

For Research Use Only

# ROCK1 Recombinant antibody

Catalog Number: 83166-5-RR



## Basic Information

|   |  |  |
|---|--|--|
| <b>Catalog Number:</b><br>83166-5-RR                          | <b>GenBank Accession Number:</b><br>BC113114                                 | <b>Purification Method:</b><br>Protein A purification                                      |
| <b>Size:</b><br>100ul, Concentration: 1000 ug/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>6093  | <b>CloneNo.:</b><br>230423C6   |
| <b>Source:</b><br>Rabbit                                      | <b>UNIPROT ID:</b><br>Q13464   | <b>Recommended Dilutions:</b><br>WB 1:5000-1:50000<br>IHC 1:50-1:500<br>IF/ICC 1:125-1:500 |
| <b>Isotype:</b><br>IgG  | <b>Full Name:</b><br>Rho-associated, coiled-coil containing protein kinase 1 |  |
| <b>Immunogen Catalog Number:</b><br>AG16317                   | <b>Calculated MW:</b><br>1354 aa, 158 kDa                                    |  |
|   | <b>Observed MW:</b><br>150-160 kDa   |  |

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, FC (Intra), ELISA

**Species Specificity:**  
human, mouse

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB:** Jurkat cells, NIH/3T3 cells, HeLa cells, A431 cells, RAW 264.7 cells

**IHC:** human intrahepatic cholangiocarcinoma tissue,

**IF/ICC:** HeLa cells,

## Background Information

ROCK1, also named as p160ROCK and NY-REN-35, belongs to the protein kinase superfamily and AGC Ser/Thr protein kinase family. ROCK1 phosphorylates and activates DAPK3, which then regulates myosin light chain phosphatase through phosphorylation of MYPT1 thereby regulating the assembly of the actin cytoskeleton, cell migration, invasiveness of tumor cells, smooth muscle contraction and neurite outgrowth. ROCK1 is required for centromere positioning and centromere-dependent exit from mitosis. It is necessary for apoptotic membrane blebbing. ROCK1 catalyzes the reaction: ATP + a protein = ADP + a phosphoprotein.

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

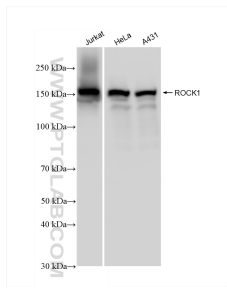
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

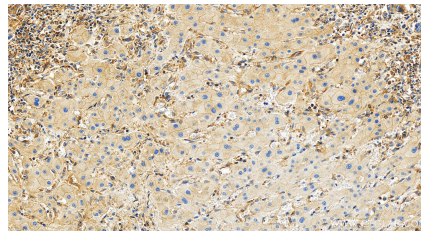
E: proteintech@ptglab.com  
W: ptglab.com

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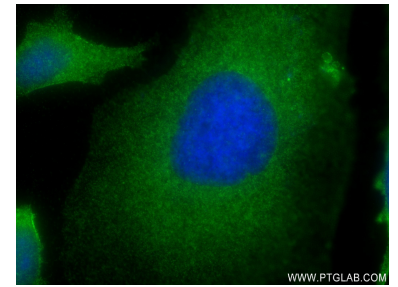
## Selected Validation Data



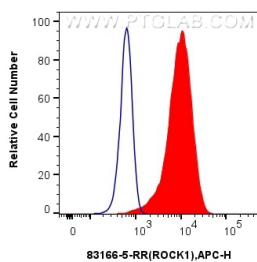
Various lysates were subjected to SDS PAGE followed by western blot with 83166-5-RR (ROCK1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



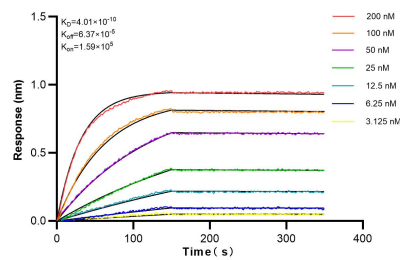
Immunohistochemical analysis of paraffin-embedded human intrahepatic cholangiocarcinoma tissue slide using 83166-5-RR (ROCK1 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using ROCK1 antibody (83166-5-RR, Clone: 230423C6) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1).



$1 \times 10^6$  HeLa cells were intracellularly stained with 0.25  $\mu$ g ROCK1 Recombinant antibody (83166-5-RR, Clone:230423C6) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25  $\mu$ g Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Biolayer interferometry (BLI) kinetic assays of 83166-5-RR against Human ROCK1 were performed. The affinity constant is 0.401 nM.