abcam

Product datasheet

Anti-Adipose Triglyceride Lipase antibody [EPR3444(2)] - BSA and Azide free ab239961



RabMAb

4 Images

Overview

Product name Anti-Adipose Triglyceride Lipase antibody [EPR3444(2)] - BSA and Azide free

DescriptionRabbit monoclonal [EPR3444(2)] to Adipose Triglyceride Lipase - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB

Unsuitable for: Flow Cyt,ICC/IF or IHC-P

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

General notes ab239961 is the carrier-free version of <u>ab109251</u>.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our <u>conjugation kits</u> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

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Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

ClonalityMonoclonalClone numberEPR3444(2)

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab239961 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
WB		Use at an assay dependent concentration. Detects a band of approximately 54 kDa (predicted molecular weight: 55 kDa).

Application notes Is unsuitable for Flow Cyt,ICC/IF or IHC-P.

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 diseaseNote=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 similaritiesContains 1 patatin domain.

Developmental stage

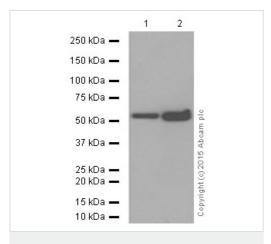
 $\label{lem:linear_loss} \mbox{Induced during differentiation of primary preadipocytes to adipocytes. Expression increased from}$

fetal to adult in retinal pigment epithelium.

Cellular localization

Lipid droplet. Cell membrane.

Images



Western blot - Anti-Adipose Triglyceride Lipase antibody [EPR3444(2)] - BSA and Azide free (ab239961)

All lanes : Anti-Adipose Triglyceride Lipase antibody [EPR3444(2)] (ab109251) at 1/5000 dilution (purified)

Lane 1 : Mouse heart tissue lysate

Lane 2 : Rat heart tissue lysate

Lysates/proteins at 20 µg per lane.

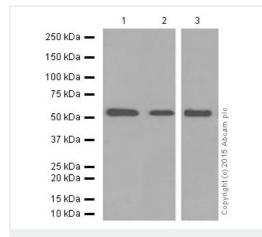
Secondary

All lanes : HRP-conjugated goat anti-rabbit lgG (specific to the non-reduced form of lgG) at 1/1000 dilution

Predicted band size: 55 kDa **Observed band size:** 54 kDa

This data was developed using <u>ab109251</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Adipose Triglyceride Lipase antibody [EPR3444(2)] - BSA and Azide free (ab239961)

All lanes : Anti-Adipose Triglyceride Lipase antibody [EPR3444(2)] (ab109251) at 1/1000 dilution (purified)

Lane 1: Human heart tissue lysate
Lane 2: A431 whole cell lysate
Lane 3: A673 whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : HRP-conjugated goat anti-rabbit lgG (specific to the non-reduced form of lgG) at 1/1000 dilution

Predicted band size: 55 kDa **Observed band size:** 54 kDa

This data was developed using <u>ab109251</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

All lanes : Anti-Adipose Triglyceride Lipase antibody [EPR3444(2)] (ab109251) at 1/1000 dilution (unpurified)

Lane 1: 3T3-L1 lysate **Lane 2**: A431 lysate **Lane 3**: A673 lysate

Lane 4: Human heart tissue lysate

Lane 5: Human skeletal muscle tissue lysate

Lane 6: Human adipose tissue lysate

Lysates/proteins at 10 µg per lane.

1 2 3 4 5 6 **KDa** 250 150 100 75 50 37 25 20 15 10

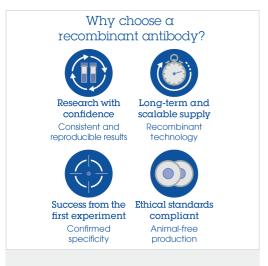
Western blot - Anti-Adipose Triglyceride Lipase antibody [EPR3444(2)] - BSA and Azide free (ab239961)

Secondary

All lanes: HRP-conjugated goat anti-rabbit lgG at 1/2000 dilution

Predicted band size: 55 kDa Observed band size: 54 kDa

This data was developed using <u>ab109251</u>, the same antibody clone in a different buffer formulation.



Anti-Adipose Triglyceride Lipase antibody
[EPR3444(2)] - BSA and Azide free (ab239961)

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