

ARG40490 anti-ROCK1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes ROCK1
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	ROCK1
Species	Human
Immunogen	Synthetic peptide derived from Human ROCK1.
Conjugation	Un-conjugated
Alternate Names	Rho-associated, coiled-coil-containing protein kinase I; p160ROCK; p160 ROCK-1; ROCK-I; EC 2.7.11.1; Renal carcinoma antigen NY-REN-35; P160ROCK; Rho-associated protein kinase 1; Rho-associated, coiled-coil-containing protein kinase 1

Application Instructions

Application table	Application	Dilution
	FACS	1:50
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	IP	1:50
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	150 kDa	

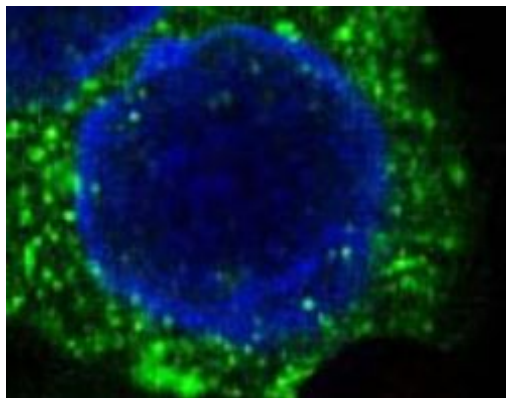
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

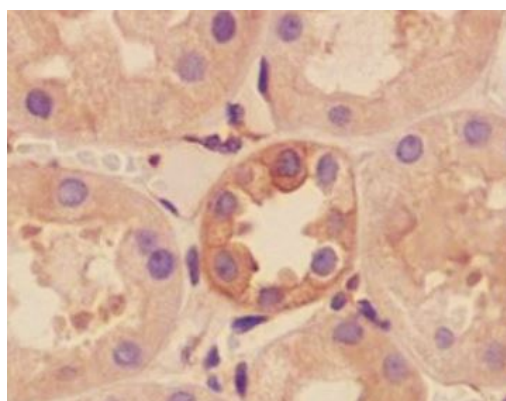
Bioinformation

Gene Symbol	ROCK1
Gene Full Name	Rho-associated, coiled-coil containing protein kinase 1
Background	<p>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. [provided by RefSeq, Aug 2015]</p>
Function	<p>Protein kinase which is a key regulator of actin cytoskeleton and cell polarity. Involved in regulation of smooth muscle contraction, actin cytoskeleton organization, stress fiber and focal adhesion formation, neurite retraction, cell adhesion and motility via phosphorylation of DAPK3, GFAP, LIMK1, LIMK2, MYL9/MLC2, PFN1 and PPP1R12A. Phosphorylates FHOD1 and acts synergistically with it to promote SRC-dependent non-apoptotic plasma membrane blebbing. Phosphorylates JIP3 and regulates the recruitment of JNK to JIP3 upon UVB-induced stress. Acts as a suppressor of inflammatory cell migration by regulating PTEN phosphorylation and stability. Acts as a negative regulator of VEGF-induced angiogenic endothelial cell activation. Required for centrosome positioning and centrosome-dependent exit from mitosis. Plays a role in terminal erythroid differentiation. May regulate closure of the eyelids and ventral body wall by inducing the assembly of actomyosin bundles. Promotes keratinocyte terminal differentiation. Involved in osteoblast compaction through the fibronectin fibrillogenesis cell-mediated matrix assembly process, essential for osteoblast mineralization. [UniProt]</p>
Calculated Mw	158 kDa
PTM	<p>Autophosphorylated on serine and threonine residues.</p> <p>Cleaved by caspase-3 during apoptosis. This leads to constitutive activation of the kinase and membrane blebbing. [UniProt]</p>
Cellular Localization	<p>Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole. Golgi apparatus membrane; Peripheral membrane protein. Cell projection, bleb. Cytoplasm, cytoskeleton. Cell membrane. Cell projection, lamellipodium. Cell projection, ruffle. Note=Associated with the mother centriole and an intercentriolar linker. Colocalizes with ITGB1BP1 and ITGB1 at the cell membrane predominantly in lamellipodia and membrane ruffles, but also in retraction fibers. [UniProt]</p>



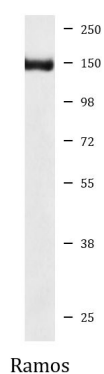
ARG40490 anti-ROCK1 antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG40490 anti-ROCK1 antibody.



ARG40490 anti-ROCK1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human kidney tissue stained with ARG40490 anti-ROCK1 antibody.



ARG40490 anti-ROCK1 antibody WB image

Western blot: Ramos cell lysate stained with ARG40490 anti-ROCK1 antibody.