abcam

Product datasheet

Anti-Adipose Triglyceride Lipase antibody [EPR19650] ab207799

リコンビナント RabMAb

7 References 画像数 11

製品の概要

製品名	Anti-Adipose Triglyceride Lipase antibody [EPR19650]
製品の詳細	Rabbit monoclonal [EPR19650] to Adipose Triglyceride Lipase
由来種	Rabbit
アプリケーション	**適用あり:** WB, IHC-P, ICC/IF, IP
種交差性	**交差種:** Mouse, Rat, Human
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: Human adipose tissue lysate; Adult mouse and rat adipose tissue lysates. IHC-P: Human Adipose tissue; Mouse and rat white and brown adipose tissue. ICC/IF: 3T3-L1 cells. IP: 3T3-L1 differentiated for 6 days whole cell lysate.
特記事項	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**.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
バッファー	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR19650

アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab207799の使用に適用されます**

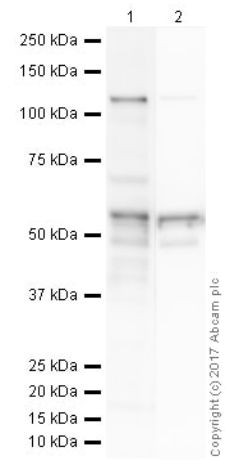
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		1/1000. Detects a band of approximately 55 kDa (predicted molecular weight: 55 kDa). Abcam recommends milk blocking for this product.
IHC-P		1/4000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/500.
IP		1/30.

ターゲット情報

機能	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.
組織特異性	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).
パスウェイ	Glycerolipid metabolism; triacylglycerol degradation.
関連疾患	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.
配列類似性	Contains 1 patatin domain.
発生段階	Induced during differentiation of primary preadipocytes to adipocytes. Expression increased from fetal to adult in retinal pigment epithelium.
細胞内局在	Lipid droplet. Cell membrane.

画像



Western blot - Anti-Adipose Triglyceride Lipase antibody [EPR19650] (ab207799)

Lane 1 : Anti-Adipose Triglyceride Lipase antibody [EPR19650] (ab207799) at 1/1000 dilution (2% Bovine Serum Albumin)
Lane 2 : Anti-Adipose Triglyceride Lipase antibody [EPR19650] (ab207799) at 1/1000 dilution (3% Milk)

All lanes : Human adipose normal tissue lysate - total protein (**ab28980**)

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Peroxidase AffiniPure Goat Anti-Rabbit IgG (H+L) at 1/50000 dilution

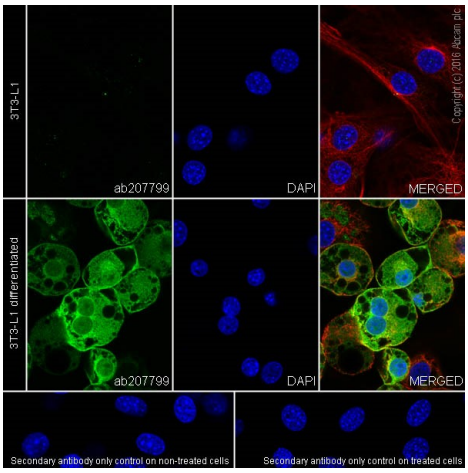
Developed using the ECL technique.

Performed under reducing conditions.

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

Exposure time: 8 minutes

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin (lane 1) and 3% Milk (lane 2) before being incubated with ab207799 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution **ab133406**.

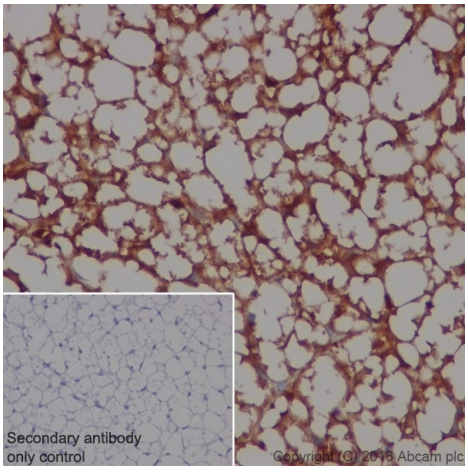


Immunocytochemistry/ Immunofluorescence - Anti-Adipose Triglyceride Lipase antibody [EPR19650] (ab207799)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized 3T3-L1 (mouse embryonic fibroblast cell line) undifferentiated and differentiated cells labeling Adipose Triglyceride Lipase with ab207799 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing positive staining on 3T3-L1 cells differentiated for 6 days. The level of expression in 3T3/L1 can be induced by differentiation treatment according to the literature (PMID 19297333).

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.

