For Research Use Only

RAB1B Recombinant antibody

Catalog Number:83687-4-RR



Basic Information

Catalog Number: GenBank Accession Number: 83687-4-RR BC071169

BC071169 Protein A purfication

Size:
GeneID (NCBI):
CloneNo.:

 $1000 \ \mu \, g/ml$ 81876 240635D9

Source: UNIPROT ID: Recommended Dilutions: Rabbit Q9H0U4 WB 1:5000-1:50000

Isotype: Full Name:

IgG RAB1B, member RAS oncogene family

Immunogen Catalog Number:Calculated MW:AG12197201 aa, 22 kDaObserved MW:

22 kDa

Applications

Tested Applications: WB, FC (Intra), ELISA Species Specificity:

human, mouse, rat

Positive Controls:

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

Purification Method:

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

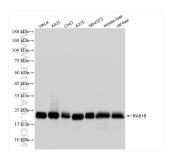
Storage:

Store at -20°C. Stable for one year after shipment. Storage Buffer:

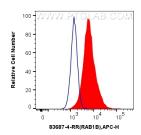
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

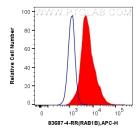
Selected Validation Data



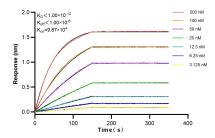
Various lysates were subjected to SDS PAGE followed by western blot with 83687-4-RR (RAB1B antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



1x10^6 U-251 cells were intracellularly stained with 0.25 ug RAB1B Recombinant antibody (83687-4-RR, Clone:240635D9) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



1x10^6 HeLa cells were intracellularly stained with 0.25 ug RAB1B Recombinant antibody (83687-4-RR, Clone:240635D9) and APC-Conjugated AffiniPure Goat Anti-Rabbit 1gG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 49% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



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