

ROCK1 Antibody (Clone 12M03)

CATALOG #:	3545-100
AMOUNT:	100 µg
LOT #:	_____
CLONE#:	12M03
ISOTYPE:	Mouse IgG

IMMUNOGEN:

Synthetic peptide corresponding to the caspase-3 cleavage site

FORMULATION:

100 µg (0.5 mg/ml) Protein G purified mouse anti-human ROCK1 monoclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA, 0.02% thimerosal.

SPECIES REACTIVITY: Human

STORAGE CONDITIONS:

Store at -20°C. For long-term storage, aliquot and freeze at -70°C. Avoid repeated freeze/thaw cycles.

BACKGROUND:

ROCK-1 (Rho-associated coiled coil-containing protein kinase 1) has been found to be a new caspase-3 substrate. ROCK-1 consists of an amino-terminal kinase domain and an inhibitory cysteine/histidine-rich C-terminal domain. During apoptosis, ROCK-1 is cleaved by caspase-3 at the conserved DETD1113/G sequence and its C-terminal inhibitory domain is removed, resulting in deregulated and constitutive kinase activity. The caspase-3 mediated cleavage and activation of ROCK-1 induces phosphorylation of MLC and membrane blebbing, the early events in the execution phase of apoptosis.

APPLICATION AND USAGE:

The antibody can be used for Western blotting (1-4 µg/ml). However, the optimal conditions should be determined individually. Jurkat cell lysate treated with camptothecin (2 µM for 6-8 hours) can be used as a positive control.

SPECIFICITY:

The antibody has been selected for its ability to recognize the cleaved ROCK-1 in Western blotting. It does not recognize the full length protein.

RELATED PRODUCTS:

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- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

Cell Proliferation & Senescence

- Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

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- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

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- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

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- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay & Drug Discovery Kits
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- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- β-Galactosidase Staining Kit & Luciferase Reporter Assay Kit

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