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ROCK2 Antibody

Rabbit mAb
Catalog # AP91415

Product Information

Application	WB, IF, ICC
Primary Accession	O75116
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	p164 ROCK 2; Rho kinase 2; ROCK 2; Rock II; Rock2m; ROK alpha; ROKalpha;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	160900

Additional Information

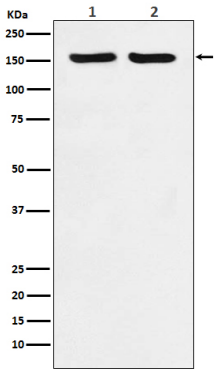
Dilution	WB 1:1000~1:5000 ICC/IF 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human ROCK2
Description	Regulates the assembly of the actin cytoskeleton. Promotes formation of stress fibers and of focal adhesion complexes. Plays a role in smooth muscle contraction.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	ROCK2
Synonyms	KIAA0619
Function	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 ADD1, BRCA2, CNN1, EZR, DPYSL2, EP300, MSN, MYL9/MLC2, NPM1, RDX, PPP1R12A and VIM. Phosphorylates SORL1 and IRF4. Acts as a negative regulator of VEGF-induced angiogenic endothelial cell activation. Positively regulates the activation of p42/MAPK1- p44/MAPK3 and of p90RSK/RPS6KA1 during myogenic differentiation. Plays an important role in the timely initiation of centrosome duplication. Inhibits keratinocyte terminal differentiation. May regulate closure of the eyelids and ventral body wall through organization of actomyosin bundles. Plays a critical role in the regulation of spine and synaptic properties in the hippocampus. Plays an important role in generating the circadian rhythm of the aortic myofilament Ca(2+) sensitivity and vascular

	contractility by modulating the myosin light chain phosphorylation.
Cellular Location	Cytoplasm. Cell membrane; Peripheral membrane protein. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome Note=Cytoplasmic, and associated with actin microfilaments and the plasma membrane.
Tissue Location	Expressed in the brain (at protein level).

Images



Western blot analysis of ROCK2 expression in (1) Hela cell lysate; (2) RAW264.7 cell lysate.

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