

**ROCK2 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AW5570**

**Specification**

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**ROCK2 Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O75116</a>
Other Accession	<a href="#">Q28021</a> , <a href="#">P70336</a> , <a href="#">M3TYT0</a> , <a href="#">Q62868</a>
Reactivity	Human, Mouse, Rat
Predicted	Bovine, Pig
Host	Rabbit
Clonality	Polyclonal
Calculated MW	H=161;M=161,167;R=160 KDa
Isotype	Rabbit IgG
Antigen Source	HUMAN

**ROCK2 Antibody (C-term) - Additional Information**

**Gene ID** 9475

**Antigen Region**  
1326-1360

**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 1326-1360 amino acids from the C-terminal region of human ROCK2.

**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.

**ROCK2 Antibody (C-term) - 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

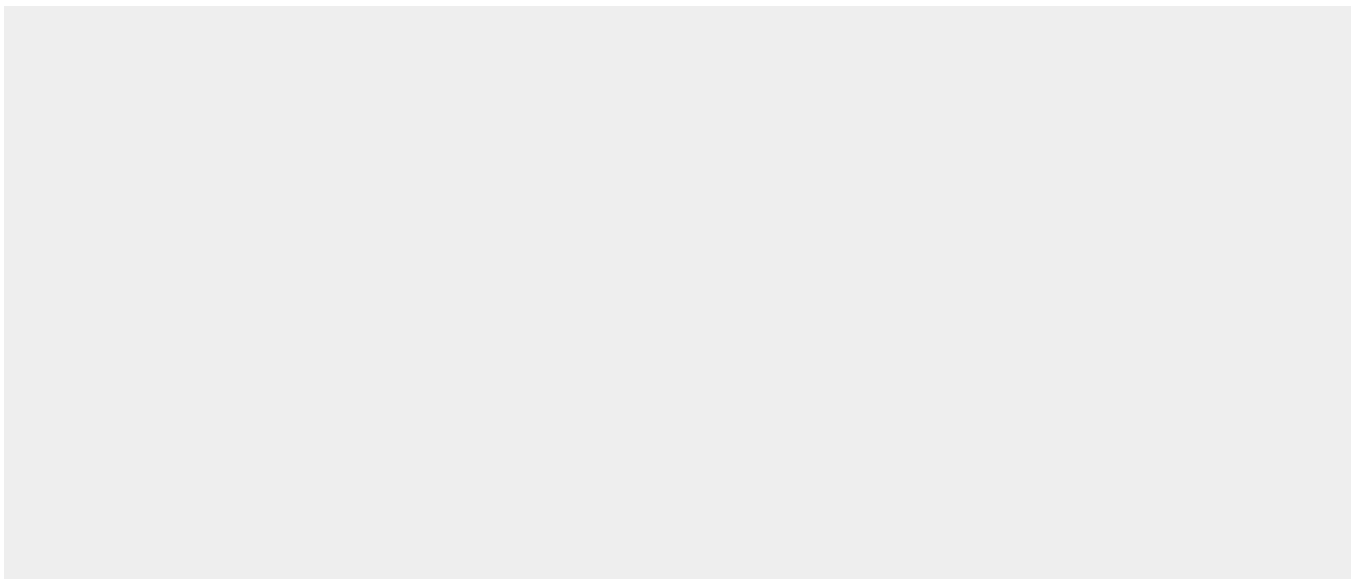
Expressed in the brain (at protein level).

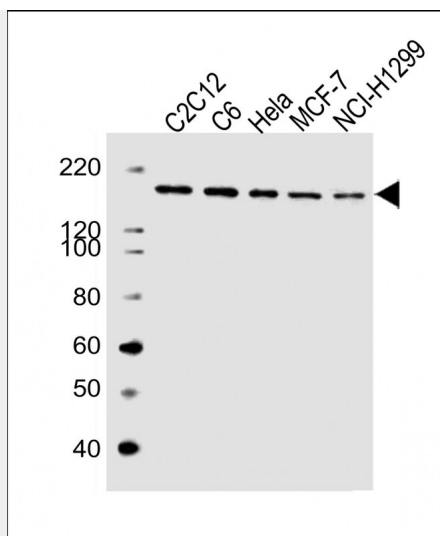
## ROCK2 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## ROCK2 Antibody (C-term) - 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: MCF-7 whole cell lysate Lane 5: NCI-H1299 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% NFD/MTBST.

### **ROCK2 Antibody (C-term) - 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<sup>2+</sup> sensitivity and vascular contractility by modulating the myosin light chain phosphorylation.

### **ROCK2 Antibody (C-term) - References**

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 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).