



# Rock-2 Monoclonal Antibody

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| <b>Catalog No</b>                  | YP-mAb-14980                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Applications</b>                | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Gene Name</b>                   | ROCK2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human ROCK2. AA range:691-740                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>                 | Rock-2 Monoclonal Antibody detects endogenous levels of Rock-2 protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Source</b>                      | Monoclonal, Mouse,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Purification</b>                | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Dilution</b>                    | WB 1:500-1:2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Synonyms</b>                    | ROCK-II;ROCK2;Rock-2;Rho-associated protein kinase 2;KIAA0619;Rho kinase 2;Rho-associated;coiled-coil-containing protein kinase 2;coiled-coil-containing protein kinase II;p164 ROCK-2; coiled-coil-containing protein kinase II                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Observed Band</b>               | 165kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Calculated Molecular Weight</b> | 165kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Cell Pathway</b>                | Cytoplasm. Cell membrane ; Peripheral membrane protein . Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasmic, and associated with actin microfilaments and the plasma membrane. .                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Tissue Specificity</b>          | Expressed in the brain (at protein level).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Function</b>                    | catalytic activity:ATP + a protein = ADP + a phosphoprotein..enzyme regulation:Activated by RHOA binding.,function:Protein kinase that phosphorylates a large number of important signaling proteins, and thereby regulates the assembly of the actin cytoskeleton. Promotes formation of stress fibers and of focal adhesion complexes. Plays a role in smooth muscle contraction.,miscellaneous:Inhibited by Y-27632.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family.,similarity:Contains 1 AGC- |



kinase C-terminal domain.,similarity:Contains 1 PH domain.,similarity:Contains 1 phorbol-ester/DAG-type zinc finger.,similarity:Contains 1 protein kinase domain.,similarity:Contains 1 REM (Hr1) repeat.,subcellular location:Cytoplasmic, and associated with actin microfilaments and the plasma membrane., subunit:Homodim

#### Background

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],

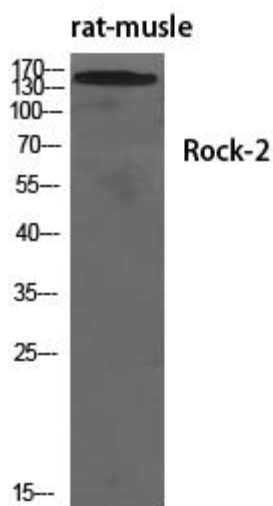
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



Western Blot analysis of various cells using Rock-2 Monoclonal Antibody