

Basic Information

Product Name	Anti-ROCK2 Antibody		
Gene Name	ROCK2		
Source	Rabbit		
Clonality	Polyclonal		
Isotype	IgG		
Species Reactivity	human, mouse, rat		
Tested Application	WB, FCM, ICC/IF, ELISA		
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.		
Immunogen	E.coli-derived human ROCK2 recombinant protein (Position: E652-D909).		
Concentration	500 ug/ml		
Purification	Immunogen affinity purified.		
Observed MW	161 kDa		
Dilution Ratios	Western blot (WB):	1:500-2000	
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400	
	Flow Cytometry (Fixed):	1:50-200	
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000	

Storage

12 months from date of receipt, -20°C as supplied.

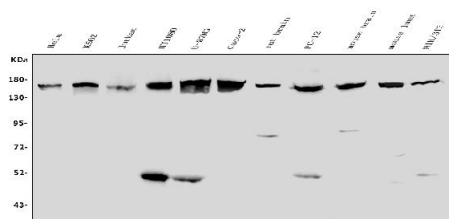
Background Information

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. 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.

Reference

Anti-ROCK2 Antibody被引用在2文献中。

Selected Validation Data



Western blot analysis of ROCK2 using anti-ROCK2 antibody

(A01023-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HELA whole cell lysates,

Lane 2: human K562 whole cell lysates,

Lane 3: human Jurkat whole cell lysates,

Lane 4: human HT1080 whole cell lysates,

Lane 5: human U-87MG whole cell lysates,

Lane 6: human CACO-2 whole cell lysates,

Lane 7: rat brain tissue lysates,

Lane 8: rat PC-12 whole cell lysates,

Lane 9: mouse brain tissue lysates,

Lane 10: mouse lung tissue lysates,

Lane 11: mouse NIH/3T3 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-ROCK2 antigen

affinity purified polyclonal antibody (A01023-1) at a dilution of

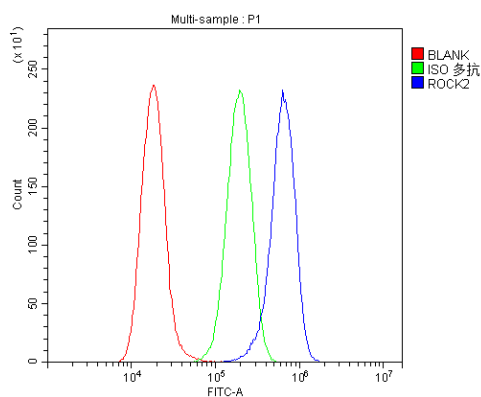
1:1000 and probed with a goat anti-rabbit IgG-HRP secondary

antibody (Catalog # BA1054). The signal is developed using ECL Plus

Western Blotting Substrate (Catalog # AR1197). A specific band was

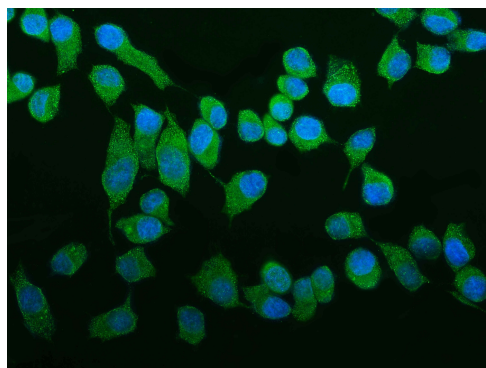
detected for ROCK2 at approximately 161 kDa. The expected band

size for ROCK2 is at 161 kDa.



Flow Cytometry analysis of A549 cells using anti-ROCK2 antibody (A01023-1).

Overlay histogram showing A549 cells stained with A01023-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-ROCK2 Antibody (A01023-1) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



ICC/IF analysis of ROCK2 using anti-ROCK2 antibody (A01023-1). ROCK2 was detected in an immunocytochemical section of HepG2 cells. The section was incubated with rabbit anti-ROCK2 Antibody (A01023-1) at a dilution of 1:100. Fluoro488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).