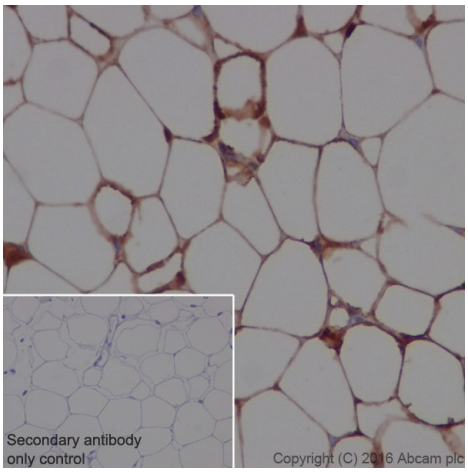


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Adipose Triglyceride Lipase antibody [EPR19650] (ab207799)

Immunohistochemical analysis of paraffin-embedded rat brown adipose tissue labeling Adipose Triglyceride Lipase with ab207799 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Cytoplasmic staining on rat brown adipose tissue is observed (PMID: 15550674). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) **ab97051** at 1/500 dilution.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

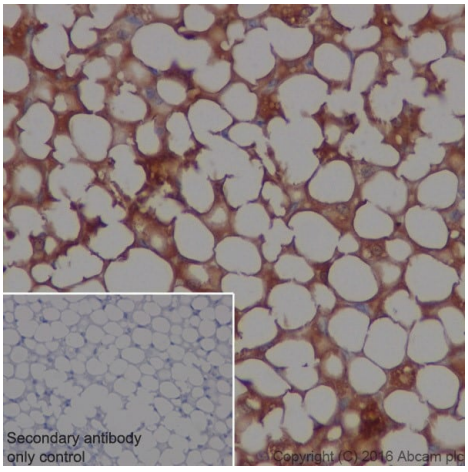


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Adipose Triglyceride Lipase antibody [EPR19650] (ab207799)

Immunohistochemical analysis of paraffin-embedded rat white adipose tissue labeling Adipose Triglyceride Lipase with ab207799 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Cytoplasmic staining on rat white adipose tissue is observed (PMID: 15550674). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) **ab97051** at 1/500 dilution.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

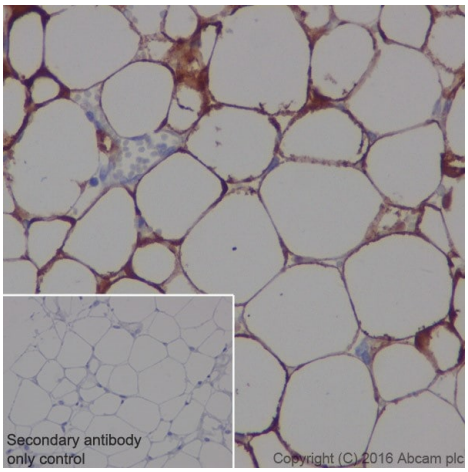


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Adipose Triglyceride Lipase antibody [EPR19650] (ab207799)

Immunohistochemical analysis of paraffin-embedded mouse brown adipose tissue labeling Adipose Triglyceride Lipase with ab207799 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Cytoplasmic staining on mouse brown adipose tissue is observed (PMID: 15550674). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) **ab97051** at 1/500 dilution.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

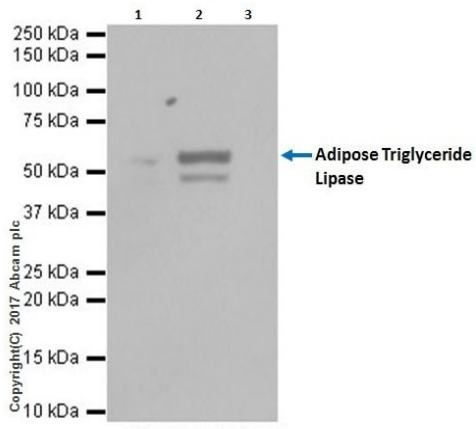


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Adipose Triglyceride Lipase antibody [EPR19650] (ab207799)

Immunohistochemical analysis of paraffin-embedded mouse white adipose tissue labeling Adipose Triglyceride Lipase with ab207799 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Cytoplasmic staining on mouse white adipose tissue is observed (PMID: 15550674). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) **ab97051** at 1/500 dilution.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-Adipose Triglyceride Lipase antibody [EPR19650] (ab207799)

Adipose Triglyceride Lipase was immunoprecipitated from 0.35 mg of 3T3-L1 (mouse embryonic fibroblast cell line) differentiated for 6 days whole cell lysate with ab207799 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab207799 at 1/500 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/1000 dilution.

Lane 1: 3T3-L1 differentiated for 6 days whole cell lysate 10 µg (Input).

