10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PNPLA4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13971b

Product Information

Application	WB, IHC-P, E
Primary Accession	P41247
Other Accession	NP_004641.1, NP_001135861.1, NP_001166143.1
Reactivity	Human
Predicted	Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32515
Calculated MW	27980
Antigen Region	171-199

Additional Information

Gene ID	8228
Other Names	Patatin-like phospholipase domain-containing protein 4, Protein GS2, PNPLA4, DXS1283E, GS2
Target/Specificity	This PNPLA4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 171-199 amino acids from the C-terminal region of human PNPLA4.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PNPLA4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PNPLA4 (HGNC:24887)
Function	Has abundant triacylglycerol lipase activity (PubMed: 15364929, PubMed:15955102, PubMed:16150821, PubMed:17603008). Transfers fatty

acid from triglyceride to retinol, hydrolyzes retinylesters, and generates 1,3-diacylglycerol from triglycerides (PubMed:15955102, PubMed:17603008). Additionally possesses acylglycerol transacylase and phospholipase A2 activities (PubMed:15364929, PubMed:17603008). Able to catalyze fatty acyl CoA-dependent retinol esterification during epidermal maturation, when pH becomes acidic (PubMed:15955102).

Cellular Location Mitochondrion.

Tissue Location Expressed in all tissues examined, including heart, brain, placenta, lung, liver, muscle, kidney, pancreas and spleen

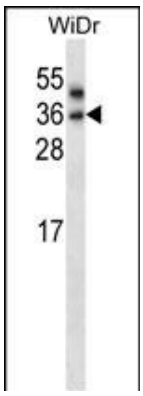
Background

This gene encodes a member of the patatin-like family of phospholipases. The encoded enzyme has both triacylglycerol lipase and transacylase activities and may be involved in adipocyte triglyceride homeostasis. Alternate splicing results in multiple transcript variants. A pseudogene of this gene is found on chromosome Y.

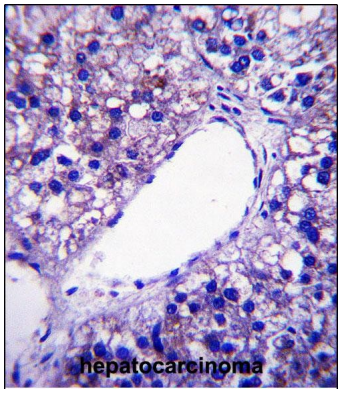
References

Gao, J.G., et al. Mol. Genet. Metab. 96(4):253-260(2009)
Kienesberger, P.C., et al. J. Lipid Res. 50 SUPPL, S63-S68 (2009) :
Johansson, L.E., et al. PLoS ONE 4 (4), E5327 (2009) :
Gao, J.G., et al. Biochem. Biophys. Res. Commun. 360(2):501-506(2007)
Wilson, P.A., et al. J. Lipid Res. 47(9):1940-1949(2006)

Images



PNPLA4 Antibody (C-term) (Cat. #AP13971b) western blot analysis in WiDr cell line lysates (35ug/lane).This demonstrates the PNPLA4 antibody detected the PNPLA4 protein (arrow).



PNPLA4 Antibody (C-term) (Cat. #AP13971b)immunohistochemistry analysis in formalin fixed and paraffin embedded human hepatocarcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of PNPLA4 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

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