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Phospho-HSL (S853) Antibody

Rabbit mAb
Catalog # AP90670

Product Information

Application	WB
Primary Accession	Q05469
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	Hormone sensitive lipase; LIPE; LIPS; HSL;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	116598

Additional Information

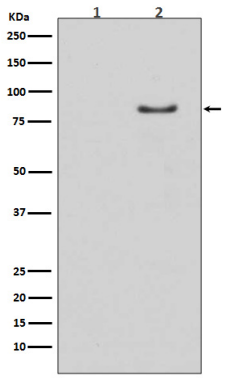
Dilution	WB 1:5000~1:10000
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Phospho-HSL (S853)
Description	hormone sensitive lipase is a lipolytic enzyme of the 'GDXG' family. Plays a rate limiting step in triglyceride lipolysis. In adipose tissue and heart, it primarily hydrolyzes stored triglycerides to free fatty acids, while in steroidogenic tissues, it principally converts cholesteryl esters to free cholesterol for steroid hormone production.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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:15716583, PubMed:15955102, PubMed:19800417, PubMed:8812477). 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 (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 cholesterol for steroid hormone production (By similarity).

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..

Images



Western blot analysis of Phospho-HSL (S853) expression in (1) Mouse muscle lysate; (2) Mouse muscle lysate treated with AP.

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