

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
Source: Rabbit	GeneID (NCBI): 9138	CloneNo.: 260491F5
Isotype: IgG	UNIPROT ID: Q92888	Recommended Dilutions: WB: 1:5000-1:50000 IF/ICC: 1:50-1:500
Immunogen Catalog Number: AG1905	Full Name: Rho guanine nucleotide exchange factor (GEF) 1	
	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 G α 12/13. 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 G α 12/13 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 G α 12/13 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

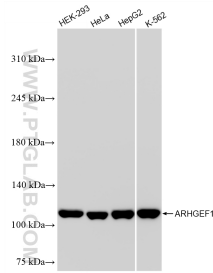
For technical support and original validation data for this product please contact:

T: 4006900926

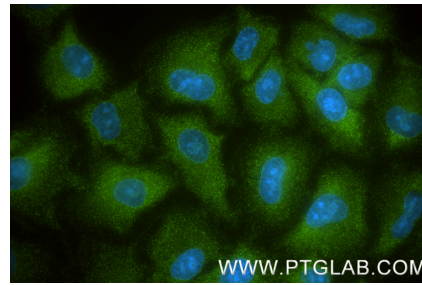
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Selected Validation Data



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.



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).