

# AbboMax, Inc

Innovation at Work

## Rabbit anti Phospho-ROCKII(pThr<sup>249</sup>) Antibody

Synonym: Rho Kinase; Rho-associated kinase-alpha (ROK $\alpha$ );  
Rho-associated, coiled-coil containing protein kinase II (ROCKII)

### Order Information

Description: Rabbit anti ROCKII(pThr<sup>249</sup>)  
Catalogue#: 602-870  
Lot#: See the label  
Size: 100 ug/200 ul  
Host: Rabbit  
Clone: N/A  
Application: ELISA, WB, IHC  
Reactivity: Hu, Rt, Ms, Ck Dg, Bv

### ANTIGEN PREPARATION

A synthetic peptide corresponding to the epitope -CDTAV- with a single phosphorylation site Thr249 of human Rho Kinase/RockII protein. This sequence is identical among human, mouse, rat, chicken, dog and bovine.

### BACKGROUND

Rho A-dependent kinase (ROCKII), or ROK-alpha, is identified a serine/threonine kinase, a downstream effector of the small GTPase Rho, mediating effects of Rho on the actin cytoskeleton, formation of actin stress fibers and focal adhesions, ROCKII alters cardiac myofilament response to Ca<sup>2+</sup> by mechanisms involving phosphorylation of thin filament proteins. ROCK-II induces a depression in maximum ATPase rate and tension, which is associated with phosphorylation of troponin T (TnT), troponin I (TnI), and myosin-binding protein C (C-protein). The phosphorylation of Rho-kinase at Thr 249, Thr 396 plays important role in G-protein signaling..

### PURIFICATION

The Rabbit IgG is purified by Site-specific Epitope Affinity Purification.

### SPECIFICITY

This antibody recognizes ~165 kDa of human ROCKII at a phosphorylation site of Thr249. It does not react to non-phosphorylated protein. This antibody also reacts with mouse and rat. The other species are not tested.

### FORMULATION

This affinity purified antibody is supplied in sterile Tris-buffered saline (pH7.2) containing antibody stabilizer

### STORAGE

The antibodies are stable for 12 months from date of receipt when stored at -20°C to -70°C. The antibodies can be stored at 2°C-8°C for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

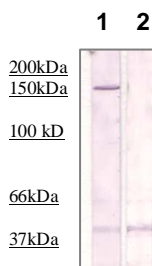
### APPLICATIONS/SUGGESTED WORKING DILUTIONS

Western Blot	0.1-1 $\mu$ g/ml
ELISA	0.01-0.1 $\mu$ g/ml
Immunoprecipitation	2-5 $\mu$ g/ml
IHC	0.5-2 $\mu$ g/ml
Flow cytometry	Not tested

<b>MOLECULAR WEIGHT:</b>	165 kDa
<b>POSITIVE CONTROL:</b>	Conditioned 3T3 cell
<b>CELLULAR LOCATION:</b>	N/A

Optimal dilutions should be determined by researchers for the specific applications.

### DATA ATTACHMENTS



**Western Blot:** The cell lysate derived from Conditioned 3T3 cell was immunoprecipitated by Rabbit anti Rho Kinase (pT249), (Cat#602-870), then immunoprobed by the same antibody at 1:500 (lane 1). Lane 2 is a negative control.

### REFERENCES

Susan Vahebi, et al, Functional Effects of Rho-Kinase-Dependent Phosphorylation of Specific Sites on Cardiac Troponin. *Circulation Research*. 2005;96:740-747.

**FOR RESEARCH USE ONLY.**

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