10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

PNPLA3 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16280a

Specification

PNPLA3 Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	Q9NST1
Other Accession	NP_079501.2
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**52865**
Antigen Region	**109-137**

PNPLA3 Antibody (N-term) - Additional Information

Gene ID 80339

Other Names
Patatin-like phospholipase domain-containing protein 3, Acylglycerol O-acyltransferase, 231-, Adiponutrin, Calcium-independent phospholipase A2-epsilon, iPLA2-epsilon, PNPLA3, ADPN, C22orf20

Target/Specificity
This PNPLA3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 109-137 amino acids from the N-terminal region of human PNPLA3.

Dilution
WB~~1:1000

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
PNPLA3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PNPLA3 Antibody (N-term) - Protein Information

Name PLPL3

Function Specifically catalyzes coenzyme A (CoA)-dependent acylation of 1-acyl-sn-glycerol 3-phosphate (2-lysophosphatidic acid/LPA) to generate phosphatidic acid (PA), an important metabolic intermediate and precursor for both triglycerides and glycerophospholipids. Does not esterify other lysophospholipids. Acyl donors are long chain (at least C16) fatty acyl-CoAs: arachidonoyl-CoA, linoleoyl-CoA, oleoyl-CoA and at a lesser extent palmitoyl-CoA (PubMed:22560221). Additionally possesses low triacylglycerol lipase and CoA-independent acylglycerol transacylase activities and thus may play a role in acyl-chain remodeling of triglycerides (PubMed:15364929, PubMed:20034933, PubMed:22560221). In vitro may express hydrolytic activity against glycerolipids triacylglycerol, diacylglycerol and monoacylglycerol, with a strong preference for oleic acid as the acyl moiety (PubMed:21878620). However, the triacylglycerol hydrolase activity is controversial and may be very low (PubMed:22560221). Possesses phospholipase A2 activity (PubMed:15364929).

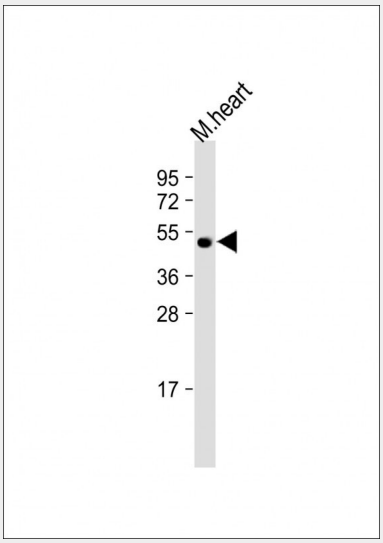
Cellular Location
Membrane; Single-pass type II membrane protein. Lipid droplet

PNPLA3 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

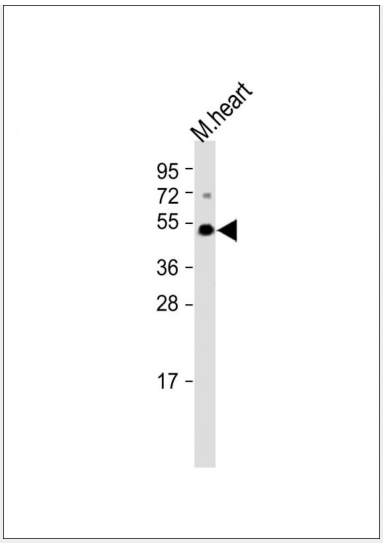
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PNPLA3 Antibody (N-term) - Images

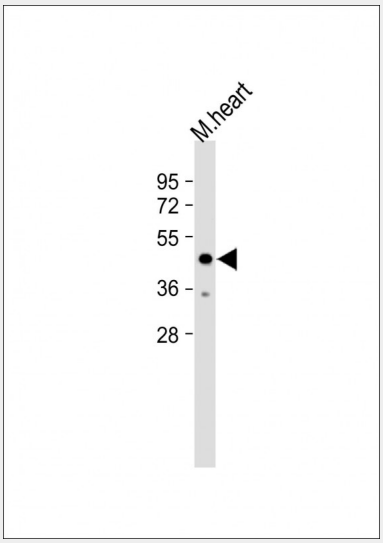


All lanes : Anti-PNPLA3 Antibody (N-term) at 1:2000 dilution Lane1: mouse heart lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 46 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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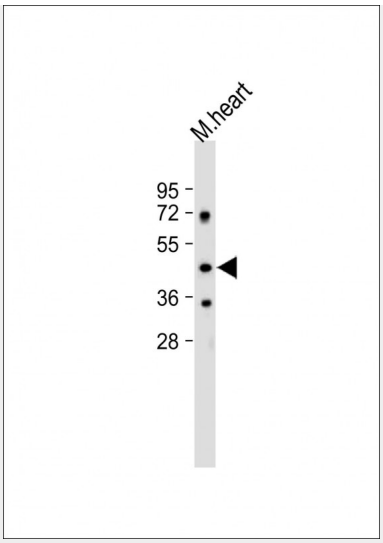


All lanes : Anti-PNPLA3 Antibody (N-term) at 1:1000 dilution Lane 1: mouse heart lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 46 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

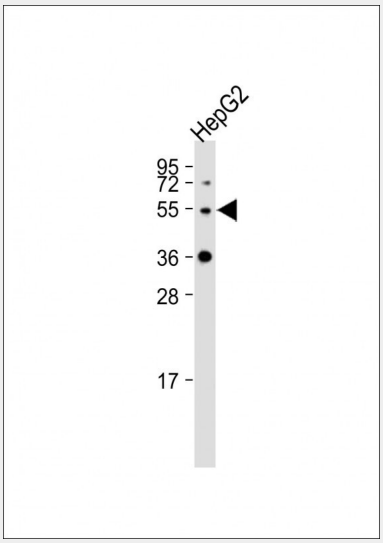


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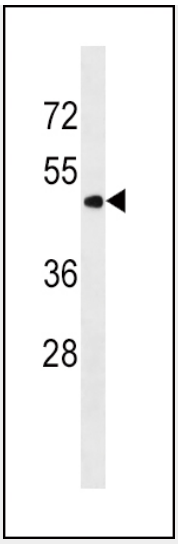


All lanes : Anti-PNPLA3 Antibody (N-term) at 1:2000 dilution Lane 1: mouse heart lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 46 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-PNPLA3 Antibody (N-term) at 1:2000 dilution Lane 1: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 53 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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PNPLA3 Antibody (N-term) (Cat. #AP16280a) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the PNPLA3 antibody detected the PNPLA3 protein (arrow).

PNPLA3 Antibody (N-term) - Background

The protein encoded by this gene is a triacylglycerol lipase that mediates triacylglycerol hydrolysis in adipocytes. The encoded protein, which appears to be membrane bound, may be involved in the balance of energy usage/storage in adipocytes.

PNPLA3 Antibody (N-term) - References

Santoro, N., et al. Hepatology 52(4):1281-1290(2010)
Valenti, L., et al. Hepatology 52(4):1274-1280(2010)
Rotman, Y., et al. Hepatology 52(3):894-903(2010)
Speliotes, E.K., et al. Hepatology 52(3):904-912(2010)
Pare, G., et al. PLoS Genet. 6 (6), E1000981 (2010) :