

Rabbit ARHGDIA Polyclonal Antibody | anti-ARHGDIA antibody

ARHGDIA Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326122	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

ARHGDIA; Polyclonal Antibody; ARHGDIA Antibody; fa96g11; GDIA 1; GDIA1; GDIR1_HUMAN; MGC117248; NPHS8; Rho GDI 1; Rho GDI alpha; Rho GDI; Rho GDP dissociation inhibitor (GDI) alpha; Rho GDP dissociation inhibitor 1; Rho GDP dissociation inhibitor alpha; Rho GDP-dissociation inhibitor 1; Rho-GDI alpha; RhoGDI 1; RhoGDI alpha; RHOGDI; RhoGDI1; wu:fa96g11; zgc:55554; zgc:77681; anti-ARHGDIA antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	ARHGDIA antibody detects endogenous levels of total ARHGDIA
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
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	204
Applicable Applications for anti-ARHGDIA antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human ARHGDIA
Subcellular Location	Cytoplasm.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Dog, Chicken
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Dog (100%), Chicken (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of HeLa whole cell lysates, using ARHGDIA Antibody. The lane on the left is treated with the antigen-specific peptide.



WB (Western Blot)

Western blot analysis of extracts from mouse spleen, using ARHGDIA Antibody.



IHC (Immunohistochemistry)

AAA326122 at 1/100 staining Human prostate tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample 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.



IF (Immunofluorescence)

AAA326122 staining HuvEc cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-ARHGDIa antibody

Description: Rho family small GTPases, including Rho, Rac and cdc42, act as molecular switches, regulating processes such as cell migration, adhesion, proliferation and differentiation. They are activated by guanine nucleotide exchange factors (GEFs), which catalyze the exchange of bound GDP for GTP, and inhibited by GTPase activating proteins (GAPs), which catalyze the hydrolysis of GTP to GDP. A third level of regulation is provided by the stoichiometric binding of Rho GDP dissociation inhibitor (RhoGDI). RhoGDI affects Rho activity by inhibiting nucleotide exchange and membrane association, regulating activity and localization (Reviewed in 1, 2). The inhibitory and shuttling functions of RhoGDI have been uncoupled using mutant forms of RhoGDI (3). Phosphorylation of GDIs and/or GTPases can modulate their affinity for each other and, therefore, GTPase mediated signaling. PAK1 phosphorylation of RhoGDI at serines 101 and 174 causes release and activation of Rac1, but not RhoA (4).

Function: Controls Rho proteins homeostasis. Regulates the GDP/GTP exchange reaction of the Rho proteins by inhibiting the dissociation of GDP from them, and the subsequent binding of GTP to them. Retains Rho proteins such as CDC42, RAC1 and RHOA in an inactive cytosolic pool, regulating their stability and protecting them from degradation. Actively involved in the recycling and distribution of activated Rho GTPases in the cell, mediates extraction from membranes of both inactive and activated molecules due its exceptionally high affinity for prenylated forms. Through the modulation of Rho proteins, may play a role in cell motility regulation. In glioma cells, inhibits cell migration and invasion by mediating the signals of SEMA5A and PLXNB3 that lead to inactivation of RAC1.

Subunit Structure: Monomer. Interacts with FER. Interacts with PLXNB3 (By similarity). Forms a heterodimer with RAC1. Interacts with RHOA, the affinity is increased by three orders of magnitude when RHOA is prenylated. Interacts with PSMD10; the interaction increases ARHGDIa association with RHOA, leading to ARHGDIa-mediated inactivation of RHOA and ROCK and prolonged AKT activation. Interacts with RHOC and CDC42.

Similarity: Belongs to the Rho GDI family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	297374782
NCBI GeneID	396
NCBI Accession #	NP_001172006.1
NCBI GenBank Nucleotide #	NM_001185077.2
UniProt Accession #	P52565; Q6IBM5; A8MXW0; B2R5X1; B4DDD3; B4DUV9
Molecular Weight	Observed: 28 kDa Predicted: 24 kDa
NCBI Official Full Name	rho GDP-dissociation inhibitor 1 isoform a
NCBI Official Synonym Full Names	Rho GDP dissociation inhibitor alpha
NCBI Official Symbol	ARHGDIa
NCBI Official Synonym Symbols	GDIA1; NPHS8; RHOGDI; RHOGDI-1; HEL-S-47e
NCBI Protein Information	rho GDP-dissociation inhibitor 1
UniProt Protein Name	Rho GDP-dissociation inhibitor 1
UniProt Gene Name	ARHGDIa

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/arhgdia-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/326122>