

Anti-ROCK2 Antibody

Catalog Number: PA1242

About ROCK2

Rho-associated kinase (ROCK), including the ROCK-I and ROCK-II isoforms, is a protein kinase involved in signaling from Rho to actin cytoskeleton. Serine/threonine kinase ROCK II/Rho kinase, which is an isozyme of ROCK I, is one of the targets for the small GTPase Rho. ROCK II regulates the formation of actin stress fibers and focal adhesions, cytokinesis, smooth muscle contraction, and the activation of c-fos serum response element. Sequencing analysis has shown that human ROCK II contains 1388 amino acid residues with a calculated molecular mass of approximately 161 kDa. Fluorescence in situ hybridization analysis showed that the human ROCK II gene is located on chromosome 2p24. Thumkeo et al. (2003) concluded that ROCK-II is essential in inhibiting blood coagulation and maintaining blood flow in the endothelium-free labyrinth layer and that loss of ROCK-II leads to thrombus formation, placental dysfunction, intrauterine growth retardation, and fetal death.

Overview

Product Name	Anti-ROCK2 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-ROCK2 Antibody catalog # PA1242. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, WB
Clonality	Polyclonal G9
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	O75116

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human ROCK2, identical to the related rat and mouse sequences.
Predicted Reactive Species	Chicken
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross reactivity with other proteins
Form	Lyophilized



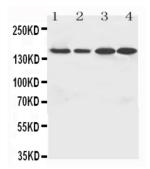


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Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5ug/ml, Human, Rat, Mouse

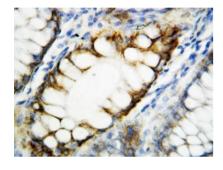


Anti-ROCK2 Antibody (PA1242) Images



Anti-ROCK2 antibody, PA1242, Western blotting

Lane 1: MCF-7 Cell Lysate Lane 2: HELA Cell Lysate Lane 3: SMMC Cell Lysate Lane 4: MM453 Cell Lysate



Anti-ROCK2 antibody, PA1242, IHC(P) IHC(P): Human Rectal Cancer Tissue

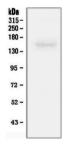


Figure 3. Western blot analysis of ROCK2 using anti-ROCK2 antibody (PA1242).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: rat brain tissue lysate.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ROCK2 antigen affinity purified polyclonal antibody (Catalog # PA1242) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for ROCK2 at approximately 161KD. The expected band size for ROCK2 is at 161KD.

6 Publications Citing This Product

- 1. PubMed ID: 32990282, Han F,Xu H,Shen JX,Pan C,Yu ZH,Chen JJ,Zhu XL,Cai YF,Lu YP.RhoA/Rock2/Limk1/cofilin1 pathway is involved in attenuation of neuronal dendritic spine loss by paeonol in the frontal cortex of D-galactose and aluminum? induced Alzheimer's disease? like ra
- 2. PubMed ID: 26604905, The role of Rho/Rho-kinase pathway and the neuroprotective effects of fasudil in chronic cerebral ischemia
- 3. PubMed ID: 20493836, 8,9-Epoxyeicosatrienoic acid analog protects pulmonary artery smooth muscle cells from apoptosis via ROCK pathway



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