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Product Information

RhoA, His-tagged, human
recombinant, expressed in *E. coli* cells

Catalog Number **SRP5127**
Storage Temperature –70 °C

Synonyms: ARH12, ARHA, RHO12, RHOH12

Product Description

RhoA is a member of the Rho gene family that interacts with protein kinases and serves as a target of activated GTPase. RhoA plays an important role in the initial events of cell protrusion; whereas, Rac1 and Cdc42 activate pathways implicated in reinforcement and stabilization of newly expanded protrusions. Rho mediates corneal epithelial migration in response to external stimuli by regulating the organization of the actin cytoskeleton.[1] The inhibition of RhoA signaling is required for both vaccinia morphogenesis and virus-induced cell motility. Vaccinia inhibits RhoA signaling using the viral protein F11 and this can enhance the spread of infection.[2]

Recombinant, full-length, human RhoA was expressed in *E. coli* cells using an N-terminal His tag. The gene accession number is NM_001664. Recombinant protein stored in 50 mM MOPS, pH 7.0, 300 mM NaCl, 150 mM imidazole, 0.1 mM PMSF, 0.25 mM DTT, and 25% glycerol.

Molecular mass: ~23 kDa

Purity: 70–95% (SDS-PAGE, see Figure 1)

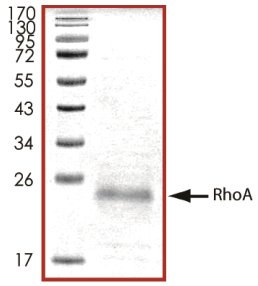
Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at –70 °C is recommended. After opening, aliquot into smaller quantities and store at –70 °C. Avoid repeated handling and multiple freeze/thaw cycles.

Figure 1.
SDS-PAGE Gel of Typical Lot
70–95% (densitometry)



References

1. Wu, K.Y. et al., Local translation of RhoA regulates growth cone collapse. Nature, **436**, 1020-1024 (2005).
2. Valderrama, F. et al., Vaccinia virus-induced cell motility requires F11L-mediated inhibition of RhoA signaling. Science, **311**, 377-381 (2006).

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