

Anti-GPAT1 GPAM Antibody

Catalog Number: A05432

About GPAM

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.

Overview

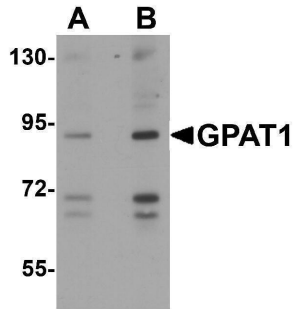
Product Name	Anti-GPAT1 GPAM Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-GPAT1 GPAM Antibody (Catalog # A05432). Tested in ELISA, WB, IHC-P, IF applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, IF, IHC-P, WB
Clonality	Polyclonal
Formulation	GPAT1 Antibody is supplied in PBS containing 0.02% sodium azide.
Storage Instructions	GPAT1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. Avoid repeated freeze-thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Host	Rabbit
Uniprot ID	Q9HCL2

Technical Details

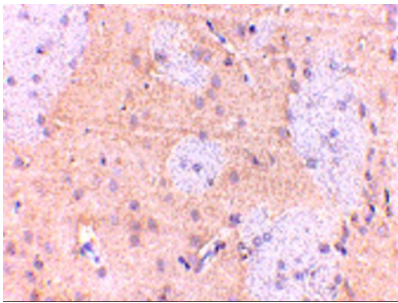
Immunogen	GPAT1 antibody was raised against a 15 amino acid synthetic peptide near the carboxy terminus of the human GPAT1. The immunogen is located within amino acids 730 - 780 of GPAT1.
Predicted Reactive Species	Bovine, Pig
Cross Reactivity	At least four isoforms of GPAT1 are known to exist; this antibody will detect only the two largest isoforms.
Isotype	IgG
Form	Liquid
Concentration	1 mg/mL

Purification	GPAT1 Antibody is affinity chromatography purified via peptide column.
Suggested Dilutions	GPAT1 antibody can be used for detection of GPAT1 by Western blot at 1 - 2 ug/mL. Antibody can also be used for immunohistochemistry starting at 2.5 ug/mL. For immunofluorescence start at 20 ug/mL. Antibody validated: Western Blot in rat samples; Immunohistochemistry in mouse and rat samples and Immunofluorescence in mouse and rat samples. All other applications and species not yet tested. Optimal dilutions for each application should be determined by the researcher.

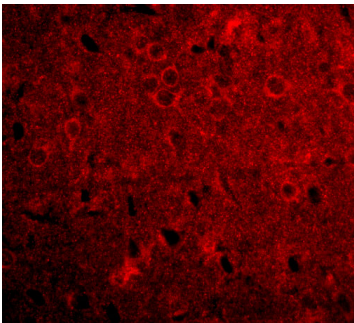
Anti-GPAT1 GPAM Antibody (A05432) Images



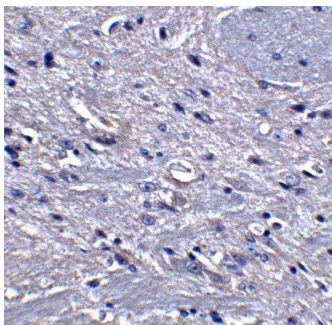
Western blot analysis of GPAT1 in rat brain tissue lysate with GPAT1 antibody at (A) 1 and (B) 2 ug/mL.



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

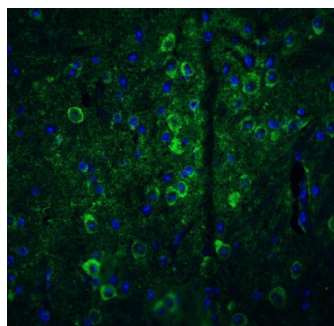


Immunofluorescence of GPAT1 in Rat Brain tissue with GPAT1 antibody at 20 ug/mL.



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

Immunofluorescence of GPAT1 in mouse brain tissue with GPAT1 antibody at 20 ug/mL. Green: GPAT1 Antibody (A05432) Blue: DAPI staining



Submit a product review to [Biocompare.com](https://www.biocompare.com)

Submit a review of this product to [Biocompare.com](https://www.biocompare.com) to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-GPAT1 GPAM Antibody

For Research Use Only. Not for use in diagnostic procedures.