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PLRP2 Rabbit pAb

Catalog # AP96843

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P54317
Other Accession	P54317
Reactivity	Mouse
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	51961
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PLRP2
Epitope Specificity	301-400/469
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 AB hydrolase superfamily. Lipase family. Contains 1 PLAT domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a lipase that hydrolyzes galactolipids, the main components of plant membrane lipids. An allelic polymorphism in this gene results in both coding and non-coding variants; the reference genome represents the non-coding allele. [provided by RefSeq, Aug 2015]

Additional Information

Gene ID	5408
Other Names	PLRP2; LIPR2_HUMAN; PNLIPRP2; PL-RP2; Cytotoxic T lymphocyte lipase; Galactolipase; Triacylglycerol lipase; LIPR2_MOUSE; LIPR2_RAT; Secretory glycoprotein GP-3; pancreatic lipase related protein 2 (gene/pseudogene); pancreatic lipase related protein 2
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	PNLIPRP2 (HGNC:9157)

Function	Lipase that primarily hydrolyzes triglycerides and galactosylglycerides (PubMed:15287741, PubMed:17401110, PubMed:18702514, PubMed:19451396, PubMed:20083229, PubMed:21865348, PubMed:26494624). In neonates, may play a major role in pancreatic digestion of dietary fats such as milk fat globules enriched in long- chain triglycerides (PubMed:19824014, PubMed:21652702, PubMed:23732775). Hydrolyzes short-, medium- and long-chain fatty acyls in triglycerides without apparent positional specificity (PubMed:15287741, PubMed:17401110, PubMed:18702514, PubMed:21652702, PubMed:21865348). Can completely deacylate triacylglycerols (PubMed:21865348). When the liver matures and bile salt synthesis increases, likely functions mainly as a galactolipase and monoacylglycerol lipase. Hydrolyzes monogalactosyldiglycerols (MGDG) and digalactosyldiacylglycerols (DGDG) present in a plant-based diet, releasing long-chain polyunsaturated fatty acids (PubMed:15287741, PubMed:17401110, PubMed:18702514, PubMed:20083229, PubMed:26494624). Hydrolyzes medium- and long-chain fatty acyls in galactolipids (PubMed:18702514, PubMed:20083229). May act together with LIPF to hydrolyze partially digested triglycerides (PubMed:23732775). Hydrolyzes long-chain monoglycerides with high efficiency (PubMed:17401110, PubMed:21652702, PubMed:23732775). In cytotoxic T cells, contributes to perforin-dependent cell lysis, but is unlikely to mediate direct cytotoxicity (By similarity). Also has low phospholipase activity (PubMed:17401110, PubMed:18702514). In neurons, required for the localization of the phospholipid 1-oleoyl-2-palmitoyl-PC (OPPC) to neurite tips through acyl chain remodeling of membrane phospholipids (By similarity). The resulting OPPC-rich lipid membrane domain recruits the t-SNARE protein STX4 by selectively interacting with the STX4 transmembrane domain and this promotes surface expression of the dopamine transporter SLC6A3/DAT at neurite tips by facilitating fusion of SLC6A3-containing transport vesicles with the plasma membrane (By similarity).
Cellular Location	Secreted. Zymogen granule membrane {ECO:0000250|UniProtKB:P54318}; Peripheral membrane protein {ECO:0000250|UniProtKB:P54318}. Cell projection, neuron projection {ECO:0000250|UniProtKB:P54318}. Note=Localizes to neurite tips in neuronal cells. {ECO:0000250|UniProtKB:P54318}
Tissue Location	Pancreas..

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