

# Gastric Lipase (D-17): sc-50934

## 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. Littlewood, J.M., et al. 2005. Diagnosis and treatment of intestinal malabsorption in cystic fibrosis. *Pediatr. Pulmonol.* 41: 35-49.
2. Mu, H., et al. 2005. The metabolism of structured triacylglycerols. *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., et al. 2005. Gastrointestinal lipolysis levels and potential use of Gastric Lipase in insufficiency. *Clin. Gastroenterol. Hepatol.* 3: 715-716.
6. Osaki, N., et al. 2005. Metabolites of dietary triacylglycerol and diacylglycerol during the digestion process in rats. *Lipids* 40: 281-286.
7. Shinchi, H., et al. 2005. Value of magnetic resonance cholangiopancreatography with secretin stimulation in the evaluation of pancreatic exocrine function after pancreaticogastrostomy. *J. Hepatobiliary Pancreat. Surg.* 11: 50-55.

## CHROMOSOMAL LOCATION

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

## SOURCE

Gastric Lipase (D-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Gastric Lipase of human origin.

## STORAGE

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

## 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-50934 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Gastric Lipase (D-17) is recommended for detection of Gastric Lipase of human 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 Gastric Lipase siRNA (h): sc-60673, Gastric Lipase shRNA Plasmid (h): sc-60673-SH and Gastric Lipase shRNA (h) Lentiviral Particles: sc-60673-V.

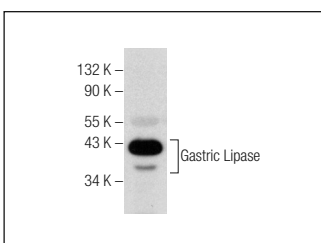
Molecular Weight of Gastric Lipase: 43 kDa.

Positive Controls: human stomach extract: sc-363780.

## RECOMMENDED 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



Gastric Lipase (D-17): sc-50934. Western blot analysis of Gastric Lipase expression in human stomach tissue extract.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **Gastric Lipase (H-1): sc-390750** or **Gastric Lipase (H-8): sc-390749**, our highly recommended monoclonal alternatives to Gastric Lipase (D-17).