

For Research Use Only

ARHGEF1 Recombinant monoclonal antibody, PBS Only

Catalog Number: 88129-1-PBS



Basic Information

Catalog Number: 88129-1-PBS	GenBank Accession Number: BC011726	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 9138	CloneNo.: 260491F5
Source: Rabbit	UNIPROT ID: Q92888	
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, Indirect ELISA

Species Specificity:
human

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

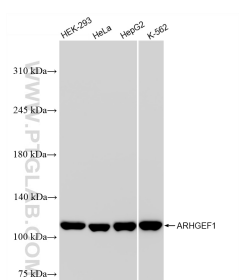
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

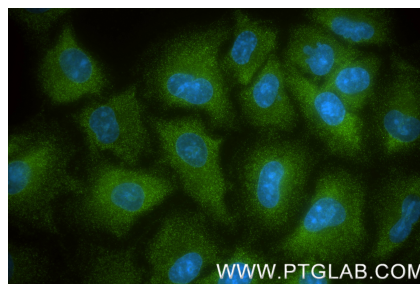
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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Selected Validation Data



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. This data was developed using the same antibody clone with 88129-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 88129-1-PBS in a different storage buffer formulation.