

## **Agpat2 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58265

## **Product Information**

**Application** IHC-P, IHC-F, IF, E

Primary Accession <u>015120</u>

**Reactivity** Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 30914
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human LPAAB

Epitope Specificity 121-220/278

**Isotype** IgG

DISEASE

**Purity** affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

**SUBCELLULAR LOCATION** Membrane; Multi-pass membrane protein

**SIMILARITY** Belongs to the 1-acyl-sn-glycerol-3-phosphate acyltransferase family.

Defects in AGPAT2 are the cause of congenital generalized lipodystrophy type

1 (CGL1) [MIM:608594]; also known as Berardinelli-Seip congenital lipodystrophy type 1 (BSCL1) or Berardinelli-Seip syndrome. CGL1 is an autosomal recessive disorder characterized by marked paucity of adipose tissue, extreme insulin resistance, hypertriglyceridemia, hepatic steatosis and

early onset of diabetes.

**Important Note** This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**Background Descriptions** Agpat2 is a member of the 1-acylglycerol-3-phosphate O-acyltransferase

family. It is located within the endoplasmic reticulum membrane and converts lysophosphatidic acid to phosphatidic acid, the second step in de novo

lysophosphatidic acid to phosphatidic acid, the second step in de novo phospholipid biosynthesis. Mutations in its have been associated with congenital generalized lipodystrophy (CGL), or Berardinelli-Seip syndrome, a disease characterized by a near absence of adipose tissue and severe insulin resistance. Alternate transcriptional splice variants, encoding different

isoforms, have been characterized.

## **Additional Information**

**Gene ID** 10555

Other Names 1-acyl-sn-glycerol-3-phosphate acyltransferase beta, 2.3.1.51,

1-acylglycerol-3-phosphate O-acyltransferase 2, 1-AGP acyltransferase 2, 1-AGPAT 2, Lysophosphatidic acid acyltransferase beta, LPAAT-beta, AGPAT2

**Target/Specificity** Expressed predominantly in heart and liver.

**Dilution** IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

## **Protein Information**

Name AGPAT2

**Function** Converts 1-acyl-sn-glycerol-3-phosphate (lysophosphatidic acid or LPA) into

1,2-diacyl-sn-glycerol-3-phosphate (phosphatidic acid or PA) by incorporating

an acyl moiety at the sn-2 position of the glycerol backbone.

**Cellular Location** Endoplasmic reticulum membrane; Multi-pass membrane protein

**Tissue Location** Expressed predominantly in adipose tissue, pancreas and liver.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.