

Hepatic Lipase (H-70): sc-21007

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 nine exons and 8 introns, and encodes a 499 amino acid protein.

CHROMOSOMAL LOCATION

Genetic Locus: LIPC (human) mapping to 15q21.3; Lipc (mouse) mapping to 9 D.

SOURCE

Hepatic Lipase (H-70) is a rabbit polyclonal antibody raised against amino acids 91-160 of Hepatic Lipase of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Hepatic Lipase (H-70) is available conjugated to agarose (sc-21007 AC), 500 µg/0.25 ml agarose in 1 ml, for IP.

STORAGE

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

APPLICATIONS

Hepatic Lipase (H-70) is recommended for detection of Hepatic Lipase of mouse, rat and 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), 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 Hepatic Lipase siRNA (h): sc-35560, Hepatic Lipase siRNA (m): sc-41523, Hepatic Lipase shRNA Plasmid (h): sc-35560-SH, Hepatic Lipase shRNA Plasmid (m): sc-41523-SH, Hepatic Lipase shRNA (h) Lentiviral Particles: sc-35560-V and Hepatic Lipase shRNA (m) Lentiviral Particles: sc-41523-V.

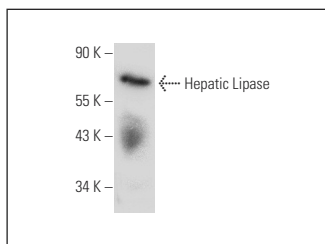
Molecular Weight of Hepatic Lipase: 57-59 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, mouse liver extract: sc-2256 or Hep G2 cell lysate: sc-2227.

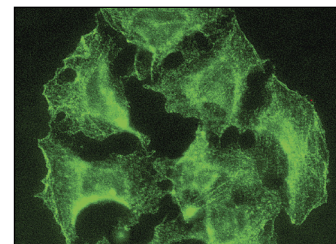
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Hepatic Lipase (H-70): sc-21007. Western blot analysis of Hepatic Lipase expression in MCF7 whole cell lysate.



Hepatic Lipase (H-70): sc-21007. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization.

SELECT PRODUCT CITATIONS

1. Magee, T.R., et al. 2008. Down-regulation of transcription factor peroxisome proliferator-activated receptor in programmed hepatic lipid dysregulation and inflammation in intrauterine growth-restricted offspring. *Am. J. Obstet. Gynecol.* 199: 271.e1-271.e5.
2. Neale, B.M., et al. 2010. Genome-wide association study of advanced age-related macular degeneration identifies a role of the hepatic lipase gene (LIPC). *Proc. Natl. Acad. Sci. USA* 107: 7395-7400.
3. Shimizu, Y., et al. 2010. Lipoprotein lipase and hepatic triglyceride lipase reduce the infectivity of hepatitis C virus (HCV) through their catalytic activities on HCV-associated lipoproteins. *Virology* 407: 152-159.
4. Schmitz, M., et al. 2012. Loss of gene function as a consequence of human papillomavirus DNA integration. *Int. J. Cancer* 131: E593-E602.

RESEARCH USE

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


 MONOS
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Try **Hepatic Lipase (XHL3-6): sc-21740** or **Hepatic Lipase (XHL1-1C): sc-21741**, our highly recommended monoclonal alternatives to Hepatic Lipase (H-70).