

## RHOA PROTEIN

### RhoA Protein

**Cat.#:** 10104

**Product Name:** RhoA Protein

**Synonyms:** Ras homolog gene family, member A, ARHA, ARH12, RHO12, RHOH12

**Source:** Human, recombinant full length, His6-tag

**Expression Host Species:** E. coli

**Molecular Weight:** 22 kDa

**Purity:** >96% by SDS-PAGE

**Introduction:** Small GTPases are a super-family of cellular signaling regulators. RhoA belongs to the Rho sub-family of GTPases. Rho proteins play critical roles in many actin cytoskeleton-dependent processes including platelet aggregation, cell motility, contraction, and cytokinesis. It regulates the formation of stress fibers and focal adhesions in fibroblasts and Ca<sup>2+</sup> sensitivity of smooth muscle contraction.

**Amino Acid Sequence** (1-193)

**MAAIRKKLVIVGDGACGKTCLLIVFSKDQFPEVYVPTVFENYVADIEVDGKQVELALWDTAGQEDYD  
RLRPLSYDPTDVILMCFSIDSPDSLENIPEKWTPEVKHFPCNPVPIILVGNKKDLRNDEHTRRELAKM  
KQEPVKPEEGRDMANRIGAFGYMECSAKTKDGVREVFEMATRAALQARRGKKKSGCLVL**

#### Properties

**Physical Appearance (form):** Dissolved in 20mM Tris-HCl, pH8.0, 150mM NaCl.

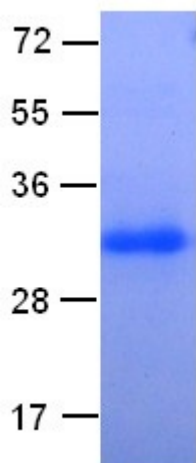
**Physical Appearance (form):** White or clear

**Concentration:** 1 mg/mL

**Storage:** -80°C

#### Preparation Instructions:

Centrifuge the vial before open the cap and reconstitute in water. Adding of 10 mM β-mercaptoethanol or 1 mM DTT into the solution to protect the protein is recommended and using of non-ionic detergents such as n-Dodecyl β-D-maltoside (DoDM) or polyethylene detergents (e.g. C12E10) also help to stabilize the protein. Avoid repeated freezing and thawing after reconstitution. The purity of His-tagged RhoA was determined by SDS-PAGE and Coomassie Brilliant Blue Staining.



## References:

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3. Machacek, M. et al., *Nature* 461: 99-103, 2009
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5. Rao, P. V. et al., *Invest. Ophthalm. Vis. Sci.* 42: 1029-1037, 2001.
6. Valderrama, F. et al., *Science* 311: 377-381, 2006.
7. Wang, H.-R. et al., *Science* 302: 1775-1779, 2003.
8. Wu, K. Y. et al., *Nature* 436: 1020-1024, 2005.
9. Yoshida, S. et al., *Science* 313: 108-111, 2006.