

Gastric Lipase (H-8): sc-390749

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 homologous 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. Shintchi, 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.
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7. Case, C.L., et al. 2005. Enzyme content and acid stability of enteric-coated pancreatic enzyme products *in vitro*. *Pancreas* 30: 180-183.
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CHROMOSOMAL LOCATION

Genetic locus: LIPF (human) mapping to 10q23.31.

SOURCE

Gastric Lipase (H-8) is a mouse monoclonal antibody raised against amino acids 291-360 mapping near the C-terminus of Gastric Lipase of human 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.

RESEARCH USE

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

APPLICATIONS

Gastric Lipase (H-8) is recommended for detection of Gastric Lipase of 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 shRNA Plasmid (h): sc-60673-SH and Gastric Lipase shRNA (h) Lentiviral Particles: sc-60673-V.

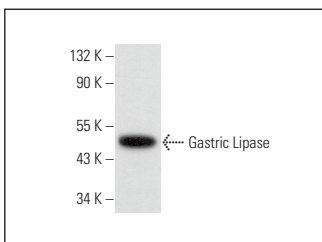
Molecular Weight of Gastric Lipase: 43 kDa.

Positive Controls: human stomach extract: sc-363780.

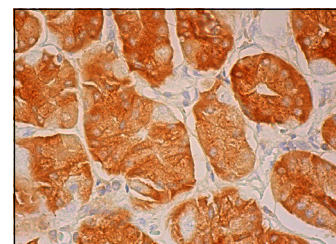
RECOMMENDED SUPPORT REAGENTS

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-8): sc-390749. Western blot analysis of Gastric Lipase expression in human stomach tissue extract.



Gastric Lipase (H-8): sc-390749. Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Wu, W., et al. 2016. A simple biomarker scoring matrix for early gastric cancer detection. *Proteomics* 16: 2921-2930.

STORAGE

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