Lane 2: ab207799 IP in 3T3-L1 differentiated for 6 days whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab207799 in 3T3-L1 differentiated for 6 days whole cell lysate.

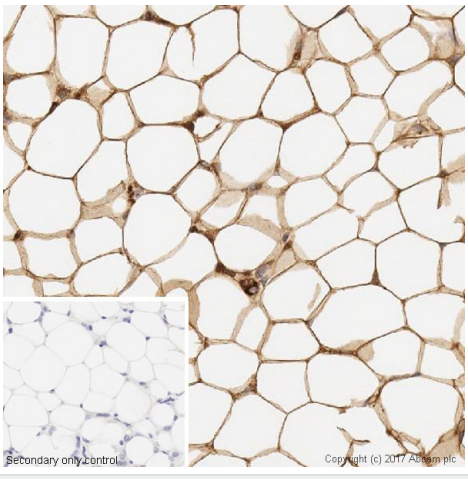
Blocking and dilution buffer and concentration: 5% NFDM/TBST. Exposure time: 1 second.

All lanes : Anti-Adipose Triglyceride Lipase antibody [EPR19650] (ab207799) at 1/500 dilution

All lanes :

Secondary
All lanes : VeriBlot for IP Detection Reagent (HRP) (**ab131366**) at 1/1000 dilution

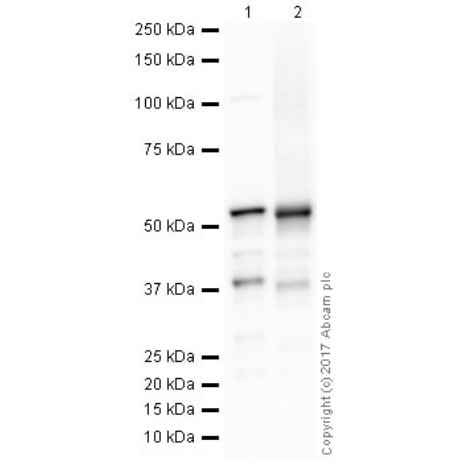
Exposure time: 1 second



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Adipose Triglyceride Lipase antibody [EPR19650] (ab207799)

IHC image of Adipose Triglyceride Lipase staining in a formalin-fixed, paraffin-embedded human adipose tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval (EDTA based pH 9.0 solution, epitope retrieval solution 2) for 20 mins. The section was then incubated with ab207799, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. As a negative control (inset), an identical assay was performed without adding the primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Western blot - Anti-Adipose Triglyceride Lipase antibody [EPR19650] (ab207799)

All lanes : Anti-Adipose Triglyceride Lipase antibody [EPR19650] (ab207799) at 1/1000 dilution (3% Milk)

Lane 1 : Adult Mouse Adipose Tissue Lysate
Lane 2 : Adult Rat Adipose Tissue Lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Peroxidase AffiniPure Goat Anti-Rabbit IgG (H+L) at 1/50000 dilution

Developed using the ECL technique.

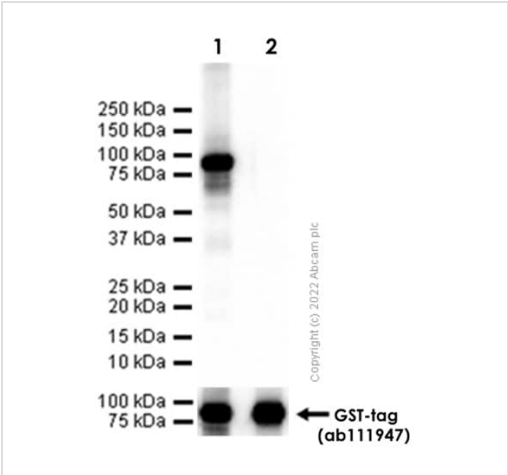
Performed under reducing conditions.

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

Exposure time: 5 seconds

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% Milk before being incubated with ab207799 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution **ab133406**.

Anti-Adipose Triglyceride Lipase antibody [EPR19650] (ab207799)



Western blot - Anti-Adipose Triglyceride Lipase antibody [EPR19650] (ab207799)

All lanes : Anti-Adipose Triglyceride Lipase antibody [EPR19650] (ab207799) at 1/1000 dilution

Lane 1 : GST tagged Recombinant Human Adipose Triglyceride Lipase (PNPLA2) protein (Full length, 82 KDa)
Lane 2 : GST tagged Recombinant Human KLF4 protein (Full length, 81 KDa)

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Performed under reducing conditions.

Predicted band size: 55 kDa
Observed band size: 82 kDa

Exposure time: 5 seconds

Blocking buffer and concentration: 5% NFDM/TBST

Diluting buffer and concentration: 5% NFDM/TBST

Gel type: 4-20% gradient gel (SDS-PAGE)

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