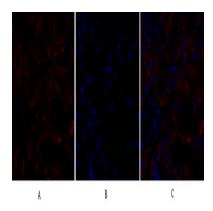
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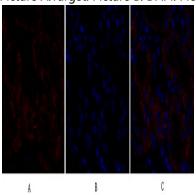
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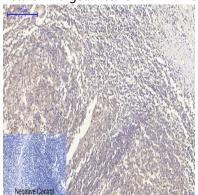




Immunofluorescence analysis of mouse-kidney tissue. 1,Rock-1 Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of mouse-kidney tissue. 1,Rock-1 Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunohistochemical analysis of paraffin-embedded Human-Tonsil tissue. 1,Rock-1 Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.

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## 注意事项 (Note)

For research use only .