

Rabbit Anti-ROCK2 antibody

SL1205R

Product Name ROCK2

Chinese Name Rho 相关蛋白激酶 2 抗体

Alias

p164 ROCK 2; p164 ROCK-2; Rho associated coiled coil containing protein kinase 2; Rho associated protein kinase 2; Rho kinase 2; ROCK 2; Rock II; Rock2m; ROK alpha; ROKalpha; coiled-coil-containing protein kinase 2; KIAA0619; Rho associated, coiled coil containing protein kinase II; Rho-associated; Rho-associated protein kinase 2; Rock2; ROCK2_HUMAN.

Research Area

Tumour Cell biology Signal transduction Apoptosis Kinases and Phosphatases

Immunogen Species

Rabbit

Clonality

Polyclonal

React Species

Human,Mouse(predicted:Rat,Rabbit)

Applications

WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight

161kDa

Cellular localization

cytoplasmic The cell membrane

Form

Liquid

Concentration 1mg/ml

immunogen

KLH conjugated synthetic peptide derived from human ROCK2: 1001-1300/1388

Lsotype

IgG

Purification

affinity purified by Protein A

Buffer Solution

1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage

Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention

This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

PubMed

[PubMed](#)

The protein encoded by this gene is a serine/threonine kinase that regulates cytokinesis, smooth muscle contraction, the formation of actin stress fibers and focal adhesions, and the activation of the c-fos serum response element. This protein, which is an isozyme of ROCK1 is a target for the small GTPase Rho. [provided by RefSeq, Jul 2008].

Function:

Regulates the assembly of the actin cytoskeleton. Promotes formation of stress fibers and of focal adhesion complexes. Plays a role in smooth muscle contraction.

Subcellular Location:

Cytoplasm. Cell membrane. Cytoplasmic, and associated with actin microfilaments and the plasma membrane.

Post-translational modifications:

Phosphorylated upon DNA damage, probably by ATM or ATR. Phosphorylation at Tyr-722 reduces its binding to RHOA and is crucial for focal adhesion dynamics. Dephosphorylation by PTPN11 stimulates its RHOA binding activity. Cleaved by granzyme B during apoptosis. This leads to constitutive activation of the kinase and membrane blebbing.

**Product
Detail**

Similarity:

Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. Contains 1 AGC-kinase C-terminal domain. Contains 1 PH domain. Contains 1 phorbol-ester/DAG-type zinc finger. Contains 1 protein kinase domain. Contains 1 REM (Hr1) repeat.

SWISS:

O75116

Gene ID:

9475

Database links:

[Entrez Gene: 9475](#) Human

[Entrez Gene: 19878](#) Mouse

[Entrez Gene: 25537](#) Rat

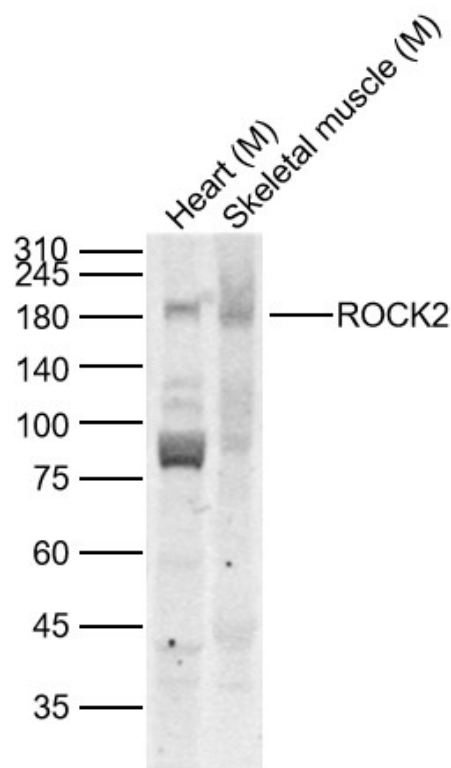
[Omim: 604002](#) Human

[SwissProt: O75116](#) Human

[SwissProt: P70336](#) Mouse

ROCK2 (Rho kinase alpha) 是 ROCK1 的同工酶。是一个丝/苏氨酸激酶，可调节 cell factor，平滑肌收缩和肌动蛋白的形成。

**Product
Picture**



Sample:

