

For Research Use Only

ARHGEF1 Recombinant monoclonal antibody

Catalog Number: 88129-1-RR



Basic Information

Catalog Number: 88129-1-RR	GenBank Accession Number: BC011726	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 9138	CloneNo.: 260491F5
Source: Rabbit	UNIPROT ID: Q92888	Recommended Dilutions: WB: 1:5000-1:50000 IF/ICC: 1:50-1:500
Isotype: IgG	Full Name: Rho guanine nucleotide exchange factor (GEF) 1	
Immunogen Catalog Number: AG1905	Calculated MW: 912 aa, 102 kDa Observed MW: 115 kDa	

Applications

Tested Applications: WB, IF/ICC, ELISA	Positive Controls:
Species Specificity: human	WB : HEK-293 cells, HeLa cells, HepG2 cells, Jurkat cells, K-562 cells IF/ICC : A549 cells,

Background Information

ARHGEF1, also known as p115-RhoGEF, is a member of the Rho guanine nucleotide exchange factor (GEF) family, specifically activating the small GTPase RhoA by catalyzing the exchange of GDP for GTP. Structurally, it contains a Dbl homology (DH) domain responsible for GEF activity, a Pleckstrin homology (PH) domain that may regulate membrane association, and an RGS-like domain that interacts with the G-protein subunits Gα12/13. This protein is expressed ubiquitously, with particularly high expression in hematopoietic and lymphoid tissues, and plays a critical role in transducing signals from G protein-coupled receptors coupled to Gα12/13 to activate RhoA and its downstream effector ROCK, thereby regulating cytoskeletal dynamics, cell contraction, and migration. Notably, ARHGEF1 acts as a dual-specificity regulator, functioning as a GAP for Gα12/13 while serving as a GEF for RhoA. Its involvement in essential physiological processes, such as angiotensin II-induced vascular smooth muscle contraction, underscores its importance, while mutations in the ARHGEF1 gene are associated with immunodeficiency 62 and other potential pathologies.

Storage

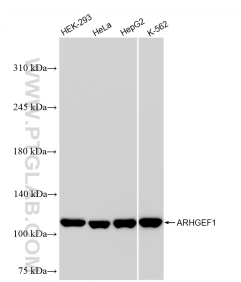
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

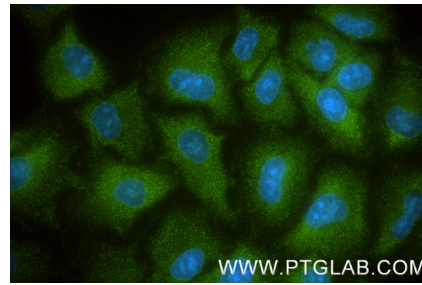
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 88129-1-RR (ARHGEF1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed A549 cells using ARHGEF1 antibody (88129-1-RR, Clone: 260491F5) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).