

Rabbit Anti-ROCK2 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP52048**Specification**

Rabbit Anti-ROCK2 Polyclonal Antibody - Product Information

Application	WB, IHC-P
Primary Accession	O75116
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Antigen Region	human ROCK2:1001-1300/1388

Rabbit Anti-ROCK2 Polyclonal Antibody - Additional Information**Gene ID** 9475**Other Names**

ROCK-II; Rho-associated protein kinase 2; Rho kinase 2; Rho-associated, coiled-coil-containing protein kinase 2; Rho-associated, coiled-coil-containing protein kinase II; p164 ROCK-2; ROCK2; KIAA619

Dilution

WB~~1:100~1:500<br \>IHC-P~~1:100~1:500

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Rabbit Anti-ROCK2 Polyclonal Antibody - 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

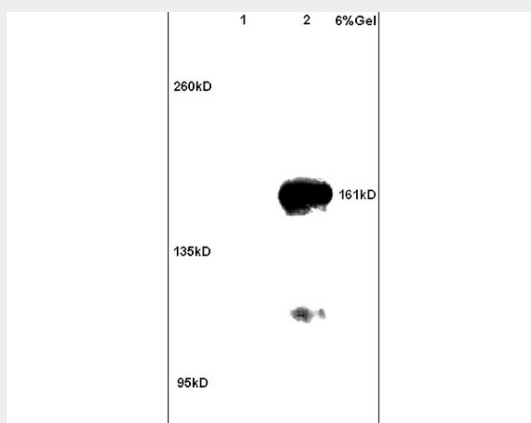
Expressed in the brain (at protein level).

Rabbit Anti-ROCK2 Polyclonal Antibody - Protocols

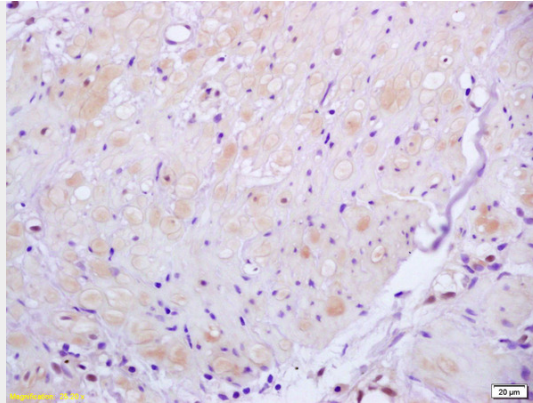
Provided below are standard protocols that you may find useful for product applications.

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

Rabbit Anti-ROCK2 Polyclonal Antibody - Images



Lane 1: rat brain lysates Lane 2: human colon carcinoma lysates probed with Anti ROCK2 Polyclonal Antibody, Unconjugated (AP52048) at 1:200 in 4C. Followed by conjugation to secondary antibody at 1:3000 90min in 37C. Predicted band 161kD. Observed band size: 161kD



Formalin-fixed and paraffin embedded human gastric carcinoma labeled with Anti ROCK2 Polyclonal Antibody, Unconjugated (AP52048) at 1:200 followed by conjugation to the secondary antibody and DAB staining

Rabbit Anti-ROCK2 Polyclonal Antibody - 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, EP3, 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 p9RSK/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.