

## Rabbit Anti-ROCK1 + ROCK2 antibody

SL10173R

<b>Product Name</b>	ROCK1 + ROCK2
<b>Chinese Name</b>	Rho 相关蛋白激酶 1/2 抗体
<b>Alias</b>	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; ROCK1_HUMAN; Rho-associated protein kinase 1; Renal carcinoma antigen NY-REN-35; Rho-associated, coiled-coil-containing protein kinase 1; Rho-associated, coiled-coil-containing protein kinase I; ROCK-I; p160 ROCK-1; p160ROCK. .
<b>Immunogen Species</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>React Species</b>	Human, Rat, (predicted: Mouse, Chicken, Dog, Pig, Cow, Horse, Rabbit, Sheep, ) IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
<b>Applications</b>	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Theoretical molecular weight</b>	161kDa
<b>Cellular localization</b>	The nucleus cytoplasmic The cell membrane
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>immunogen</b>	KLH conjugated synthetic peptide derived from human ROCK1 and ROCK2: 101-200/1388
<b>Lsotype</b>	IgG
<b>Purification</b>	affinity purified by Protein A
<b>Buffer Solution</b>	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
<b>Storage</b>	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw

**Attention**

cycles.

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.

**Subunit:**

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.

**Product Detail**

Cleaved by granzyme B during apoptosis. This leads to constitutive activation of the kinase and membrane blebbing.

**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:**

Q13464

**Gene ID:**

6093

**Database links:**

[Entrez Gene: 6093](#) Human

[Entrez Gene: 19877](#) Mouse

[Entrez Gene: 81762](#) Rat

[Omim: 601702](#) Human

[SwissProt: Q13464](#) Human

[SwissProt: P70335](#) Mouse

[SwissProt: Q63644](#) Rat

[Unigene: 306307](#) Human

[Unigene: 6710](#) Mouse

[Unigene: 89756](#) Rat

[Entrez Gene: 9475](#) Human

[Entrez Gene: 19878](#) Mouse

[Entrez Gene: 25537](#) Rat

[Omim: 604002](#) Human

[SwissProt: O75116](#) Human

[SwissProt: P70336](#) Mouse

[SwissProt: Q62868](#) Rat

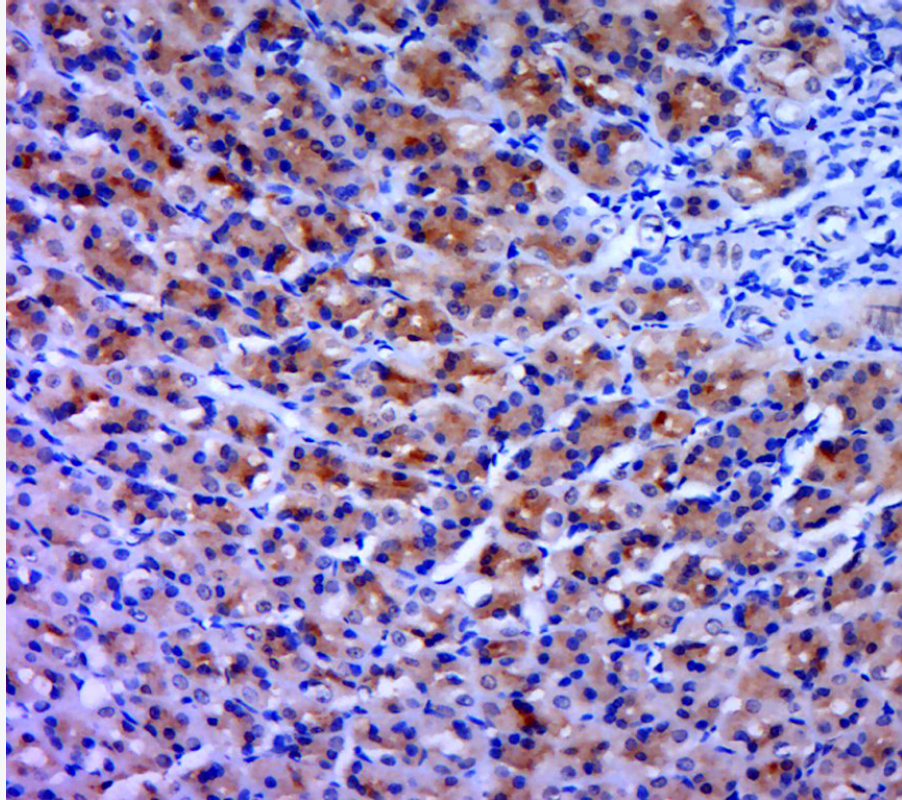
[Unigene: 58617](#) Human

[Unigene: 681743](#) Human

[Unigene: 276024](#) Mouse

[Unigene: 88642](#) Rat

**Product Picture**



Paraformaldehyde-fixed, paraffin embedded (rat stomach tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ROCK1 + ROCK2) Polyclonal Antibody, Unconjugated (SL10173R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.