

## Recombinant ROCK2+ROCK1 Monoclonal Antibody

catalog number: AN301910L

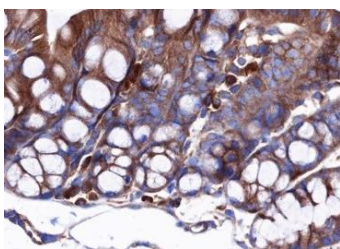
**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Description

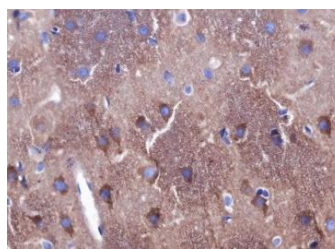
<b>Reactivity</b>	Human;Rat;Mouse
<b>Immunogen</b>	Recombinant human ROCK2+ROCK1 fragment
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG, κ
<b>Clone</b>	A626
<b>Purification</b>	Protein A purified
<b>Buffer</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant.

### Applications Recommended Dilution

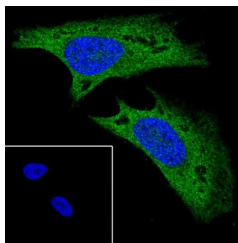
<b>WB</b>	1:1000
<b>IHC</b>	1:50-1:100
<b>IF</b>	1:50



Immunohistochemistry of paraffin-embedded Mouse colon using ROCK2+ROCK1 Monoclonal Antibody at dilution of 1:100.



Immunohistochemistry of paraffin-embedded Rat cerebrum using ROCK2+ROCK1 Monoclonal Antibody at dilution of 1:100.



Immunofluorescent analysis of (4% Paraformaldehyde) fixed HeLa cells using anti-ROCK2+ROCK1 Monoclonal Antibody at dilution of 1:50.

### Preparation & Storage

<b>Storage</b>	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
<b>Shipping</b>	Ice bag

### Background

#### For Research Use Only

ROCK (Rho-associated kinase), a family of serine/threonine kinases, is an important downstream target of Rho-GTPase and plays an important role in Rho-mediated signaling. Two isoforms of ROCK have been identified: ROCK1 and ROCK2. ROCK is composed of N-terminal catalytic, coiled-coil, and C-terminal PH (pleckstrin homology) domains. The C-terminus of ROCK negatively regulates its kinase activity. ROCK1 is cleaved by caspase-3 at a conserved DETD1113/G sequence resulting in loss of its C-terminal inhibitory domain. ROCK2 is directly cleaved by granzyme B (grB). Cleavage activates ROCK2 and leads to phosphorylation of myosin light chain (MLC) and inhibition of myosin phosphatase. This phosphorylation may account for the mechanism by which Rho regulates cytokinesis, cell motility, cell membrane blebbing during apoptosis, and smooth muscle contraction.