

PRODUCT INFORMATION



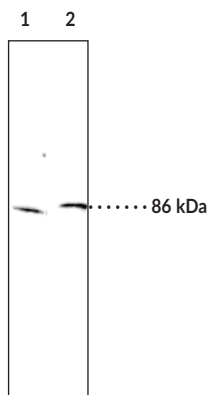
Hormone-Sensitive Lipase Polyclonal Antibody

Item No. 10006371

Overview and Properties

Contents:	This vial contains 500 µl of peptide affinity-purified antibody.
Synonyms:	HSL, LIPE
Immunogen:	Synthetic peptide from the C-terminal region of human HSL receptor
Species Reactivity:	(+) Human, mouse, rat; other species not tested
Uniprot No.:	Q05469
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	TBS, pH 7.4, with 50% glycerol, 0.1% BSA, and 0.02% sodium azide
Host:	Rabbit
Application:	Western blot (WB); the recommended starting dilution is 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Lane 1: Rat brown fat lysate (40 µg)
Lane 2: RAW 264.7 cell lysate (40 µg)

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Hormone-sensitive lipase (HSL) catalyzes the hydrolysis of tri-, di-, and monoacylglycerols, as well as cholesterol esters and thus mobilizes fatty acid and provides a primary source of energy in mammals.¹ The enzyme is highly expressed in adipose tissue and steroidogenic tissues, and less abundantly in skeletal muscle, heart, brain, pancreatic beta cells, adrenal gland, ovaries, testes, and macrophages. Its presence in various tissues indicates the enzyme plays diverse roles including those in steroidogenesis and spermatogenesis, foam cell formation in atherosclerosis, and diabetic pathology.^{1,2} Human HSL cDNA encodes a 775 amino acid protein with an estimated molecular size of 84 kDa.³ A second, larger isoform encoded by a unique testis mRNA was later identified.^{4,5} Cayman's HSL Polyclonal Antibody can be used for Western blot applications. The antibody recognizes HSL at 86 kDa from human, mouse, and rat samples.

References

1. Sattiel, A.R. Another hormone-sensitive triglyceride lipase in fat cells. *Proc. Natl. Acad. Sci. USA* **97**(2), 535-537 (2000).
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3. Langin, D., Laurell, H., Holst, L., *et al.* Gene organization and primary structure of human hormone-sensitive lipase: Possible significance of a sequence homology with a lipase of *Moraxella* TA144, an antarctic bacterium. *Proc. Natl. Acad. Sci. USA* **90**(11), 4897-4901 (2005).
4. Holst, L.S., Langin, D., Mulder, H., *et al.* Molecular cloning, genomic organization, and expression of a testicular isoform of hormone-sensitive lipase. *Genomics* **35**(3), 441-447 (1996).
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