

PLRP2 (D-1): sc-376236

BACKGROUND

Pancreatic lipase (PNLIP), also designated pancreatic triacylglycerol acylhydrolase, is important for dietary fat absorption, as it hydrolyses triglycerides into diglycerides, monoglycerides and free fatty acids. Pancreatic lipase-related protein 2 (PLRP2) is a 469 amino acid protein with 65% amino acid identity with Pancreatic Lipase. Similar to Pancreatic Lipase, PLRP2 is believed to have lipolytic activity that is inhibited by the lipase inhibitor orlistat. PLRP2 catalyzes the reaction of triacylglycerol and water to form diacylglycerol and a carboxylate. Expressed in the pancreas, PLRP2 is a secreted protein that contains one PLAT domain which is thought to be involved in protein-lipid interactions.

REFERENCES

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3. Eydoux, C., et al. 2006. Human Pancreatic Lipase-related protein 2: tissular localization along the digestive tract and quantification in pancreatic juice using a specific ELISA. *Biochim. Biophys. Acta* 1760: 1497-1504.
4. Reboul, E., et al. 2006. Pancreatic Lipase and pancreatic lipase-related protein 2, but not Pancreatic Lipase-related protein 1, hydrolyze retinyl palmitate in physiological conditions. *Biochim. Biophys. Acta* 1761: 4-10.
5. Elinson, N., et al. 2006. Leptin directly regulates exocrine Pancreas Lipase and two related proteins in the rat. *Br. J. Nutr.* 96: 691-696.
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CHROMOSOMAL LOCATION

Genetic locus: PNLIPRP2 (human) mapping to 10q25.3; Pnliprp2 (mouse) mapping to 19 D2.

SOURCE

PLRP2 (D-1) is a mouse monoclonal antibody raised against amino acids 13-70 mapping near the N-terminus of PLRP2 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PLRP2 (D-1) is available conjugated to agarose (sc-376236 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376236 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376236 PE), fluorescein (sc-376236 FITC), Alexa Fluor® 488 (sc-376236 AF488), Alexa Fluor® 546 (sc-376236 AF546), Alexa Fluor® 594 (sc-376236 AF594) or Alexa Fluor® 647 (sc-376236 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376236 AF680) or Alexa Fluor® 790 (sc-376236 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

PLRP2 (D-1) is recommended for detection of PLRP2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PLRP2 siRNA (h): sc-76174, PLRP2 siRNA (m): sc-76175, PLRP2 shRNA Plasmid (h): sc-76174-SH, PLRP2 shRNA Plasmid (m): sc-76175-SH, PLRP2 shRNA (h) Lentiviral Particles: sc-76174-V and PLRP2 shRNA (m) Lentiviral Particles: sc-76175-V.

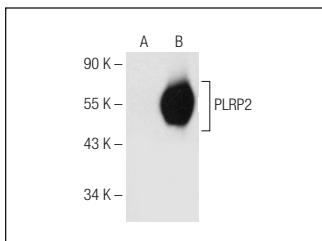
Molecular Weight of PLRP2: 50 kDa.

Positive Controls: PLRP2 (h3): 293T Lysate: sc-158870 or mouse pancreas extract: sc-364244.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



PLRP2 (D-1): sc-376236. Western blot analysis of PLRP2 expression in non-transfected: sc-117752 (A) and human PLRP2 transfected: sc-158870 (B) 293T whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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