

colipase (T-14): sc-161495

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. Colipase, also known as CLPS or pancreatic colipase preproprotein, is a 112 amino acid secreted protein that functions as a cofactor of pancreatic lipase. Necessary for dietary lipid hydrolysis and localizing to pancreatic acinar cells, colipase allows pancreatic lipase to anchor itself to the lipid-water interface of lipid micelles, thereby preventing intestinal bile salts from washing it off.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Clps (mouse) mapping to 17 A3.3.

SOURCE

colipase (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of colipase of mouse 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-161495 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

colipase (T-14) is recommended for detection of colipase 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 colipase siRNA (m): sc-142480, colipase shRNA Plasmid (m): sc-142480-SH and colipase shRNA (m) Lentiviral Particles: sc-142480-V.

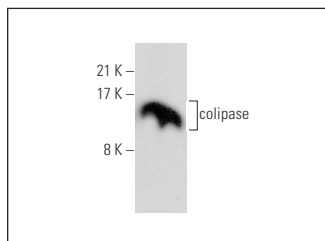
Molecular Weight of colipase: 12 kDa.

Positive Controls: rat pancreas extract: sc-364806.

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



colipase (T-14): sc-161495. Western blot analysis of colipase expression in rat pancreas tissue extract.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.