Anti-Phospho-Hormone sensitive lipase (S853) Antibody [SN06-39]

ET1611-19

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 117 kDa
Clone number:	SN06-39

Description: 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.

Immunogen: Synthetic phospho-peptide corresponding to residues surrounding Ser853 of Human LIPE aa 821-870 / 1,076.

Positive control: Mouse skeletal muscle tissue lysate, Rat skeletal muscle tissue lysate, human fetal skeletal muscle tissue, mouse skeletal muscle tissue, rat skeletal muscle tissue.

Subcellular location: Cell membrane, cytosol, caveola, Lipid droplet.

Database links: SwissProt: Q05469 Human | P54310-2 Mouse | P15304-2 Rat

Recommended Dilutions:

WB	1:1,000
IHC-P	1:200

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

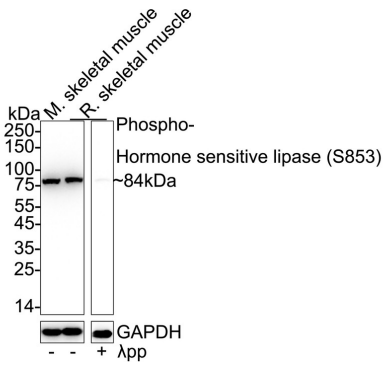

Fig1: Western blot analysis of Phospho-Hormone sensitive lipase (S853) on different lysates with Rabbit anti-Phospho-Hormone sensitive lipase (S853) antibody (ET1611-19) at 1/1,000 dilution.

Lane 1: Mouse skeletal muscle tissue lysate
Lane 2: Rat skeletal muscle tissue lysate
Lane 3: Rat skeletal muscle tissue lysate, the membrane treated with λpp for 1 hour

Lysates/proteins at 30 µg/Lane.

Predicted band size: 117 kDa
Observed band size: 84 kDa

Exposure time: 4 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET1611-19) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

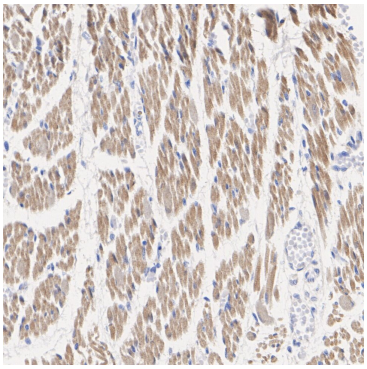

Fig2: Immunohistochemical analysis of paraffin-embedded human fetal skeletal muscle tissue with Rabbit anti-Phospho-Hormone sensitive lipase (S853) antibody (ET1611-19) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1611-19) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

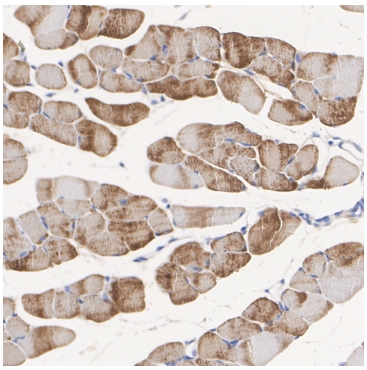

Fig3: Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue with Rabbit anti-Phospho-Hormone sensitive lipase (S853) antibody (ET1611-19) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1611-19) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

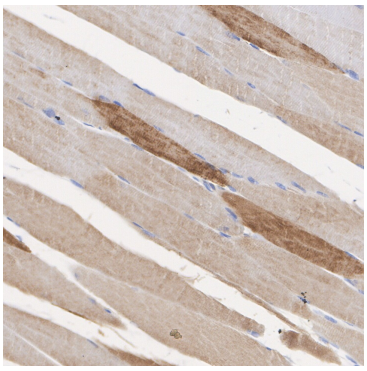

Fig4: Immunohistochemical analysis of paraffin-embedded rat skeletal muscle tissue with Rabbit anti-Phospho-Hormone sensitive lipase (S853) antibody (ET1611-19) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1611-19) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References

1. Ikoma-Seki K et al. Role of LRP1 and ERK and cAMP Signaling Pathways in Lactoferrin-Induced Lipolysis in Mature Rat Adipocytes. PLoS One 10:e0141378 (2015).
2. Shum M et al. Angiotensin II type 2 receptor promotes adipocyte differentiation and restores adipocyte size in high-fat/high-fructose diet-induced insulin resistance in rats. Am J Physiol Endocrinol Metab 304:E197-210 (2013).