

GPAT4 Rabbit pAb

Catalog # AP98131

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q86UL3
Other Accession	Q86UL3
Predicted	Rat, Pig, Human, Mouse, Chicken, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	52071
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GPAT4
Epitope Specificity	351-456/456
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the 1-acyl-sn-glycerol-3-phosphate acyltransferase family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	AGPAT6 is a novel glycerolipid acyltransferase of the ER, which is crucial for the production of milk fat by the mammary gland. It converts lysophosphatidic acid (LPA) into phosphatidic acid by incorporating an acyl moiety at the sn-2 position of the glycerol backbone.

Additional Information

Gene ID	137964
Other Names	1-AGPAT 6; AGPAT6; LPAAT-zeta; LPAATZ; TSARG7; RGD1310520; GPAT4_BOVIN; GPAT4; 1-acylglycerol-3-phosphate O-acyltransferase 6 (1-AGP acyltransferase 6 1-AGPAT 6); Acyl-CoA:glycerol-3-phosphate acyltransferase 4; Lysophosphatidic acid acyltransferase zeta (LPAAT-zeta); 2.3.1.15; GPAT4_HUMAN; Testis spermatogenesis apoptosis-related protein 7 (TSARG7); GPAT4_MOUSE; Testis spermatogenesis apoptosis-related protein 7; Q0ZFS7_RAT; glycerol-3-phosphate acyltransferase 4; 1-acylglycerol-3-phosphate O-acyltransferase 6 (lysophosphatidic acid acyltransferase, zeta); 1-acylglycerol-3-phosphate O-acyltransferase 6; lysophosphatidic acid acyltransferase, zeta
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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	GPAT4 (HGNC:20880)
Function	Converts glycerol-3-phosphate to 1-acyl-sn-glycerol-3- phosphate (lysophosphatidic acid or LPA) by incorporating an acyl moiety at the sn-1 position of the glycerol backbone (PubMed: 18238778). Active against both saturated and unsaturated long-chain fatty acyl- CoAs (PubMed: 18238778). Protects cells against lipotoxicity (PubMed: 30846318).
Cellular Location	Endoplasmic reticulum membrane; Multi-pass membrane protein
Tissue Location	Ubiquitous. High levels in testis. Relatively high level of expression in skeletal muscle and heart. Relatively low level of expression in lung.

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