

Rabbit RhoA Polyclonal Antibody | anti-RhoA antibody

Phospho-RhoA (Thr100) Antibody

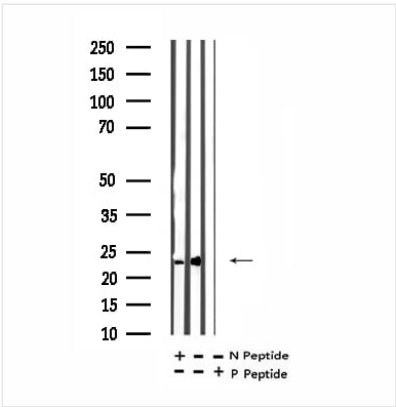
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA328471	Rabbit	Human, Mouse, Rat Predicted: Pig, Bovine, Sheep, Rabbit, Dog, Chicken, Xenopus	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

RhoA; Polyclonal Antibody; Phospho-RhoA (Thr100) Antibody; Aplysia ras related homolog 12; ARH12; ARHA; H 12; H12; Oncogene RHO H12; Ras homolog family member A; Ras homolog gene family member A; Rho A; Rho cDNA clone 12; RHO H12; RHO12; RHOA; RHOA_HUMAN; RHOH12; Small GTP binding protein Rho A; Transforming protein Rho A; Transforming protein RhoA; anti-RhoA antibody

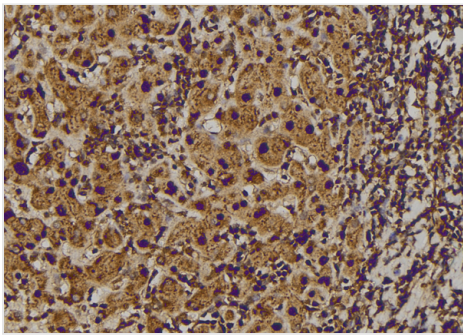
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted: Pig, Bovine, Sheep, Rabbit, Dog, Chicken, Xenopus
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-RhoA (Thr100) Antibody detects endogenous levels of RhoA only when phosphorylated at Thr100.
Purity/Purification	Purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Form/Format	Liquid; Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	193
Applicable Applications for anti-RhoA antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human RhoA around the phosphorylation site of Thr100.
Subcellular Location	Cytoskeleton; Plasma Membrane
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



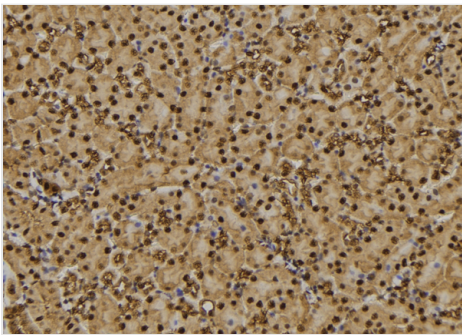
WB (Western Blot)

Western blot analysis of Phospho-RhoA (Thr100) in lysates of HL-60 cells, using Phospho-RhoA (Thr100) Antibody.



IHC (Immunohistochemistry)

At 1/100 staining human liver tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary



IHC (Immunohistochemistry)

At 1/100 staining mouse kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary

ADDITIONAL INFORMATION

Related Product Information for anti-RhoA antibody	Description: 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). Post Translational Modifications: (Microbial infection) Substrate for botulinum ADP-ribosyltransferase.(Microbial infection) Cleaved by yopT protease when the cell is infected by some Yersinia pathogens. This removes the lipid attachment, and leads to its displacement from plasma membrane and to subsequent cytoskeleton cleavage.(Microbial infection) AMPylation at Tyr-34 and Thr-37 are mediated by bacterial enzymes in case of infection by H.somnus and V.parahaemolyticus, respectively. AMPylation occurs in the effector region and leads to inactivation of the GTPase activity by preventing the interaction with downstream effectors, thereby inhibiting actin assembly in infected cells. It is unclear whether some human enzyme mediates AMPylation; FICD has such ability in vitro but additional experiments remain to be done to confirm results in vivo. (Microbial infection) Glycosylated at Tyr-34 by Photorhabdus asymbiotica toxin PAU_02230. Mono-O-GlcNAcylation by PAU_02230 inhibits downstream signaling by an impaired interaction with diverse regulator and effector proteins of Rho and leads to actin disassembly. Phosphorylation by PRKG1 at Ser-188 inactivates RHOA signaling (PubMed:11162591). Phosphorylation by SLK at Ser-188 in response to AGTR2 activation (By similarity). Ubiquitinated by the BCR(KCTD13) and BCR(TNFAIP1) E3 ubiquitin ligase complexes, leading to its degradation by the proteasome, thereby regulating the actin cytoskeleton and synaptic transmission in neurons. Subunit Structure: Interacts with ARHGEF28 (By similarity). Interacts (via GTP-bound form) with RIPOR1 (via N-terminus); this interaction links RHOA to STK24 and STK26 kinases (PubMed:27807006). Interacts with RIPOR2 (via active GTP- or inactive GDP-bound forms) isoform 1 and isoform 2; these interactions are direct, block the loading of GTP to RHOA and decrease upon chemokine CCL19 stimulation in primary T lymphocytes (PubMed:25588844). Binds PRKCL1, ROCK1 and ROCK2. Interacts with ARHGEF2, ARHGEF3, NET1 and RTKN. Interacts with PLCE1 and AKAP13. Interacts with DIAPH1 (PubMed:23325789). Interacts (in the constitutively activated, GTP-bound form) with DGKQ. Interacts with human respiratory syncytial virus (HRSV) protein F; this interaction facilitates virus-induced syncytium formation. Interacts with RACK1; enhances RHOA activation. Interacts with PKP4; the interaction is detected at the midbody. Interacts (GTP-bound form preferentially) with PKN2; the interaction stimulates autophosphorylation and phosphorylation of PKN2. Interacts with ARHGDI A; this interaction inactivates and stabilizes RHOA. Interacts with ARHGDI B. Interacts (GTP-bound form) with KCNA2 (via cytoplasmic N-terminal domain) (PubMed:9635436). Similarity: The basic-rich region is essential for yopT recognition and cleavage. Belongs to the small GTPase superfamily. Rho family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	47606458
NCBI GeneID	387
UniProt Accession #	P61586

Molecular Weight	Observed: 22 kDa Predicted: 22 kDa
NCBI Official Full Name	Transforming protein RhoA
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
UniProt Entry Name	RHOA_HUMAN

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/polyclonal/rhoa-antibody-peptide-elisa-immunohistochemistry-western-blot-elisa/328471>