



Datasheet for ABIN673359  
**anti-ROCK2 antibody (AA 1001-1300)**



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### Overview

|                      |  |
|----------------------|--|
| Quantity:            | 100 µL   |
| Target:              | ROCK2  |
| Binding Specificity: | AA 1001-1300   |
| Reactivity:          | Human, Mouse, Rat  |
| Host:                | Rabbit   |
| Clonality:           | Polyclonal   |
| Conjugate:           | This ROCK2 antibody is un-conjugated   |
| Application:         | Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro)) |

### Product Details

|                       |   |
|-----------------------|---|
| Immunogen:            | KLH conjugated synthetic peptide derived from human ROCK2 |
| Isotype:              | IgG   |
| Cross-Reactivity:     | Human, Mouse, Rat   |
| Predicted Reactivity: | Rabbit  |
| Purification:         | Purified by Protein A.                                    |

### Target Details

|         |       |
|---------|-------|
| Target: | ROCK2 |
|---------|-------|

## Target Details

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Alternative Name: [ROCK2 \(ROCK2 Products\)](#)

Background: Synonyms: 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

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.

Gene ID: 9475

UniProt: [075116](#)

Pathways: [Microtubule Dynamics](#), [WNT Signaling](#), [Tube Formation](#)

## Application Details

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Application Notes: WB 1:300-5000  
ELISA 1:500-1000  
IHC-P 1:200-400  
IHC-F 1:100-500  
IF(IHC-P) 1:50-200  
IF(IHC-F) 1:50-200  
IF(ICC) 1:50-200

Restrictions: For Research Use only

## Handling

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Format: Liquid

## Handling

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|                    |  |
|--------------------|--|
| Concentration:     | 1 µg/µL  |
| Buffer:            | 0.01M TBS( pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.  |
| Preservative:      | ProClin  |
| Precaution of Use: | This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only. |
| Storage:           | 4 °C,-20 °C  |
| Storage Comment:   | Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.                                    |
| Expiry Date:       | 12 months  |

## Publications

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Product cited in:

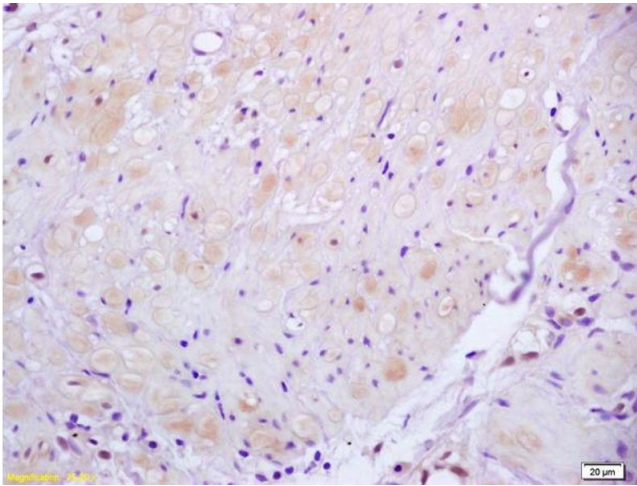
Pronobis, Zheng, Singh, Goldman, Poss: "In vivo proximity labeling identifies cardiomyocyte protein networks during zebrafish heart regeneration." in: **eLife**, Vol. 10, (2021) ([PubMed](#)).

Zhu, Gao, Zheng, Shui, Yu, Liu, Lin, Su, Yang, Wang: "Design and evaluation of EphrinA1 mutants with cerebral protective effect." in: **Scientific reports**, Vol. 7, Issue 1, pp. 1881, (2018) ([PubMed](#)).

Schwarz, Prieler, Schmid, Grzmil, Neesen: "Ccdc181 is a microtubule-binding protein that interacts with Hook1 in haploid male germ cells and localizes to the sperm tail and motile cilia." in: **European journal of cell biology**, Vol. 96, Issue 3, pp. 276-288, (2018) ([PubMed](#)).

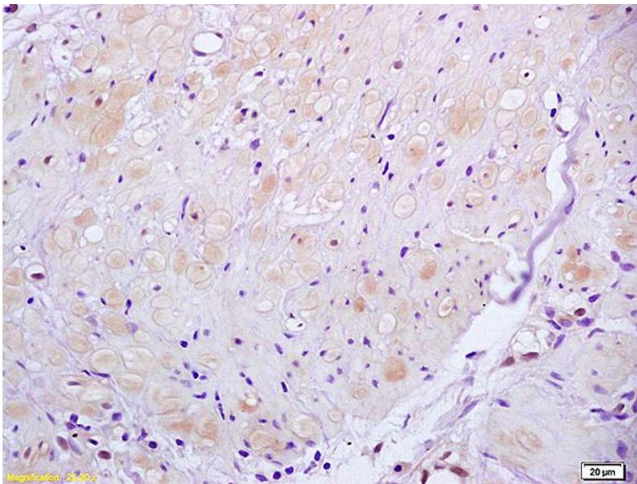
He, Wei, Du, Meng, Zheng, Lai, Yao, Zhou, Wang, Luo, Ma, Zhang: "Transcription of HOTAIR is regulated by RhoC-MRTF-A-SRF signaling pathway in human breast cancer cells." in: **Cellular signalling**, Vol. 31, pp. 87-95, (2017) ([PubMed](#)).

Wang, Zhang, Wang, Zhang, Mao, Zhuang, Tang, Luo, Zhou, Zhang: "Vascular endothelial growth factor stimulates endothelial differentiation from mesenchymal stem cells via Rho/myocardin-related transcription factor--a signaling pathway." in: **The international journal of biochemistry & cell biology**, Vol. 45, Issue 7, pp. 1447-56, (2013) ([PubMed](#)).



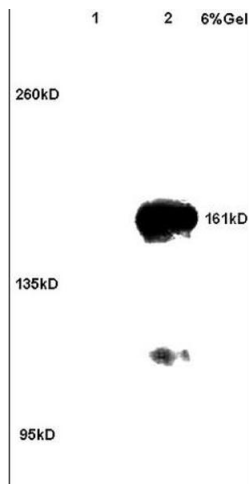
### Immunohistochemistry

**Image 1.** Formalin-fixed and paraffin embedded human gastric carcinoma labeled with Anti ROCK2 Polyclonal Antibody, Unconjugated (ABIN673359) at 1:200 followed by conjugation to the secondary antibody and DAB staining



### Immunohistochemistry

**Image 2.** Formalin-fixed and paraffin embedded human gastric carcinoma tissue labeled with Anti ROCK2 Polyclonal Antibody, unconjugated (ABIN673359) at 1:200 followed by incubation with conjugated secondary antibody and DAB staining



### SDS-PAGE

**Image 3.** Lane 1: rat brain lysates Lane 2: human colon carcinoma lysates probed with Anti ROCK2 Polyclonal Antibody, Unconjugated (ABIN673359) at 1:200 in 4C. Followed by conjugation to secondary antibody at 1:3000 90min in 37C. Predicted band 161kD. Observed band size: 161kD