

ROCK2 Blocking Peptide (C-term)

Synthetic peptide

Catalog # BP21441b

Specification

ROCK2 Blocking Peptide (C-term) - Product Information

Primary Accession

[O75116](#)**ROCK2 Blocking Peptide (C-term) - Additional Information**

Gene ID 9475

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

Target/Specificity

The synthetic peptide sequence is selected from aa 1346-1360 of HUMAN ROCK2

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ROCK2 Blocking Peptide (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 Blocking Peptide (C-term) - Protocols

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

- [Blocking Peptides](#)

ROCK2 Blocking Peptide (C-term) - Images**ROCK2 Blocking Peptide (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(2+) sensitivity and vascular contractility by modulating the myosin light chain phosphorylation.

ROCK2 Blocking Peptide (C-term) - 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).