abcam

Product datasheet

Anti-Adipose Triglyceride Lipase (phospho S406) antibody ab135093

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Overview

Product name	Anti-Adipose Triglyceride Lipase (phospho S406) antibody
Description	Rabbit polyclonal to Adipose Triglyceride Lipase (phospho S406)
Host species	Rabbit
Specificity	From Mar 2024, QC testing of replenishment batches of this polyclonal changed. All tested and expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch, please contact our Scientific Support who will be happy to help.
Tested applications	**Suitable for:** ELISA, WB
Species reactivity	**Reacts with:** Mouse **Predicted to work with:** Rat, Dog, Pig, Chinese hamster
Immunogen	Synthetic peptide within Mouse Adipose Triglyceride Lipase aa 400 to the C-terminus (phospho S406) conjugated to keyhole limpet haemocyanin. The exact sequence is proprietary. Database link: **Q8BJ56** (Peptide available as **ab174058**)
Positive control	This antibody gave a positive signal in Mouse Brown Adipose Tissue.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide

	Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab135093 in the following tested applications.

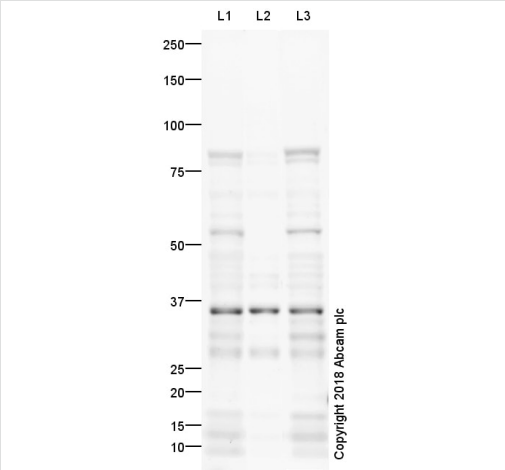
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ELISA		Use at an assay dependent concentration.
WB	★★★☆☆ (1)	Use a concentration of 1 µg/ml. Predicted molecular weight: 55 kDa.

Target

Function	Catalyzes the initial step in triglyceride hydrolysis in adipocyte and non-adipocyte lipid droplets. Also has acylglycerol transacylase activity. May act coordinately with LIPE/HLS within the lipolytic cascade. Regulates adiposome size and may be involved in the degradation of adiposomes. May play an important role in energy homeostasis. May play a role in the response of the organism to starvation, enhancing hydrolysis of triglycerides and providing free fatty acids to other tissues to be oxidized in situations of energy depletion.
Tissue specificity	Highest expression in adipose tissue. Also detected in heart, skeletal muscle, and portions of the gastrointestinal tract. Detected in normal retina and retinoblastoma cells. Detected in retinal pigment epithelium and, at lower intensity, in the inner segments of photoreceptors and in the ganglion cell layer of the neural retina (at protein level).
Pathway	Glycerolipid metabolism; triacylglycerol degradation.
Involvement in disease	Note=Genetic variations in PNPLA2 may be associated with risk of diabetes mellitus type 2. Defects in PNPLA2 are the cause of neutral lipid storage disease with myopathy (NLSDM) [MIM:610717]; also known as neutral lipid storage disease without ichthyosis. NSLDM is a neutral lipid storage disorder (NLSD) with myopathy but without ichthyosis. NLSDs are characterized by the presence of triglyceride-containing cytoplasmic droplets in leukocytes and in other tissues, including bone marrow, skin, and muscle. Individuals with NLSDM did not show obesity, in spite of a defect in triglyceride degradation in fibroblasts and in marked triglyceride storage in liver, muscles, and other visceral cells.
Sequence similarities	Contains 1 patatin domain.
Developmental stage	Induced during differentiation of primary preadipocytes to adipocytes. Expression increased from fetal to adult in retinal pigment epithelium.
Cellular localization	Lipid droplet. Cell membrane.

Images



Western blot - Anti-Adipose Triglyceride Lipase (phospho S406) antibody (ab135093)

All lanes : Anti-Adipose Triglyceride Lipase (phospho S406) antibody (ab135093) at 1 µg/ml

Lane 1 : Mouse Brown Adipose Tissue (BAT)
Lane 2 : Mouse Brown Adipose Tissue (BAT) with Mouse Patatin-like phospholipase domain-containing protein 2 Synth (402 - 412) (Phosphorylation S 406) at 1 µg/ml
Lane 3 : Mouse Brown Adipose Tissue (BAT) with Mouse Patatin-like phospholipase domain-containing protein 2 Synth (402 - 413) (No Modifications) at 1 µg/ml

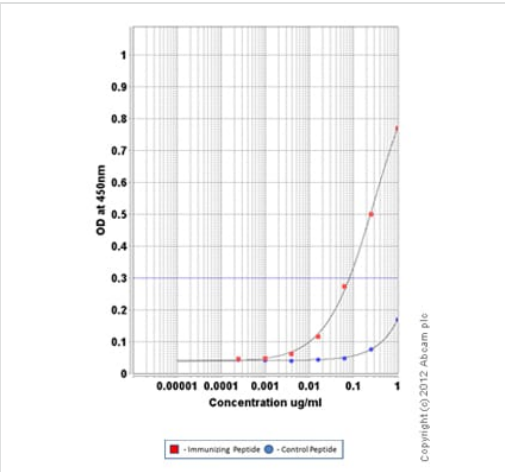
Lysates/proteins at 20 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 55 kDa
Observed band size: 55 kDa
Additional bands at: 35 kDa (possible non-specific binding), 85 kDa (possible non-specific binding)

Exposure time: 20 minutes



ELISA - Anti-Adipose Triglyceride Lipase (phospho S406) antibody (ab135093)

ab135093 was tested using an Indirect ELISA approach. The wells were coated with peptide (1µg/ml at 100µl/well) overnight at 4°C, followed by a 5% BSA blocking step for 1 hour at room temperature. The primary Ab was then added at a dilution range of 1- 0.00025µg/ml (100µl/well) for 1hr at room temperature. A HRP-conjugated anti-rabbit IgG (heavy and light chain) was used as a secondary antibody at 1:20,000 dilution for 1hr at room temperature.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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