### RhoA (67B9) Rabbit mAb

#### Applications
- Western
- IP—Immunoprecipitation
- IHC—Immunohistochemistry
- ChIP—Chromatin Immunoprecipitation
- IF—Immunofluorescence
- F—Flow cytometry
- E-P—ELISA-Peptide

#### Species Cross-Reactivity
- H—human
- M—mouse
- R—rat
- Mk—monkey
- Mi—mink
- C—chicken
- Dm—D. melanogaster
- X—Xenopus
- Z—zebrafish
- B—bovine
- Dg—dog
- Pg—pig
- Sc—S. cerevisiae
- Ce—C. elegans
- Hr—horse
- All—all species expected

Species enclosed in parentheses are predicted to react based on 100% homology.

#### IMPORTANT:
For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® at 4°C with gentle shaking, overnight.

#### Background
Rho family small GTPases, including Rho, Rac and cdc42, act as molecular switches, regulating processes such as cell migration, adhesion, proliferation and differentiation. They are activated by guanine nucleotide exchange factors (GEFs), which catalyze the exchange of bound GDP for GTP, and inhibited by GTPase activating proteins (GAPs), which catalyze the hydrolysis of GTP to GDP. A third level of regulation is provided by the stoichiometric binding of Rho GDP dissociation inhibitor (RhoGDI) (1). RhoA, RhoB and RhoC are highly homologous, but appear to have divergent biological functions. Carboxy-terminal modifications and differences in subcellular localization allow these three proteins to respond to and act on distinct signaling molecules (2,3).

Functions of RhoA, the most highly studied of these three, include regulation of actomyosin contractility (4), cytokinesis (5), focal adhesion assembly (6) and cell polarity (7).

#### Specificity/Sensitivity
RhoA (67B9) Rabbit mAb recognizes endogenous levels of total RhoA protein. The antibody does not recognize the related proteins RhoB or RhoC.

#### Source/Purification
Monoclonal antibody is produced by immunizing animals with synthetic peptides corresponding to residues near the carboxy terminus of human RhoA.

#### Background References

#### Western Blot Analysis
- **GST-RhoA**
- **RhoA (67B9) Rabbit mAb**

#### Storage
Provided in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

**Species cross-reactivity is determined by western blot.**

**Anti-rabbit secondary antibodies must be used to detect this antibody.**

#### Recommended Antibody Dilutions
- Western blotting: 1:1000

For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com.