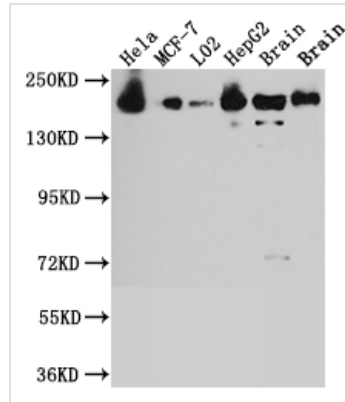




# ROCK2 Recombinant Monoclonal Antibody

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



#### 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

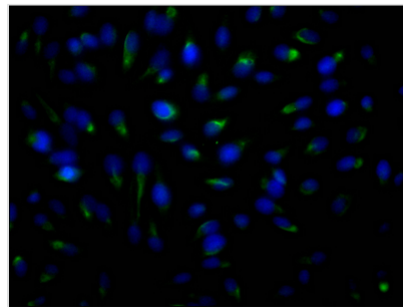
All lanes: ROCK2 antibody at 1:1000

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?. 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.