



Product Information Sheet

Polyclonal Anti- Rho-associated, coiled-coil-containing protein kinase 2, **ROCK2**

Catalogue No. PA1242

Lot No. 09A01

Ig type rabbit IgG

Size 100µg/vial

Specificity

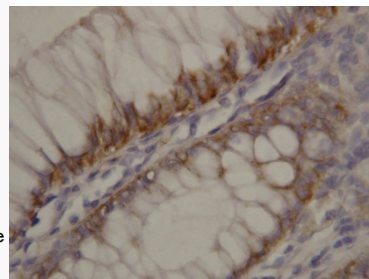
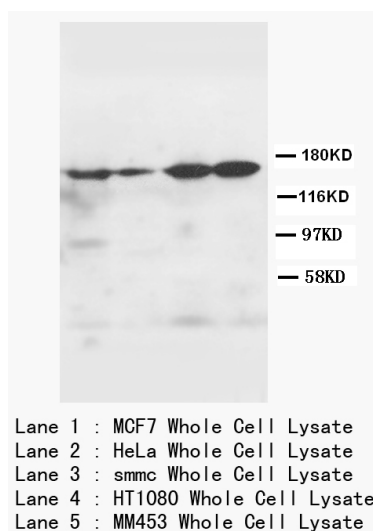
Human, rat, mouse.

No cross reactivity with other proteins.

Recommended application

Western blot

Immunohistochemistry(P)



Immunogen

A synthetic peptide corresponding to a sequence at the N-terminal of human ROCK2, identical to the related rat and mouse sequence.

Purity

Immunogen affinity purified.

Application

	Concen- tration	Tested Species	Concluded Species	Antigen Retrieval
WB	1µg/ml	Hu, Rat	Ms	-
IHC-P	2µg/ml	Hu, Rat	Ms	By Heat
IHC-F	-	-	-	-
ICC	-	-	-	-

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Reconstitution

0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for longer time.

To reorder contact us at:

Antagene, Inc.

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FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC AND CLINICAL USE.

BACKGROUND

Rho-associated kinase (ROCK), including the ROCK-I and ROCK-II isoforms, is a protein kinase involved in signaling from Rho to actin cytoskeleton. Serine/threonine kinase ROCK II/Rho kinase, which is an isozyme of ROCK I, is one of the targets for the small GTPase Rho. ROCK II regulates the formation of actin stress fibers and focal adhesions, cytokinesis, smooth muscle contraction, and the activation of c-fos serum response element. Sequencing analysis has shown that human ROCK II contains 1388 amino acid residues with a calculated molecular mass of approximately 161 kDa. Fluorescence in situ hybridization analysis showed that the human ROCK II gene is located on chromosome 2p24.¹ Thumkeo et al. (2003) concluded that ROCK-II is essential in inhibiting blood coagulation and maintaining blood flow in the endothelium-free labyrinth layer and that loss of ROCK-II leads to thrombus formation, placental dysfunction, intrauterine growth retardation, and fetal death.²

REFERENCE

1. Takahashi, N.; Tuiki, H.; Saya, H.; Kaibuchi, K. : Localization of the gene coding for ROCK II/Rho kinase on human chromosome 2p24. *Genomics* 55: 235-237, 1999.
2. Thumkeo, D.; Keel, J.; Ishizaki, T.; Hirose, M.; Nonomura, K.; Oshima, H.; Oshima, M.; Taketo, M. M.; Narumiya, S. : Targeted disruption of the mouse Rho-associated kinase 2 gene results in intrauterine growth retardation and fetal death. *Molec. Cell. Biol.* 23: 5043-5055, 2003.