

Product datasheet for **TA336511**

Hormone sensitive lipase (LIPE) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	Western Blot: 1:100-1:2000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	A fusion protein containing an internal portion of the rat HSL protein (between residues 699-908). [Swiss-Prot P15304]
Formulation:	PBS containing 1 mg/ml BSA, 0.05% Sodium Azide. Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	IgG purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	lipase E, hormone sensitive type
Database Link:	NP_005348 Entrez Gene 16890 Mouse Entrez Gene 25330 Rat Entrez Gene 3991 Human Q05469



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Background:

HSL (hormone-sensitive lipase) is a key enzyme in lipid metabolism regulation in several tissues and this intracellular neutral lipase hydrolyzes triacylglycerols (TG), diacylglycerols (DG), and monoacylglycerols, as well as cholesterol and retinyl esters. While ATGL selectively performs the first step in TG hydrolysis, HSL is the most active enzyme against DG, which gets hydrolyzed faster than TG. HSL has been shown to express in several non-adipose tissues, including ovary, adrenal gland, heart, skeletal and smooth muscle, placenta, and pancreatic beta-cells, as well as testes. Under basal conditions, HSL is exclusively found in the cytosol of adipocytes, whereas upon phosphorylation mediated activation via PKA, HSL translocates from cytosol to lipid droplet surfaces for participation in lipolysis. HSL activity is regulated primarily by serine phosphorylation, which is stimulatory at Ser-563/Ser-659 via PKA and inhibitory at Ser-565 via AMPK. Mice lacking HSL have decreased nonesterified fatty acid (NEFA) and increased cholesterol concentrations in plasma and are resistant to diet-induced obesity. HSL has emerged as a potential target for lipid disorders and obesity.

Synonyms:

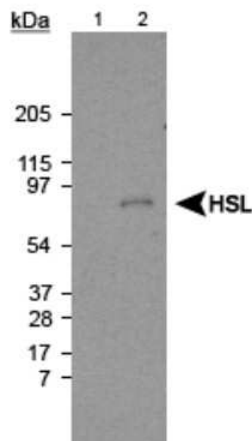
AOMS4; FPLD6; HSL; LHS

Note:

This HSL antibody is useful for Western Blot, where a band at ~84kDa is seen representing HSL protein. A non-specific band may be seen at ~89 kDa. Bands at ~102, 113, and 127 kDa may also be seen in the testis of sexually immature rats.

Protein Pathways:

Insulin signaling pathway

Product images:

Western Blot: HSL Antibody TA336511 - Detection of HSL using TA336511. Lane 1: Liver extract (negative control) Lane 2: Fat extract (10ug) (positive sample).