GPAT1 Antibody

Catalog No: #24687

Orders: order@signalwayantibody.com
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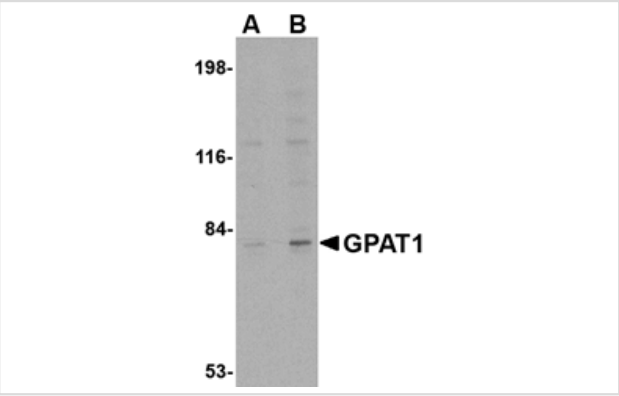
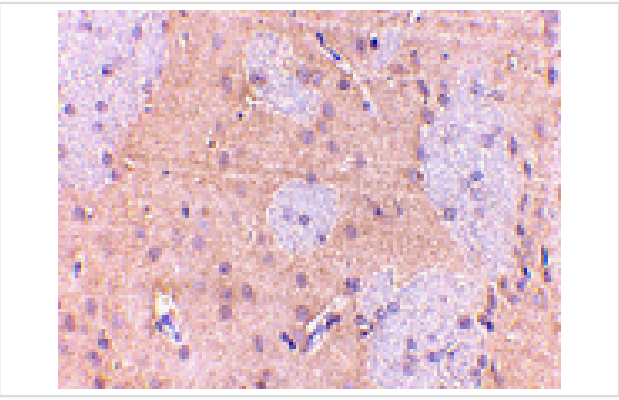
Description

Product Name	GPAT1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Affinity chromatography purified via peptide column
Applications	ELISA WB IHC
Species Reactivity	Hu Ms Rt
Immunogen Type	Peptide
Immunogen Description	Raised against a 15 amino acid peptide near the carboxy terminus of the human GPAT1.
Target Name	GPAT1
Other Names	Glycerol-3-phosphate acyltransferase 1, GPAM
Accession No.	Swiss-Prot:Q9HCL2Gene ID:57678
Uniprot	Q9HCL2
GeneID	57678;
Concentration	1mg/ml
Formulation	Supplied in PBS containing 0.02% sodium azide.
Storage	Can be stored at -20°C, stable for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

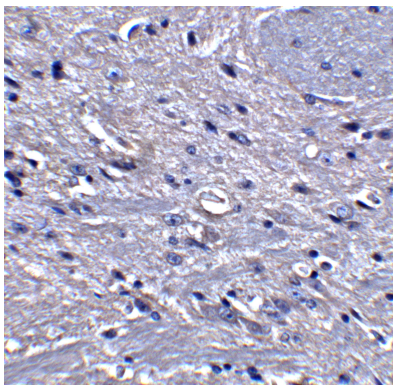
Images



Western blot analysis of GPAT1 in rat brain tissue lysate with GPAT1 antibody at (A) 1 and (B) 2 ug/mL.



Immunohistochemistry of GPAT1 in rat brain with GPAT1 antibody at 2.5 ug/mL.



Immunohistochemistry of GPAT1 in mouse brain tissue with GPAT1 antibody at 5 µg/ml.

Background

Glycerol-3-phosphate acyltransferase 1 (GPAT1), one of four known GPAT isoforms, is located on the mitochondrial outer membrane, allowing reciprocal regulation with carnitine palmitoyltransferase-1. It is thought to be critical for the development of hepatic steatosis; steatosis triggered by GPAT1 overexpression leads to hepatic and possibly peripheral insulin resistance. GPAT1 is transcriptionally upregulated by insulin and sterol regulatory element binding protein (SREBP-1) and downregulated by AMP-activated protein kinase. Mice deficient in GPAT1 exhibit decreased triacylglycerol (TAG) in cardiomyocytes even in high-fat diets, suggesting that GPAT1 contributes significantly to TAG accumulation in heart tissue during lipogenic or high fat diets. At least two isoforms of GPAT1 are known to exist.

Note: This product is for in vitro research use only