

## Anti-ROCK1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

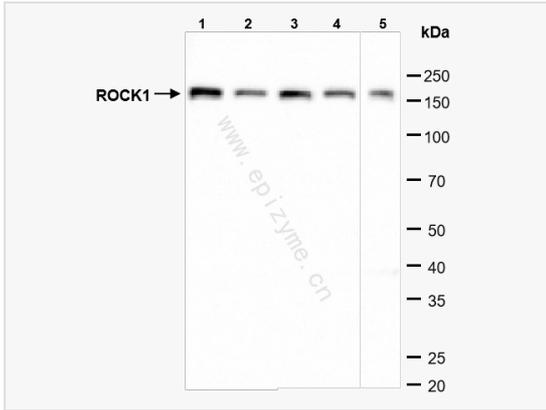
Catalog # R012097

### Product Information

Application	IF (Cell)/ICC, ELISA, WB, IHC-P/IF (Tissue-P)
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	32K50K74
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human ROCK1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-ROCK1 Rabbit mAb [32K50K74] is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

Synonyms	coiled-coil-containing protein kinase 1, coiled-coil-containing protein kinase I, MGC131603, MGC43611, p160 Rhoassociated coiled coil-forming protein kinase, p160 ROCK-1, p160 ROCK1, p160ROCK, PRO0435, Renal carcinoma antigen NY REN 35, Renal carcinoma antigen NY-REN-35, Rho associated coiled coil containing protein kinase 1, Rho associated protein kinase 1, Rho kinase, Rho-alpha kinase, Rho-associated, Rho-associated protein kinase 1, ROCK I, ROCK-I, ROCK1, ROCK1_HUMAN, Rok, rokalpha.
Calculated MW	Calculated MW: 158 kDa; Observed MW: 158 kDa
Uniprot ID	Q13464
Gene ID	6093
Background	This gene encodes a protein serine/threonine kinase that is activated when bound to the GTP-bound form of Rho. The small GTPase Rho regulates formation of focal adhesions and stress fibers of fibroblasts, as well as adhesion and aggregation of platelets and lymphocytes by shuttling between the inactive GDP-bound form and the active GTP-bound form. Rho is also essential in cytokinesis and plays a role in transcriptional activation by serum response factor. This protein, a downstream effector of Rho, phosphorylates and activates LIM kinase, which in turn, phosphorylates cofilin, inhibiting its actin-depolymerizing activity. A pseudogene, related to this gene, is also located on chromosome 18. [provided by RefSeq, Aug 2015]
Cellular Location	Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole. Golgi apparatus membrane. Cell projection, bleb. Cytoplasm, cytoskeleton. Cell membrane. Cell projection, lamellipodium. Cell projection, ruffle. Associated with the mother centriole and an intercentriolar linker. Colocalizes with ITGB1BP1 and ITGB1 at the cell membrane predominantly in lamellipodia and membrane ruffles. but also in retraction fibers. Localizes at the cell membrane in an



Western Blot - Anti-ROCK1 Rabbit mAb [32K50K74]

All lanes: R012097 at 1:1,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 3: K-562 (Human chronic myeloid leukemia cell) whole cell lysates

Lane 4: Raw264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) whole cell lysates

Lane 5: Balb/c mouse kidney whole tissue lysates

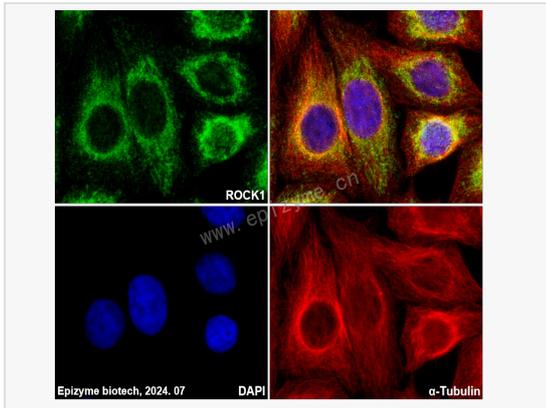
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 158 kDa

Observed band size: 158 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-ROCK1 Rabbit mAb [32K50K74]

Sample: HeLa cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

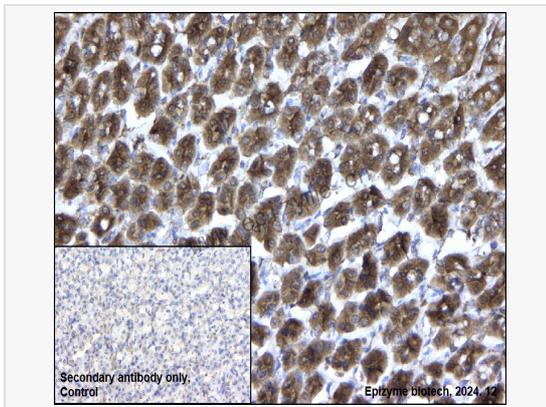
Primary antibodies: R012097 at 1:100 dilution and  $\alpha$ -tubulin Mouse Monoclonal

Antibody (Cat. No. LF209) at 1:100 dilution

Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and

Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)

Nuclei were stained with DAPI (shown in blue).



Immunohistochemistry - Anti-ROCK1 Rabbit mAb [32K50K74]

Sample: Paraformaldehyde-fixed, paraffin embedded rat stomach tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R012097 at 1:200 dilution

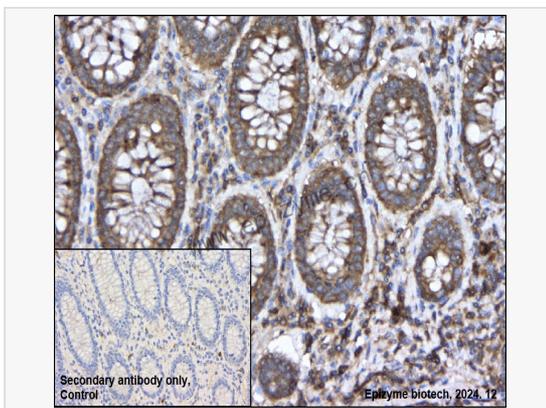
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-ROCK1 Rabbit mAb [32K50K74]

Sample: Paraformaldehyde-fixed, paraffin embedded human colonic cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R012097 at 1:200 dilution

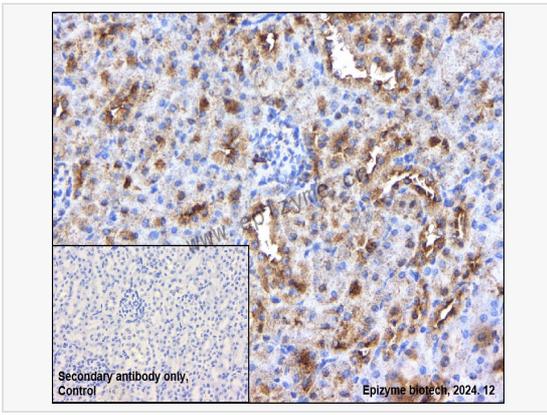
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-ROCK1 Rabbit mAb [32K50K74]

Sample: Paraformaldehyde-fixed, paraffin embedded mouse kidney tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R012097 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.