SANTA CRUZ BIOTECHNOLOGY, INC.

PLRP2 (H-79): sc-98718

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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2. Sias, B., et al. 2004. Human pancreatic lipase-related protein 2 is a galactolipase. Biochemistry 43: 10138-10148.
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.
6. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 604423. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
7. Aoki, J., et al. 2007. Structure and function of extracellular phospholipase A1 belonging to the pancreatic lipase gene family. Biochimie 89: 197-204.

CHROMOSOMAL LOCATION

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

SOURCE

PLRP2 (H-79) is a rabbit polyclonal antibody raised against amino acids 398-469 mapping at the C-terminus of PLRP2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

PLRP2 (H-79) is recommended for detection of PLRP2 of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, 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.

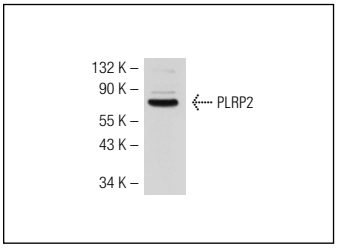
Molecular Weight of PLRP2: 50 kDa.

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

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



PLRP2 (H-79): sc-98718. Western blot analysis of PLRP2 expression in mouse pancreas tissue extract.

RESEARCH USE

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

MONOS Satisfaction Guaranteed

Try **PLRP2 (D-1): sc-376236** or **PLRP2 (H-9): sc-166956**, our highly recommended monoclonal alternatives to PLRP2 (H-79).