

Basic Information

Product Name	Anti-ROCK1 Antibody	
Gene Name	ROCK1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat, monkey	
Tested Application	WB, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human ROCK1 recombinant protein (Position: K601-R833).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	158 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	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.

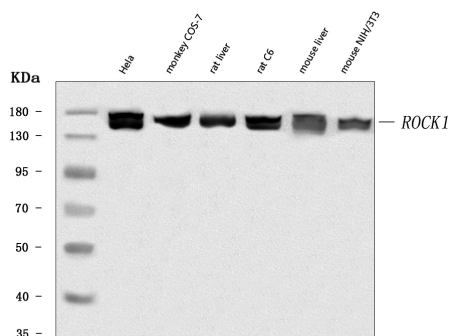
Background Information

This gene encodes a protein serine/threonine kinase that is activated when bound to the GTP-bound form of Rho. The small GTPase Rho regulates formation of focal adhesions and stress fibers of fibroblasts, as well as adhesion and aggregation of platelets and lymphocytes by shuttling between the inactive GDP-bound form and the active GTP-bound form. Rho is also essential in cytokinesis and plays a role in transcriptional activation by serum response factor. This protein, a downstream effector of Rho, phosphorylates and activates LIM kinase, which in turn, phosphorylates cofilin, inhibiting its actin-depolymerizing activity. A pseudogene, related to this gene, is also located on chromosome 18.

Reference

Anti-ROCK1 Antibody被引用在1文献中。

Selected Validation Data



Western blot analysis of ROCK1 using anti-ROCK1 antibody (A00722-4).

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: monkey COS-7 whole cell lysates,

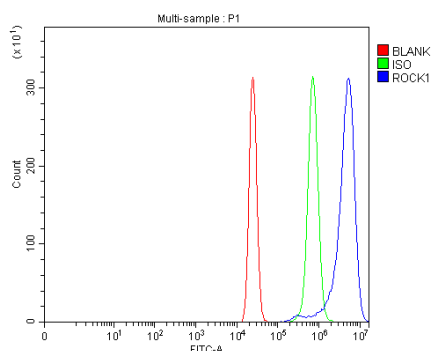
Lane 3: rat liver tissue lysates,

Lane 4: rat C6 whole cell lysates,

Lane 5: mouse liver tissue lysates,

Lane 6: mouse NIH/3T3 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-ROCK1 antigen affinity purified polyclonal antibody (A00722-4) 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 ROCK1 at approximately 158 kDa. The expected band size for ROCK1 is at 158 kDa.



Flow Cytometry analysis of U2OS cells using anti-ROCK1 antibody (A00722-4).

Overlay histogram showing U2OS cells stained with A00722-4 (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-ROCK1 Antibody (A00722-4) at 1:100 dilution for 30 min at 20°C. DyLight®488 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.