

# ROCK2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5596

## **Product Information**

**Application** WB **Primary Accession** 075116

Other AccessionQ28021, M3TYT0ReactivityHuman, Mouse, RatPredictedHuman, Sheep

Host Rabbit
Clonality Polyclonal
Calculated MW 160900
Isotype Rabbit IgG
Antigen Source HUMAN

#### **Additional Information**

**Gene ID** 9475

Antigen Region 1020-1053

Other Names Rho-associated protein kinase 2, Rho kinase 2, Rho-associated,

coiled-coil-containing protein kinase 2, Rho-associated, coiled-coil-containing

protein kinase II, ROCK-II, p164 ROCK-2, ROCK2, KIAA0619

**Dilution** WB~~1:2000

Target/Specificity This ROCK2 antibody is generated from a rabbit immunized with a KLH

conjugated synthetic peptide between 1020-1053 amino acids from the

C-terminal region of human ROCK2.

**Format** Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** ROCK2 Antibody (C-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

#### **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).

## **Background**

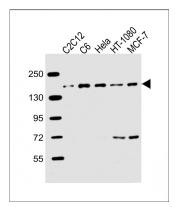
Protein kinase which is a key regulator of actin cytoskeleton and cell polarity. Involved in regulation of smooth muscle contraction, actin cytoskeleton organization, stress fiber and focal adhesion formation, neurite retraction, cell adhesion and motility via phosphorylation of ADD1, BRCA2, CNN1, EZR, 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.

#### References

Takahashi N.,et al.Genomics 55:235-237(1999). Ishikawa K.,et al.DNA Res. 5:169-176(1998). Hillier L.W.,et al.Nature 434:724-731(2005). Kawano Y.,et al.J. Cell Biol. 147:1023-1038(1999). Sebbagh M.,et al.J. Exp. Med. 201:465-471(2005).

### **Images**

All lanes: Anti-ROCK2 Antibody (C-term) at 1:2000 dilution Lane 1: C2C12 whole cell lysate Lane 2: C6 whole cell lysate Lane 3: Hela whole cell lysate Lane 4: HT-1080 whole cell lysate Lane 5: MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000



dilution. Predicted band size : 161 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.