

For Research Use Only

RAB1B Recombinant antibody

Catalog Number: 83687-4-RR



Basic Information

Catalog Number: 83687-4-RR	GenBank Accession Number: BC071169	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 81876	CloneNo.: 240635D9
Source: Rabbit	UNIPROT ID: Q9H0U4	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:200-1:800 IF/ICC 1:200-1:800
Isotype: IgG	Full Name: RAB1B, member RAS oncogene family	
Immunogen Catalog Number: AG12197	Calculated MW: 201 aa, 22 kDa	
	Observed MW: 22 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), ELISA

Species Specificity:
human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HeLa cells, A431 cells, CHO cells, A375 cells, NIH/3T3 cells, mouse liver tissue, rat liver tissue

IHC : human ovary cancer tissue, mouse heart tissue

IF/ICC : NIH/3T3 cells,

Background Information

Ras-related protein Rab-1B (RAB1B) belongs to the small GTPase superfamily and Rab family. Rab1b, a GTPase regulating secretory transport, was recently associated with targeting proteins to LDs in a Drosophila RNAi screen. Rab1b recruits lipid-synthesizing enzymes, facilitating Lipid droplets (LDs) growth. The small GTPase Rab1b interacts with diacylglycerol acyltransferase 2 to facilitate its targeting to the surface of lipid droplets. (PMID: 38809969). Rab1b, an extensively studied and established master regulator of ER-to-Golgi transport. The mechanism of Rab1b's function is to promote ER to LD surface targeting of those triglyceride-synthesizing enzymes that can associate with the unique lipid monolayer comprising the LD surface (PMID: 38809969). Rab1b is a regulatory protein involved in both COPI and COPII transport (PMID: 17429068).

Storage

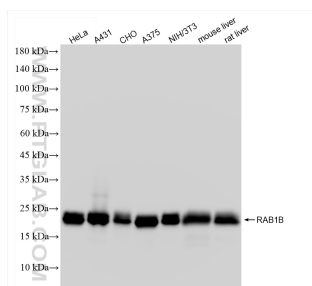
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

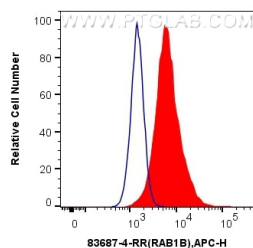
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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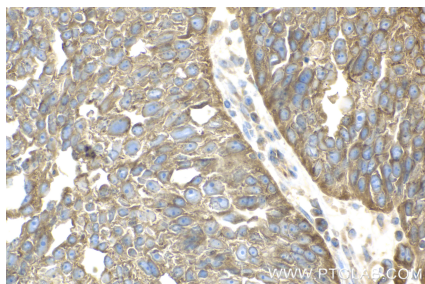
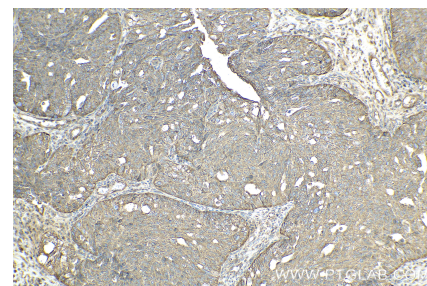
Selected Validation Data



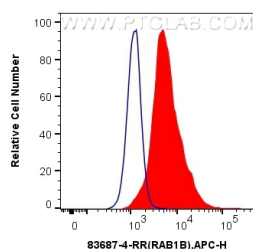
Various lysates were subjected to SDS PAGE followed by western blot with 83687-4-RR (RAB1B antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



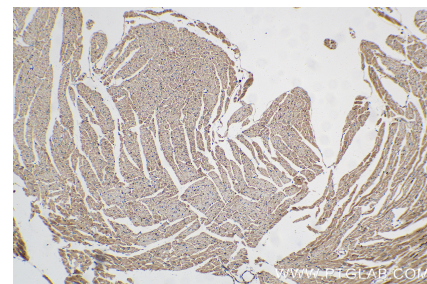
1×10^6 U-251 cells were intracellularly stained with 0.25 μ g RAB1B Recombinant antibody (83687-4-RR, Clone:240635D9) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 μ g Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



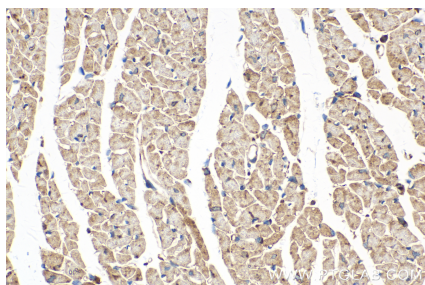
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 83687-4-RR (RAB1B antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



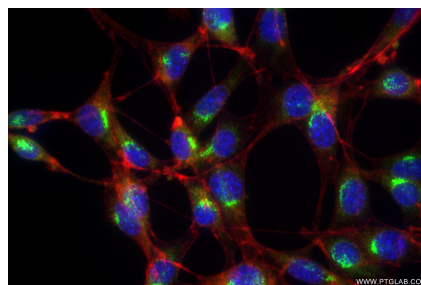
1×10^6 HeLa cells were intracellularly stained with 0.25 μ g RAB1B Recombinant antibody (83687-4-RR, Clone:240635D9) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 μ g Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



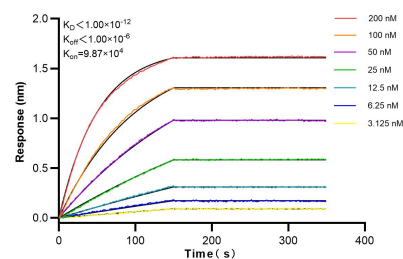
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 83687-4-RR (RAB1B antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 83687-4-RR (RAB1B antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed NIH/3T3 cells using RAB1B antibody (83687-4-RR, Clone: 240635D9) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Bi-layer interferometry (BLI) kinetic assays of 83687-4-RR against Human RAB1B were performed. The affinity constant is below 1 pM.