

Recombinant Human RhoA Protein (His Tag)

Catalog No. PKSH030838

Note: Centrifuge before opening to ensure complete recovery of vial contents.

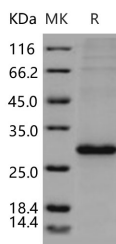
Description

Synonyms	ARH12;ARHA;RHO12;RHOH12
Species	Human
Expression Host	Baculovirus-Insect Cells
Sequence	Met 1-Leu 193
Accession	P61586-1
Calculated Molecular Weight	24 kDa
Observed molecular weight	28 kDa
Tag	N-His
Bioactivity	Not validated for activity

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 7.4, 10% glycerol Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 90 % as determined by reducing SDS-PAGE.

Background

Transforming protein RhoA, also known as Rho cDNA clone 12, Ras homolog gene family member A, RHOA and ARH12, is a cell membrane and cytoplasm protein which belongs to the small GTPase superfamily and Rho family. The

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Rho family of small GTPases plays a key role in the dynamic regulation of the actin cytoskeleton that underlies various important cellular functions such as shape changes, migration, and polarity. RHOA / ARH12 is part of a larger family of related proteins known as the Ras superfamily; proteins involved in the regulation and timing of cell division. RHOA / ARH12 is a small GTPase protein known to regulate the actin cytoskeleton in the formation of stress fibers. It acts upon two known effector proteins: ROCK1 (Rho-associated, coiled-coil containing protein kinase 1) and DIAPH1 (diaphanous homolog 1 (Drosophila)). RHOA / ARH12 regulates a signal transduction pathway linking plasma membrane receptors to the assembly of focal adhesions and actin stress fibers. RHOA / ARH12 serves as a target for the yopT cysteine peptidase from Yersinia pestis, vector of the plague, and Yersinia pseudotuberculosis, which causes gastrointestinal disorders. RHOA / ARH12 may be an activator of PLCE1. It is activated by ARHGEF2, which promotes the exchange of GDP for GTP.