For Research Use Only

AGPAT2 Recombinant antibody, PBS Only (Capture)

Catalog Number:83349-3-PBS



Purification Method:

CloneNo.:

240153C2

Protein A purification

Basic Information

Catalog Number: GenBank Accession Number:

83349-3-PBS BC019292

GeneID (NCBI):

100ug, Concentration: 1 mg/ml by Nanodrop: **UNIPROT ID:** 015120

Rabbit Full Name: Isotype: 1-acylglycerol-3-phosphate O-

acyltransferase 2 (lysophosphatidic acid acyltransferase, beta) Immunogen Catalog Number:

Calculated MW: AG34761

31 kDa Observed MW: 27 kDa

Applications

Tested Applications:

WB, IHC, FC (Intra), Cytometric bead array, Indirect

IgG

Species Specificity:

Product Information

83349-3-PBS targets AGPAT2 as part of a matched antibody pair:

MP00360-2: 83349-3-PBS capture and 83349-1-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

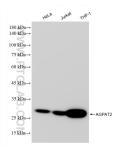
Background Information

1-acyl-sn-glycerol-3-phosphate acyltransferase beta (AGPAT2) belongs to a family of enzymes catalyzing the sn-2 acylation of the glycerol-3-phosphate backbone. AGPAT2 is highly expressed in adipose tissues, liver, and skeletal muscle. AGPAT2 is the only AGPAT isoform whose loss-of-function mutations cause a severe form of human congenital generalized lipodystrophy (PMID: 34824276). Human and mouse AGPAT2 have a calculated molecular mass of 31 kDa, and an alternatively spliced form of AGPAT2 mRNA, encoding a protein of 246 rather than 278 amino acids, is also found in human (PMID: 19336658). Western detected AGPAT2 at an apparent molecular mass of

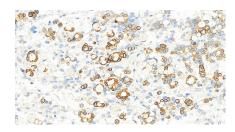
Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

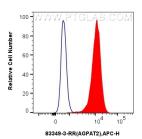
Selected Validation Data



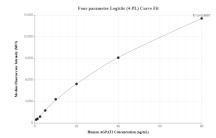
Various lysates were subjected to SDS PAGE followed by western blot with 83349-3-RR (AGPAT2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83349-3-PBS in a different storage buffer formulation.



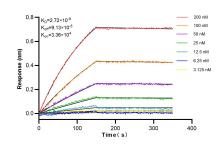
Immunohistochemical analysis of paraffinembedded human ovary cancer tissue slide using 83349-3-RR (AGPAT2 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83349-3-PBS in a different storage buffer formulation.



1x10^6 A549 cells were intracellularly stained with 0.25 ug AGPAT2 Recombinant antibody (83349-3-RR, Clone:240153C2) 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). This data was developed using the same antibody clone with 83349-3-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00360-2, AGPAT2 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83349-3-PBS. Detection antibody: 83349-1-PBS. Standard: Ag34761. Range: 0.625-80 ng/mL



Biolayer interferometry (BLL) kinetic assays of 83349-3-RR against Human AGPAT2 were performed. The affinity constant is 2.72 nM.