Recombinant Protein Technical Manual

Recombinant Human RhoA Protein (His Tag)

RPES5083

Product Data:

Product SKU: RPES5083

Size: 50µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: P61586

Protein Information:

Molecular Mass: 24 kDa

AP Molecular Mass: 28 kDa

Tag: N-His

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: ARH12;ARHA;RHO12;RHOH12

Immunogen Information:

Sequence: Met 1-Leu 193

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 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.