

GPAT1 Antibody

Catalog No: #24687

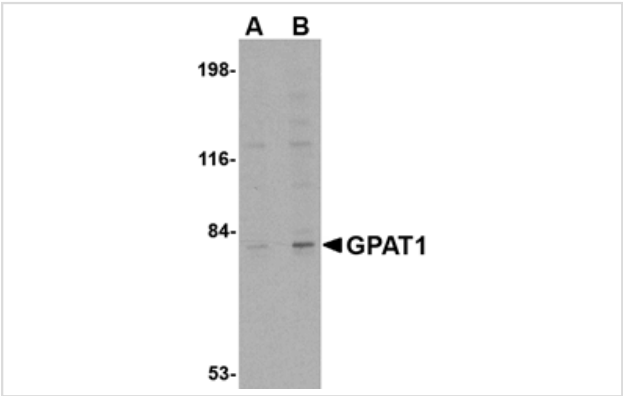


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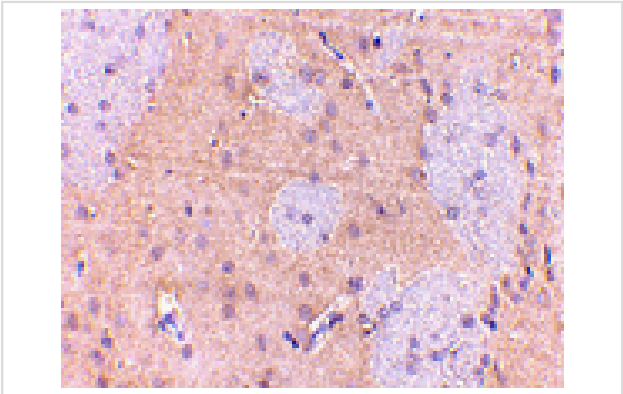
Description

| | |
|-----------------------|---|
| 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. |

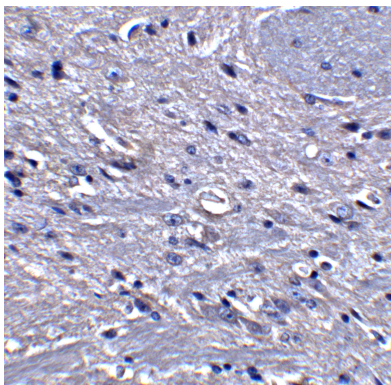
Images



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