

# Anti-HSL Antibody

Rabbit polyclonal antibody to HSL Catalog # AP59608

#### **Product Information**

Application WB, IP, IHC Primary Accession Q05469

**Reactivity** Human, Mouse, Rat, Monkey

HostRabbitClonalityPolyclonalCalculated MW116598

## **Additional Information**

**Gene ID** 3991

Other Names Hormone-sensitive lipase; HSL

**Target/Specificity** Recognizes endogenous levels of HSL protein.

**Dilution** WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IP (1/10 - 1/100) IP~~N/A

IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IP (1/10 - 1/100)

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

**Storage** Store at -20 °C.Stable for 12 months from date of receipt

#### **Protein Information**

Name LIPE

**Function** Lipase with broad substrate specificity, catalyzing the hydrolysis of

triacylglycerols (TAGs), diacylglycerols (DAGs), monoacylglycerols (MAGs), cholesteryl esters and retinyl esters (PubMed:<u>15716583</u>, PubMed:<u>15955102</u>, PubMed:<u>19800417</u>, PubMed:<u>8812477</u>). Shows a preferential hydrolysis of DAGs over TAGs and MAGs and preferentially hydrolyzes the fatty acid (FA)

esters at the sn-3 position of the glycerol backbone in DAGs

cholesterol for steroid hormone production (By similarity).

(PubMed:19800417). Preferentially hydrolyzes FA esters at the sn-1 and sn-2 positions of the glycerol backbone in TAGs (By similarity). Catalyzes the hydrolysis of 2-arachidonoylglycerol, an endocannabinoid and of 2-acetyl monoalkylglycerol ether, the penultimate precursor of the pathway for de novo synthesis of platelet-activating factor (By similarity). In adipose tissue and heart, it primarily hydrolyzes stored triglycerides to free fatty acids, while in steroidogenic tissues, it principally converts cholesteryl esters to free

## **Cellular Location**

Cell membrane. Membrane, caveola. Cytoplasm, cytosol. Lipid droplet {ECO:0000250 | UniProtKB:P54310}. Note=Found in the high-density caveolae. Translocates to the cytoplasm from the caveolae upon insulin stimulation (PubMed:17026959). Phosphorylation by AMPK reduces its translocation towards the lipid droplets (By similarity) {ECO:0000250 | UniProtKB:P54310, ECO:0000269 | PubMed:17026959}

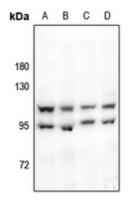
**Tissue Location** 

Testis..

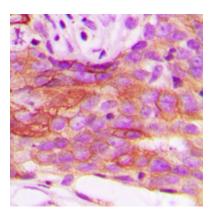
# **Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human HSL. The exact sequence is proprietary.

# **Images**



Western blot analysis of HSL expression in Panc1 (A), SKOVCAR3 (B), C6 (C), 3T3L1 (D) whole cell lysates.



Immunohistochemical analysis of HSL staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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