

Pancreatic Lipase (D-13): sc-47293

BACKGROUND

The lipase gene family belongs to one of the most robust genetic superfamilies found in living organisms, which includes esterases and thioesterases. Members of the AB hydrolase subfamily include Hepatic Lipase (HL), Endothelial lipase (EL), Lipoprotein Lipase (LPL), Pancreatic Lipase (PL), Gastric Lipase (GL) and LCAT. These family members play a crucial role in the metabolism of lipids. Pancreatic Lipase, also designated pancreatic triacylglycerol acyl hydrolase, is important for dietary fat absorption as it hydrolyses triglycerides into diglycerides, monoglycerides and free fatty acids.

REFERENCES

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2. Winkler, F.K., et al. 1990. Structure of human Pancreatic Lipase. *Nature* 343: 771-774.
3. Yajima, H., et al. 2005. Prevention of diet-induced obesity by dietary isomerized hop extract containing isohumulones, in rodents. *Int. J. Obes. Relat. Metab. Disord.* 29:991-997.
4. Han, L.K., et al. 2005. Anti-obesity effects of chikusetsusaponins isolated from *Panax japonicus* rhizomes. *BMC Complement Altern. Med.* 5:9.
5. Bijvelds, M.J., et al. 2005. Fat absorption in cystic fibrosis mice is impeded by defective lipolysis and post-lipolytic events. *Am. J. Physiol. Gastrointest. Liver Physiol.* 288: G646-653.
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CHROMOSOMAL LOCATION

Genetic locus: Pnlp (mouse) mapping to 19 D2.

SOURCE

Pancreatic Lipase (D-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Pancreatic Lipase of rat origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-47293 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

Pancreatic Lipase (D-13) is recommended for detection of Pancreatic Lipase of 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 Pancreatic Lipase siRNA (m): sc-61286, Pancreatic Lipase shRNA Plasmid (m): sc-61286-SH and Pancreatic Lipase shRNA (m) Lentiviral Particles: sc-61286-V.

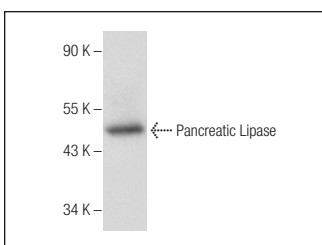
Molecular Weight of Pancreatic Lipase: 50 kDa.

Positive Controls: Rat pancreas tissue extract.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Pancreatic Lipase (D-13): sc-47293. Western blot analysis of Pancreatic Lipase expression in rat pancreas tissue extract.

SELECT PRODUCT CITATIONS

1. Jia, J., et al. 2010. Regulated expression of pancreatic triglyceride lipase after rat traumatic brain injury. *Mol. Cell. Biochem.* 335: 127-136.

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Try **Pancreatic Lipase (A-3): sc-374612** or **Pancreatic Lipase (A-2): sc-393085**, our highly recommended monoclonal alternatives to Pancreatic Lipase (D-13).