Lane 1: Mouse Heart Lysates

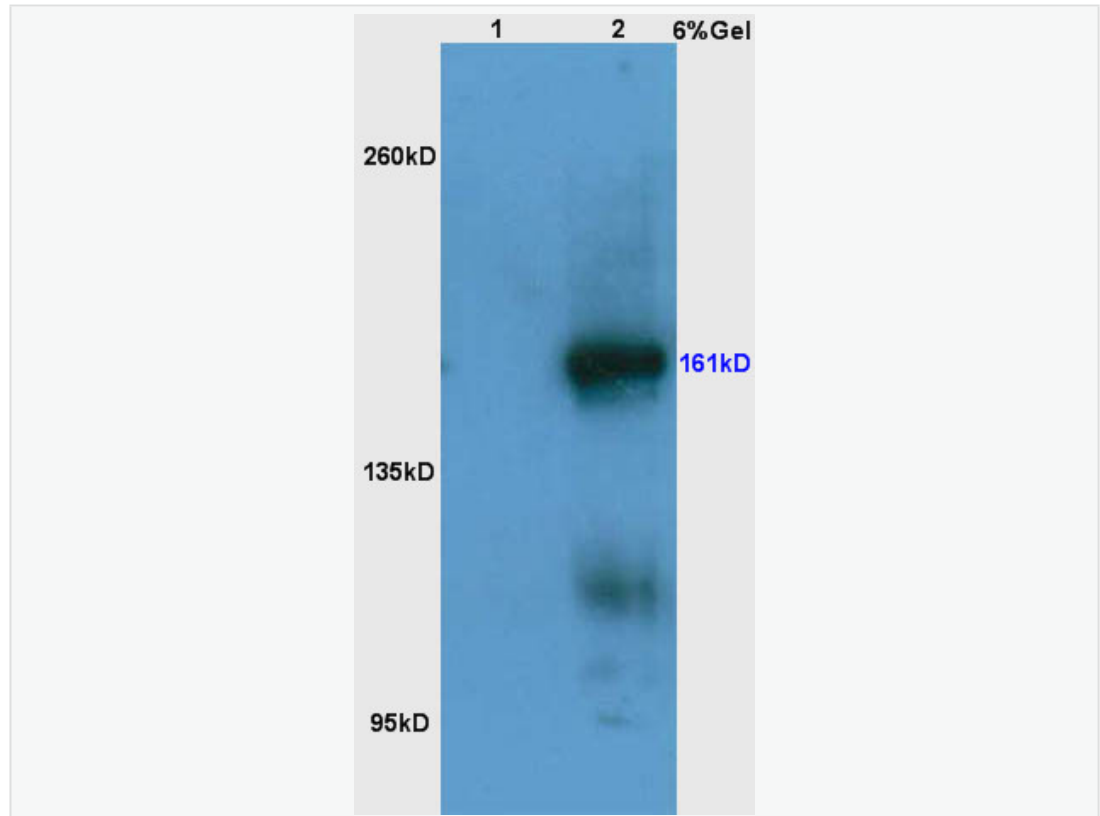
Lane 2: Mouse Skeletal muscle Lysates

Primary: Anti-ROCK2 (SL1205R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 161kDa

Observed band size: 180kDa



Sample:

Lane1: Brain (Rat) Lysate at 30 ug

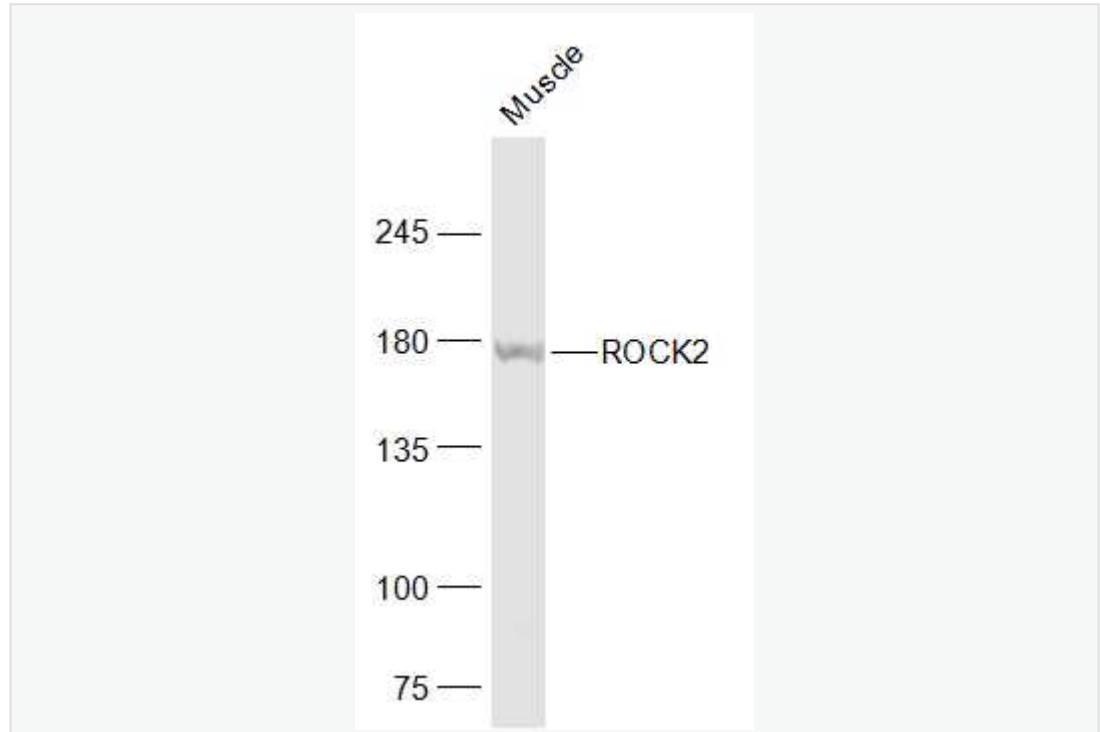
Lane2: Colon carcinoma (Human) Lysate at 30 ug

