


Product datasheet

Anti-ROCK1 antibody ab97592

3 图像

概述

产品名称	Anti-ROCK1抗体
描述	兔多克隆抗体to ROCK1
宿主	Rabbit
经测试应用	适用于: ICC/IF, WB, IHC-P
种属反应性	与反应: Human 预测可用于: Mouse, Rat, Rabbit, Cow, Zebrafish 
免疫原	Recombinant protein fragment containing a sequence corresponding to a region within amino acids 107 and 381 of human ROCK1 (Q13464)
阳性对照	293T, A431, H1299, HeLa, HepG2, Molt-4 or Raji cell lysate DLD1 xenograft HeLa cells

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
存储溶液	Preservative: 0.01% Thimerosal (merthiolate) Constituents: 10% Glycerol, 0.1M Tris, 0.1M Glycine, pH 7.0
纯度	Immunogen affinity purified
克隆	多克隆
同种型	IgG

应用

Our [Abpromise guarantee](#) covers the use of **ab97592** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Ab评论	说明
ICC/IF		1/100 - 1/200.
WB		1/500 - 1/3000. Predicted molecular weight: 158 kDa.

应用	Ab评论	说明
IHC-P		1/100 - 1/500.

## 靶标

### 功能

Protein kinase which is a key regulator of actin cytoskeleton and cell polarity. 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, PFN1 and PPP1R12A. Phosphorylates FHOD1 and acts synergistically with it to promote SRC-dependent non-apoptotic plasma membrane blebbing. Phosphorylates JIP3 and regulates the recruitment of JNK to JIP3 upon UVB-induced stress. Acts as a suppressor of inflammatory cell migration by regulating PTEN phosphorylation and stability. Acts as a negative regulator of VEGF-induced angiogenic endothelial cell activation. Required for centrosome positioning and centrosome-dependent exit from mitosis. Plays a role in terminal erythroid differentiation. May regulate closure of the eyelids and ventral body wall by inducing the assembly of actomyosin bundles. Promotes keratinocyte terminal differentiation. Involved in osteoblast compaction through the fibronectin fibrillogenesis cell-mediated matrix assembly process, essential for osteoblast mineralization.

### 组织特异性

Detected in blood platelets.

### 序列相似性

Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family.  
 Contains 1 AGC-kinase C-terminal domain.  
 Contains 1 PH domain.  
 Contains 1 phorbol-ester/DAG-type zinc finger.  
 Contains 1 protein kinase domain.  
 Contains 1 REM (Hr1) repeat.

### 结构域

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.

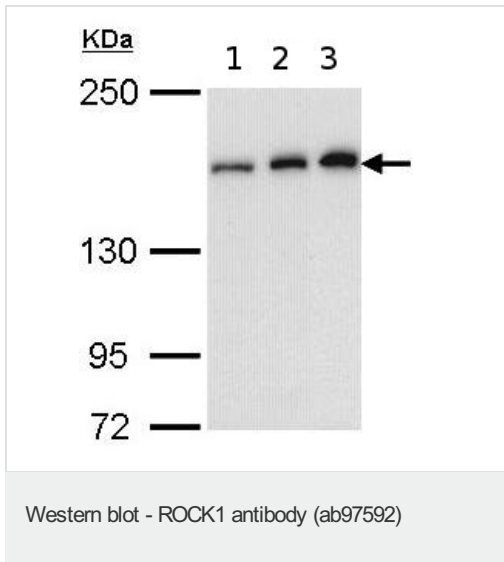
### 翻译后修饰

Autophosphorylated on serine and threonine residues.  
 Cleaved by caspase-3 during apoptosis. This leads to constitutive activation of the kinase and membrane blebbing.

### 细胞定位

Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole. Golgi apparatus membrane. Cell projection, bleb. Cytoplasm, cytoskeleton. Cell membrane. Cell projection, lamellipodium. Cell projection, ruffle. Associated with the mother centriole and an intercentriolar linker. Colocalizes with ITGB1BP1 and ITGB1 at the cell membrane predominantly in lamellipodia and membrane ruffles, but also in retraction fibers. Localizes at the cell membrane in an ITGB1BP1-dependent manner (By similarity). A small proportion is associated with Golgi membranes.

## 图片



**All lanes :** Anti-ROCK1 antibody (ab97592)  
at 1/1000 dilution

**Lane 1 :** A431 whole cell lysate

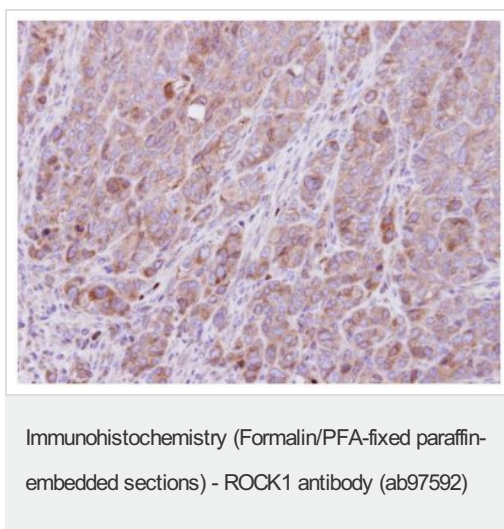
**Lane 2 :** H1299 whole cell lysate

**Lane 3 :** MOLT-4 whole cell lysate

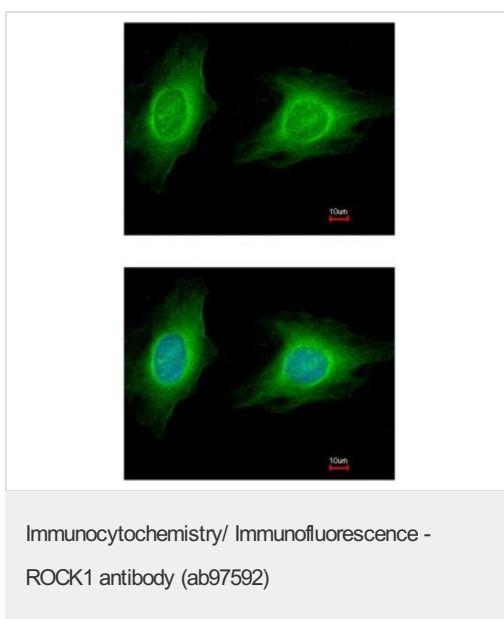
Lysates/proteins at 30 µg per lane.

**Predicted band size:** 158 kDa

Gel conc 5% (SDS PAGE)



ab97592, at a 1/500 dilution, staining human ROCK1 in DLD1 xenograft, using Immunohistochemistry, Formalin/PFA-fixed paraffin-embedded tissue.



Immunofluorescence analysis of methanol-fixed HeLa, using ab97592 at a 1/200 dilution (top image) and costained with a fluorescent stain (bottom image).

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