

HSL (H-300): sc-25843

BACKGROUND

HSL (hormone-sensitive lipase), a cytosolic neutral lipase regulated by reversible phosphorylation, catalyzes the rate limiting step in triglyceride lipolysis. HSL hydrolyzes stored triglycerides to free fatty acids in adipose and heart tissues. In organs with steroidogenic tissues, such as small intestine, HSL converts cholesteryl esters to free cholesterol for steroid hormone production. HSL is highly expressed in jejunal enterocytes and in the mucosa of the small intestine. Two major isoforms of HSL have been described resulting from the use of alternative translational start codons. The short isoform is expressed in adipose tissue while the long isoform is expressed in steroidogenic tissues such as testis. The long isoform, often referred to as testicular HSL contains an N-terminus of approximately 300 amino acids not present in the short isoform of HSL.

CHROMOSOMAL LOCATION

Genetic locus: LIPE (human) mapping to 19q13.2; Lipe (mouse) mapping to 7 A3.

SOURCE

HSL (H-300) is a rabbit polyclonal antibody raised against amino acids 476-775 mapping at the C-terminus of hormone-sensitive lipase (HSL) 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.

APPLICATIONS

HSL (H-300) is recommended for detection of HSL 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). HSL (H-300) is also recommended for detection of HSL in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for HSL siRNA (h): sc-106861, HSL siRNA (m): sc-77404, HSL shRNA Plasmid (h): sc-106861-SH, HSL shRNA Plasmid (m): sc-77404-SH, HSL shRNA (h) Lentiviral Particles: sc-106861-V and HSL shRNA (m) Lentiviral Particles: sc-77404-V.

Molecular Weight of adipocyte HSL/testicular HSL: 88/120 kDa.

Positive Controls: BT-20 cell lysate: sc-2223, SK-BR-3 cell lysate: sc-2218 or HSL (m): 293T Lysate: sc-126976.

RESEARCH USE

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

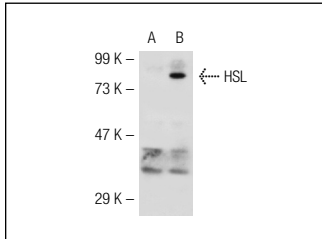
PROTOCOLS

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

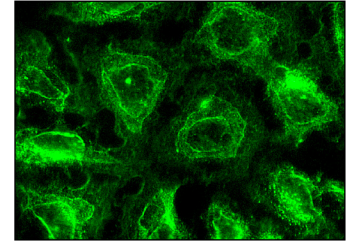
STORAGE

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

DATA



HSL (H-300): sc-25843. Western blot analysis of HSL expression in non-transfected: sc-117752 (A) and mouse HSL transfected: sc-126976 (B) 293T whole cell lysates.



HSL (H-300): sc-25843. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization.

SELECT PRODUCT CITATIONS

1. Suzuki, J., et al. 2001. Absence of cardiac lipid accumulation in transgenic mice with heart-specific HSL overexpression. *Am. J. Physiol. Endocrinol. Metab.* 281: E857-E866.
2. Desai, M., et al. 2008. Programmed upregulation of adipogenic transcription factors in intrauterine growth-restricted offspring. *Reprod. Sci.* 15: 785-796.
3. Meulle, A., et al. 2008. Positive regulation of DNA double strand break repair activity during differentiation of long life span cells: the example of adipogenesis. *PLoS ONE* 3: e3345.
4. Lucki, N.C., et al. 2011. Sphingosine-1-phosphate rapidly increases cortisol biosynthesis and the expression of genes involved in cholesterol uptake and transport in H295R adrenocortical cells. *Mol. Cell. Endocrinol.* 348: 165-175.
5. Yu, J., et al. 2014. Expression profiling of PPAR γ -regulated microRNAs in human subcutaneous and visceral adipogenesis in both genders. *Endocrinology* 155: 2155-2165.



Try **HSL (G-7): sc-74489**, our highly recommended monoclonal alternative to HSL (H-300).