

## Product datasheet

# Anti-Adipose Triglyceride Lipase antibody [EPR3444(2)] ab109251

Recombinant RabMAB

★★★★★ 2 Abreviews 7 References 3 Images

### Overview

<b>Product name</b>	Anti-Adipose Triglyceride Lipase antibody [EPR3444(2)]
<b>Description</b>	Rabbit monoclonal [EPR3444(2)] to Adipose Triglyceride Lipase
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB <b>Unsuitable for:</b> Flow Cyt, ICC/IF or IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human Adipose Triglyceride Lipase aa 350-450. The exact sequence is proprietary.
<b>Positive control</b>	WB: 3T3-L1, A431 and A673 cell lysates, human heart, skeletal muscle and adipose tissue lysates. Mouse and rat heart tissue lysates.
<b>General notes</b>	<p>Our RabMAB<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAB<sup>®</sup> patents</a></p> <p><b>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</b></p> <p>This product is a recombinant rabbit monoclonal antibody.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 59% PBS, 0.05% BSA
<b>Purity</b>	Protein A purified

<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR3444(2)
<b>Isotype</b>	IgG

## Applications

Our [Abpromise guarantee](#) covers the use of **ab109251** 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	★★★★★	1/1000 - 1/10000. 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.

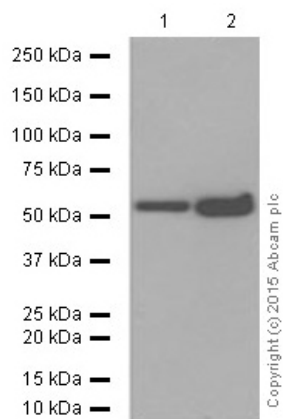
**Involvement in disease** Note=Genetic variations in PNPLA2 may be associated with risk of diabetes mellitus type 2. Defects in PNPLA2 are the cause of neutral lipid storage disease with myopathy (NLSDM) [MIM:610717]; also known as neutral lipid storage disease without ichthyosis. NSLDM is a neutral 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 antibody [EPR3444(2)] (ab109251)

**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.

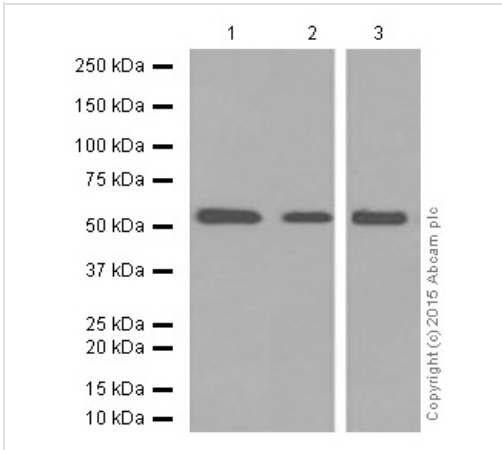
#### **Secondary**

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

**Predicted band size:** 55 kDa

**Observed band size:** 54 kDa

Blocking and dilution buffer: 5% NFDM /TBST.



Western blot - Anti-Adipose Triglyceride Lipase antibody [EPR3444(2)] (ab109251)

**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.

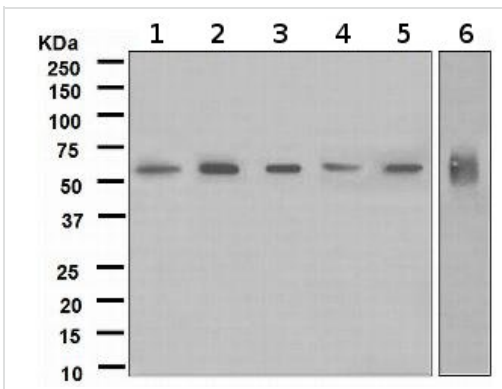
### Secondary

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

**Predicted band size:** 55 kDa

**Observed band size:** 54 kDa

Blocking and dilution buffer: 5% NFDM /TBST.



Western blot - Anti-Adipose Triglyceride Lipase antibody [EPR3444(2)] (ab109251)

**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.

### Secondary

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

**Predicted band size:** 55 kDa

**Observed band size:** 54 kDa

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