

## 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

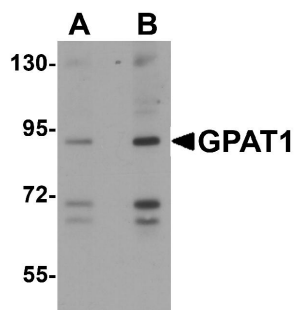
Product Name	Anti-GPAT1 GPAM Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-GPAT1 GPAM Antibody (Catalog # A05432). Tested in ELISA, WB, IHC-P, IF applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, IF, IHC-P, WB
Clonality	Polyclonal
Formulation	GPAT1 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

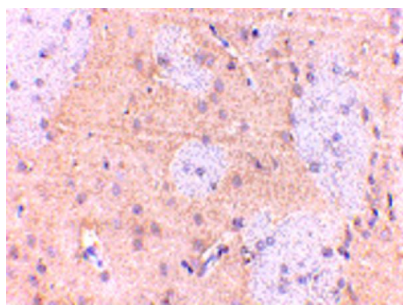
Immunogen	GPAT1 antibody was raised against a 15 amino acid synthetic peptide near the carboxy terminus of the human GPAT1. The immunogen is located within amino acids 730 - 780 of GPAT1.
Predicted Reactive Species	Bovine, Pig
Cross Reactivity	At least four isoforms of GPAT1 are known to exist; this 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	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>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.</p> <p>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.</p> <p>Optimal dilutions for each application should be determined by the researcher.</p>

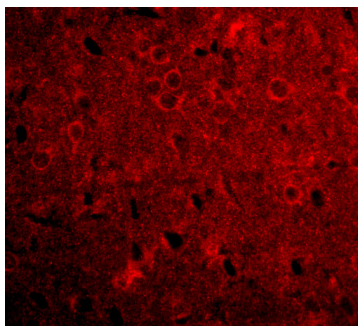
## Anti-GPAT1 GPAM Antibody (A05432) Images



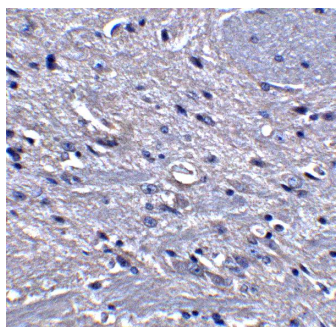
Western blot analysis of GPAT1 in rat brain tissue lysate with GPAT1 antibody at (A) 1 and (B) 2 ug/mL.



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



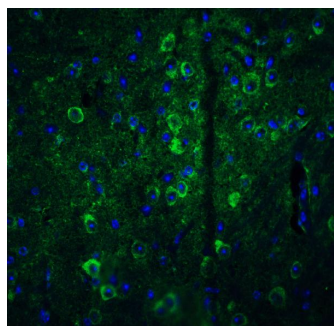
Immunofluorescence of GPAT1 in Rat Brain tissue with GPAT1 antibody at 20 ug/mL.



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

Submit a review of this product to 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