Primary: Anti-ROCK2 (SL1205R) at 1:200 dilution;

Secondary: HRP conjugated Goat Anti-Rabbit IgG(SL0295G-HRP) at 1: 3000 dilution;

Predicted band size : 161kD

Observed band size : 161kD



Sample:

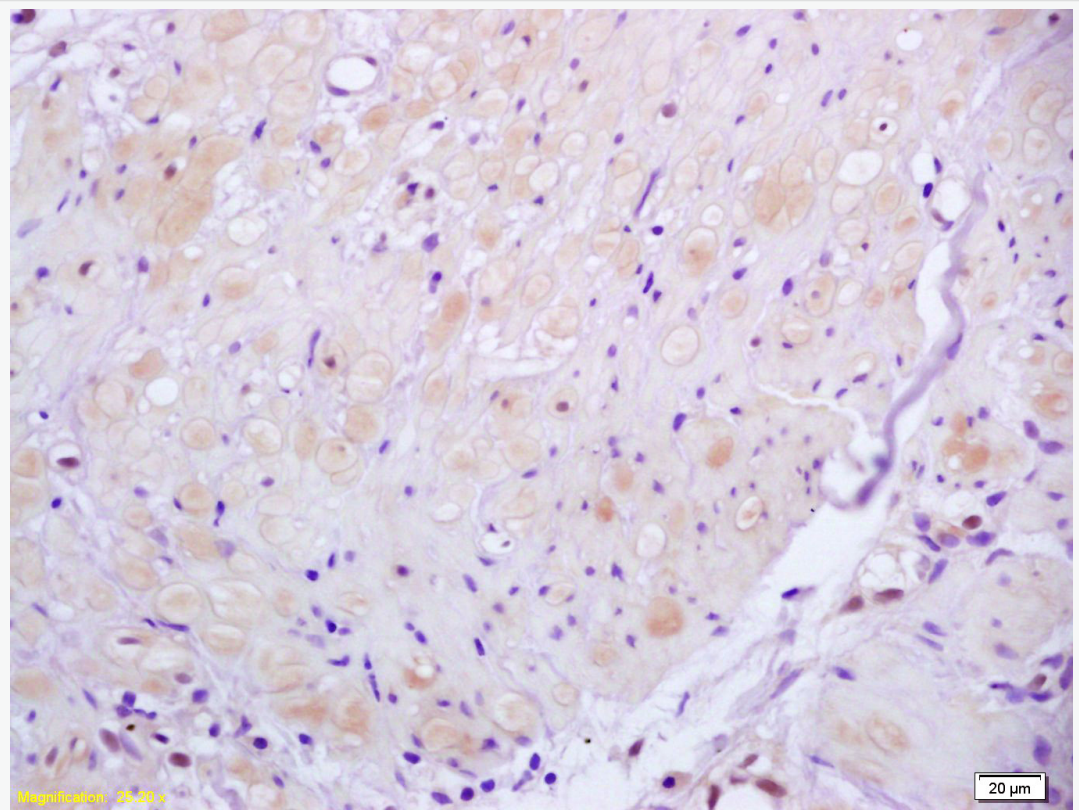
Muscle (Mouse) Lysate at 40 ug

Primary: Anti-ROCK2 (SL1205R) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 161 kD

Observed band size: 161 kD



Tissue/cell: human gastric carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-ROCK2 Polyclonal Antibody, Unconjugated(SL1205R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining