SANTA CRUZ BIOTECHNOLOGY, INC.

Gastric Lipase (H-1): sc-390750

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The lipase gene family belongs to one of the most robust genetic superfamilies found in living organisms, which includes esterases and thioesterases. The AB hydrolase subfamily plays a crucial role in the metabolism of lipids. Members of this family include Hepatic Lipase (HL), Endothelial Lipase (EL), Lipoprotein Lipase (LPL), Pancreatic Lipase (PL), Gastric Lipase (GL), LCAT and Lysosomal Acid Lipase (LAL). Gastric Lipase is a 379-amino acid protein that is highly homologus to LAL and is involved in the digestion of dietary triglycerides in the gastrointestinal tract, especially in individuals with pancreatic lipase deficiencies. Gastric Lipase is secreted by the fundic mucosa of the stomach and, under acidic pH conditions, it hydrolyzes the ester bonds of triglycerides.

REFERENCES

1. Shinchi, H., et al. 2004. Value of magnetic resonance cholangiopancreatography with secretin stimulation in the evaluation of pancreatic exocrine function after pancreaticogastrostomy. J. Hepatobiliary Pancreat. Surg. 11: 50-55.
2. Mu, H. and Porsgaard, T. 2005. The metabolism of structured triacylglycerols. Prog. Lipid Res. 44: 430-448.
3. Mattes, R.D. 2005. Fat taste and lipid metabolism in humans. Physiol. Behav. 86: 691-697.
4. Jain, D., et al. 2005. Composite glandular and endocrine tumors of the stomach with pancreatic acinar differentiation. Am. J. Surg. Pathol. 29: 1524-1529.
5. Carrière, F. and Laugier, R. 2005. Gastrointestinal lipolysis levels and potential use of Gastric Lipase in insufficiency. Clin. Gastroenterol. Hepatol. 3: 715-716.

CHROMOSOMAL LOCATION

Genetic locus: LIPF (human) mapping to 10q23.31; Lipf (mouse) mapping to 19 C1.

SOURCE

Gastric Lipase (H-1) is a mouse monoclonal antibody raised against amino acids 296-348 mapping near the C-terminus of Gastric Lipase of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Gastric Lipase (H-1) is available conjugated to agarose (sc-390750 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390750 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390750 PE), fluorescein (sc-390750 FITC), Alexa Fluor® 488 (sc-390750 AF488), Alexa Fluor® 546 (sc-390750 AF546), Alexa Fluor® 594 (sc-390750 AF594) or Alexa Fluor® 647 (sc-390750 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390750 AF680) or Alexa Fluor® 790 (sc-390750 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Gastric Lipase (H-1) is recommended for detection of Gastric Lipase 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), immunohistochemistry (including paraffin-embedded sections) (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 Gastric Lipase siRNA (h): sc-60673, Gastric Lipase siRNA (m): sc-60674, Gastric Lipase shRNA Plasmid (h): sc-60673-SH, Gastric Lipase shRNA Plasmid (m): sc-60674-SH, Gastric Lipase shRNA (h) Lentiviral Particles: sc-60673-V and Gastric Lipase shRNA (m) Lentiviral Particles: sc-60674-V.

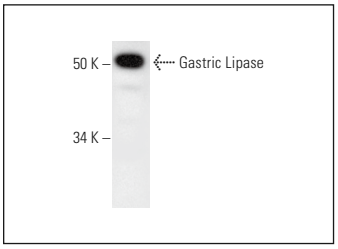
Molecular Weight of Gastric Lipase: 43 kDa.

Positive Controls: human stomach extract: sc-363780.

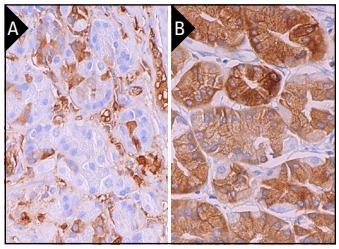
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Gastric Lipase (H-1): sc-390750. Western blot analysis of Gastric Lipase expression in human stomach tissue extract.



Gastric Lipase (H-1): sc-390750. Immunoperoxidase staining of formalin fixed, paraffin-embedded rat stomach tissue showing cytoplasmic staining of glandular cells and extracellular staining (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing cytoplasmic and membrane staining of glandular cells (**B**).

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.