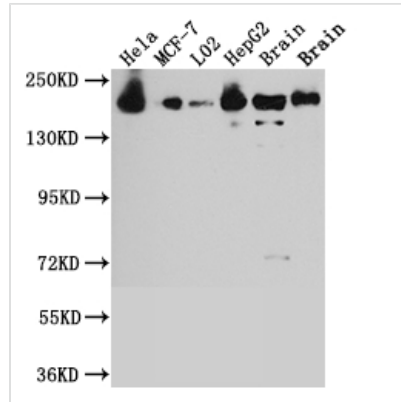




ROCK2 Antibody

Product Code	CSB-RA152329A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	O75116
Immunogen	A synthesized peptide derived from human ROCK2
Species Reactivity	Human, Mouse, Rat
Tested Applications	ELISA, WB, IF; Recommended dilution: WB:1:500-1:5000, IF:1:20-1:200
Relevance	<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 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.</p>
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Cell biology; Signal transduction
Gene Names	ROCK2
Accession NO.	10E1
Image	


Western Blot

Positive WB detected in: HeLa whole cell lysate, MCF-7 whole cell lysate, L02 whole cell lysate, HepG2 whole cell lysate, Mouse Brain whole cell lysate, Rat Brain whole cell lysate

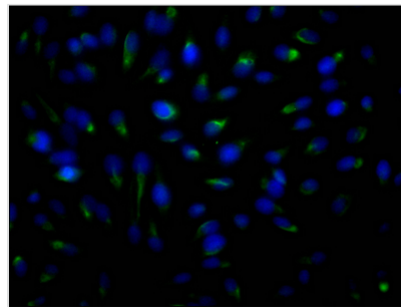
All lanes: ROCK2 antibody at 1:1000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 161 kDa

Observed band size: 161 kDa



Immunofluorescence staining of HeLa Cells with CSB-RA152329A0HU at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

ROCK2 is extensively expressed in the brain and spinal cord, and its expression improves with age. The amazing biological effects induced by knocking down ROCK2 expression in adult female rats include attenuation of axonal degeneration, prevention of apoptosis, and stimulation of neurite outgrowth. ROCK2 inhibition reduced caspase-3 and calpain activity, enhanced autophagic flux, and reduced acute axonal degeneration outgrowth.

The recombinant ROCK2 antibody expression is induced in mammalian cells transfected with a recombinant plasma vector. The recombinant plasma vector was constructed by inserting the gene coding for the antibody against ROCK2 into the plasma. The recombinant ROCK2 antibody was purified from the cell culture medium using Affinity-chromatography. It can react with samples containing ROCK2 protein from Human, Mouse, Rat and has been validated for use in the ELISA, WB, IF.