

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

Specification

PNPLA3 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	O9NST1
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

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

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

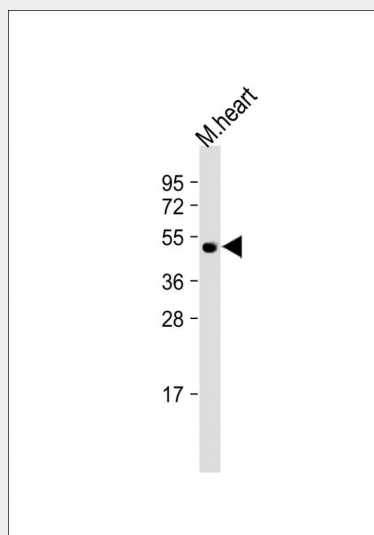
Membrane; Single-pass type II membrane protein. Lipid droplet

PNPLA3 Antibody (N-term) - Protocols

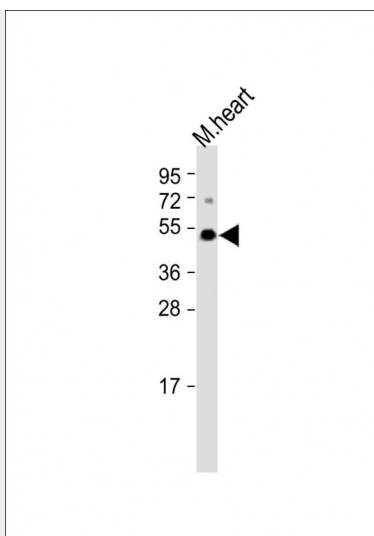
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

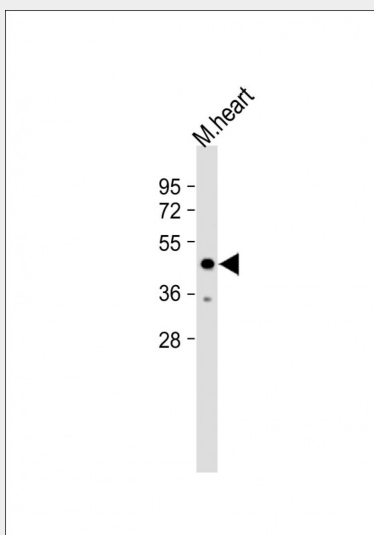
PNPLA3 Antibody (N-term) - Images



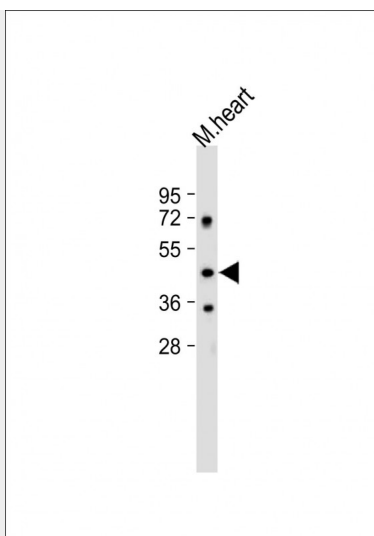
All lanes : Anti-PNPLA3 Antibody (N-term) at 1:2000 dilution Lane1: mouse heart lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 46 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



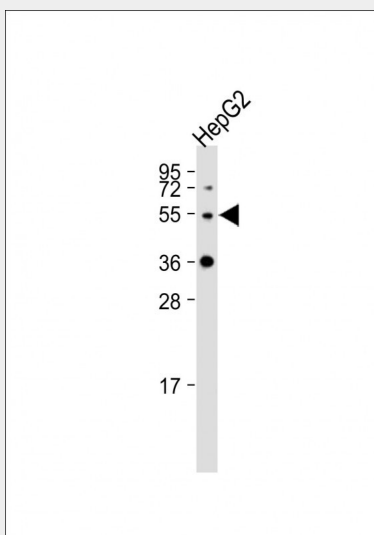
All lanes : Anti-PNPLA3 Antibody (N-term) at 1:1000 dilution Lane 1: mouse heart lysate
Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated
at 1/10000 dilution. Predicted band size : 46 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



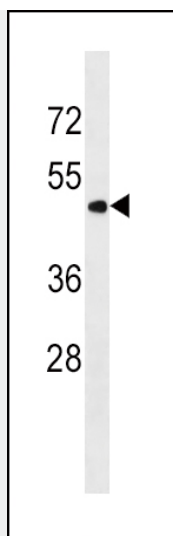
All lanes : Anti-PNPLA3 Antibody (N-term) at 1:2000 dilution Lane 1: mouse heart lysate
Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated
at 1/10000 dilution. Predicted band size : 46 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-PNPLA3 Antibody (N-term) at 1:2000 dilution Lane 1: 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.



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) :