

# Hepatic Lipase (K-14): sc-161703

## BACKGROUND

The lipase family belongs to one of the most robust genetic superfamilies found in living organisms that includes esterases and thioesterases. Lipase gene products are related by tertiary structure rather than primary amino acid sequence. Balancing the composition and the transport of lipoproteins in human plasma is essential for normal body function and is mediated in part by Hepatic Lipase, also known as HL or LIPC. Rare deficiencies in Hepatic Lipase have been identified in humans, which lead to pathologic levels of circulating lipoprotein particles; this condition is associated with coronary artery disease (CAD). Hepatic Lipase is regulated by thyroid hormones and has a dual function as a triglyceride hydrolase and a ligand/bridging factor for receptor-mediated lipoprotein uptake. Hepatic Lipase localizes to the endothelial surfaces of extrahepatic tissues. The human hepatic lipase gene maps to chromosome 15q21.3, spans over 60 kb, contains 9 exons and 8 introns, and encodes a 499 amino acid protein.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: *Lipc* (mouse) mapping to 9 D.

## SOURCE

Hepatic Lipase (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Hepatic Lipase of mouse 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-161703 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Hepatic Lipase (K-14) is recommended for detection of Hepatic Lipase of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Hepatic Lipase (K-14) is also recommended for detection of Hepatic Lipase in additional species, including canine and porcine.

Suitable for use as control antibody for Hepatic Lipase siRNA (m): sc-41523, Hepatic Lipase shRNA Plasmid (m): sc-41523-SH and Hepatic Lipase shRNA (m) Lentiviral Particles: sc-41523-V.

Molecular Weight of Hepatic Lipase: 57-59 KDa.

Positive Controls: Mouse liver extract: sc-2256 or C4 whole cell lysate: sc-364186.

## 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) 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.

## 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.

## PROTOCOLS

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