

Rabbit Rho A + B + C Monoclonal Antibody | anti-RHOA antibody

Anti-Rho A + B + C Rabbit Monoclonal Antibody

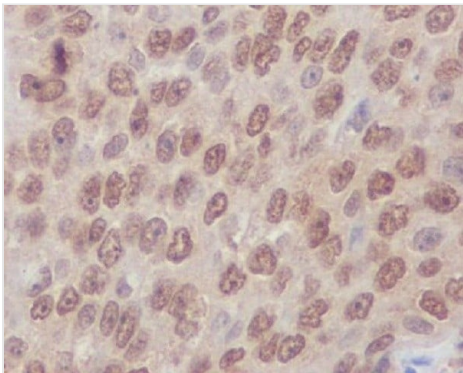
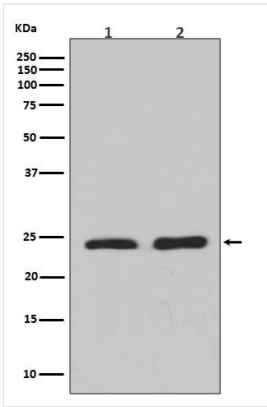
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA46903	Rabbit	Human, Mouse, Rat	Western Blot, Immunocytochemistry, Immunohistochemistry, Immunofluorescence, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

Rho A + B + C; Monoclonal Antibody; Anti-Rho A + B + C Rabbit Monoclonal Antibody; Transforming protein RhoA; Rho cDNA clone 12; h12; RHOA; ARH12; ARHA; RHO12; anti-RHOA antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Purity/Purification	Affinity-chromatography
Form/Format	Liquid
Sequence Length	193
Applicable Applications for anti-RHOA antibody	WB (Western Blot), ICC (Immunocytochemistry), IHC (Immunohistochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry)
Immunogen	A synthesized peptide derived from human Rho A + B + C
Subcellular Localization	Cell membrane; Lipid-anchor; Cytoplasmic side. Cytoplasm, cytoskeleton. Cleavage furrow. Cytoplasm, cell cortex. Midbody. Cell projection, lamellipodium. Localized to cell-cell contacts in calcium-treated keratinocytes (By similarity). Translocates to the equatorial region before furrow formation in a ECT2-dependent manner. Localizes to the equatorial cell cortex (at the site of the presumptive furrow) in early anaphase in a activated form and in a myosin- and actin-independent manner.
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



IHC (Immunohistochemistry)
Immunohistochemical analysis of paraffin-embedded human lung carcinoma, using Rho A + B + C Antibody (AAA46903). RHOA was detected in paraffin-embedded tissue section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-RHOA Antibody (AAA46903) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

WB (Western Blot)
Western blot analysis of Rho A + B + C expression in (1) Jurkat cell lysate; (2) NIH/3T3 cell lysate (AAA46903). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-RHOA monoclonal antibody overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for RHOA

ADDITIONAL INFORMATION

Related Product Information for anti-RHOA antibody	Regulates a signal transduction pathway linking plasma membrane receptors to the assembly of focal adhesions and actin stress fibers. Involved in a microtubule-dependent signal that is required for the myosin contractile ring formation during cell cycle cytokinesis. Plays an essential role in cleavage furrow formation. Required for the apical junction formation of keratinocyte cell-cell adhesion. Stimulates PKN2 kinase activity. May be an activator of PLCE1. Activated by ARHGEF2, which promotes the exchange of GDP for GTP. Essential for the SPATA13-mediated regulation of cell migration and adhesion assembly and disassembly. The MEMO1-RHOA-DIAPH1 signaling pathway plays an important role in ERBB2-dependent stabilization of microtubules at the cell cortex. It controls the localization of APC and CLASP2 to the cell membrane, via the regulation of GSK3B activity. In turn, membrane-bound APC allows the localization of the MACF1 to the cell membrane, which is required for microtubule capture and stabilization. Regulates a signal transduction pathway linking plasma membrane receptors to the assembly of focal adhesions and actin stress fibers. Involved in a microtubule-dependent signal that is required for the myosin contractile ring formation during cell cycle cytokinesis. Plays an essential role in cleavage furrow formation. Required for the apical junction formation of keratinocyte cell-cell adhesion. May be an activator of PLCE1. Activated by ARHGEF2, which promotes the exchange of GDP for GTP. Essential for the SPATA13-mediated regulation of cell migration and adhesion assembly and disassembly. The MEMO1-RHOA-DIAPH1 signaling pathway plays an important role in ERBB2-dependent stabilization of microtubules at the cell cortex. It controls the localization of APC and CLASP2 to the cell membrane, via the regulation of GSK3B activity. In turn, membrane-bound APC allows the localization of the MACF1 to the cell membrane, which is required for microtubule capture and stabilization (By similarity). Regulates KCNA2 potassium channel activity by reducing its location at the cell surface in response to CHRM1 activation; promotes KCNA2 endocytosis(PubMed: 9635436, PubMed: 19403695).
Product Categories/Family for anti-RHOA antibody	Signal Transduction; Cytoskeleton/ECM; Cytoskeleton; microfilaments; actin etc; actin assembly; Signal Transduction; Signaling Pathway; G Protein Signaling; Small G Proteins; RAS Family; Cancer

NCBI AND UNIPROT INFORMATION

NCBI GI #	927669104
NCBI GeneID	387
NCBI Accession #	NP_001300870.1
NCBI GenBank Nucleotide #	NM_001313941.1
UniProt Accession #	P61586; P06749; Q53HM4; Q5U024; Q9UDJ0; Q9UEJ4

Molecular Weight	21768 MW
NCBI Official Full Name	transforming protein RhoA isoform 1
NCBI Official Synonym Full Names	ras homolog family member A
NCBI Official Symbol	RHOA
NCBI Official Synonym Symbols	ARHA; ARH12; RHO12; RHOH12
NCBI Protein Information	transforming protein RhoA
UniProt Protein Name	Transforming protein RhoA
UniProt Gene Name	RHOA
UniProt Synonym Gene Names	ARH12; ARHA; RHO12; h12

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/rho-a-b-c-antibody-western-blot-immunocytochemistry-immunohistochemistry-immunofluorescence-flow-cytometry-elisa/46903>