10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GDIA1 Rabbit pAb

Catalog # AP97736

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9HBH0
Other Accession	Q9HBH0
Reactivity	Human
Predicted	Rat, Pig, Mouse, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	23625
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GDIA1
Epitope Specificity	121-204/204
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the small GTPase superfamily. Rho family.
SUBUNIT	Monomer (By similarity). 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
DISEASE	The disease is caused by mutations affecting the gene represented in this entry. Disease description:A form of nephrotic syndrome, a renal disease clinically characterized by progressive renal failure, severe proteinuria, hypoalbuminemia, hyperlipidemia and edema. Kidney biopsies show diffuse mesangial sclerosis, with small glomeruli, hypercellularity, increased extracellular matrix, and contracted/collapsed glomerular tufts surrounded by immature or abnormal podocytes.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Aplysia Ras-related homologs (ARHs), also called Rho genes, belong to the RAS gene superfamily encoding small guanine nucleotide exchange (GTP/GDP) factors. The ARH proteins may be kept in the inactive, GDP-bound state by interaction with GDP dissociation inhibitors, such as ARHGDIA (Leffers et al., 1993[PubMed 8262133]).[supplied by OMIM].

Additional Information

Gene ID	54509
Other Names	ARHF; RIF; Ifld1; RHOF_HUMAN; RHOF; Rho family GTPase Rif; Rho in filopodia; RHOF_MOUSE; ras homolog family member F, filopodia associated; ras homolog gene family, member F (in filopodia); ras homolog family

	member F (in filopodia)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	RHOF
Synonyms	ARHF, RIF
Function	Plasma membrane-associated small GTPase which cycles between an active GTP-bound and an inactive GDP-bound state. Causes the formation of thin, actin-rich surface projections called filopodia. Functions cooperatively with CDC42 and Rac to generate additional structures, increasing the diversity of actin-based morphology.
Cellular Location	Cell membrane; Lipid-anchor; Cytoplasmic side. Cytoplasm, cytoskeleton

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.