abcam

Product datasheet

Anti-Iba1 antibody [EPR16589] - BSA and Azide free ab221790

リコンビナント RabMAb

★★★☆☆ 1 Abreviews 2 References 画像数 10

製品の概要

製品名	Anti-Iba1 antibody [EPR16589] - BSA and Azide free
製品の詳細	Rabbit monoclonal [EPR16589] to Iba1 - BSA and Azide free
由来種	Rabbit
アプリケーション	**適用あり:** IHC-P, ICC/IF, IP, WB, IHC (PFA fixed)
種交差性	**交差種:** Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: Human spleen lysate; THP-1, MOLT-4 and U937 whole cell lysates; Mouse and rat spleen and testis lysates. IHC-P: Human cerebrum, mouse endometrium and rat cerebrum tissues. ICC/IF: U937 and THP-1 cells. IP: Mouse spleen whole cell lysate.
特記事項	ab221790 is the carrier-free version of **ab178847**. Our **carrier-free** 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 **conjugation kits** 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**.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C. Do Not Freeze.
バッファー	pH: 7.2 Constituent: PBS
キャリア・フリー	はい
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR16589
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ab221790の使用に適用されます

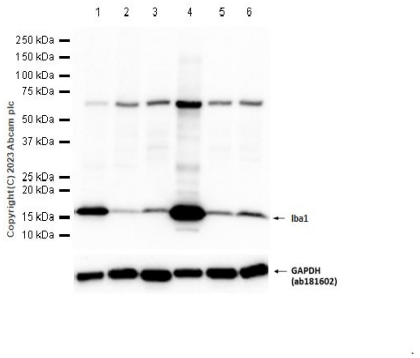
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 17 kDa (predicted molecular weight: 17 kDa).
IHC (PFA fixed)		Use at an assay dependent concentration.

ターゲット情報

機能	Actin-binding protein that enhances membrane ruffling and RAC activation. Enhances the actin-bundling activity of LCP1. Binds calcium. Plays a role in RAC signaling and in phagocytosis. May play a role in macrophage activation and function. Promotes the proliferation of vascular smooth muscle cells and of T-lymphocytes. Enhances lymphocyte migration. Plays a role in vascular inflammation.
組織特異性	Detected in T-lymphocytes and peripheral blood mononuclear cells.
配列類似性	Contains 2 EF-hand domains.
翻訳後修飾	Phosphorylated on serine residues.
細胞内局在	Cytoplasm > cytoskeleton. Cell projection > ruffle membrane. Associated with the actin cytoskeleton at membrane ruffles and at sites of phagocytosis.

画像



Western blot - Anti-Iba1 antibody [EPR16589] - BSA and Azide free (ab221790)

All lanes : Anti-Iba1 antibody [EPR16589] (**ab178847**) at 1/1000 dilution

Lane 1 : Mouse spleen tissue lysate
Lane 2 : Mouse brain tissue lysate
Lane 3 : Mouse hippocampus tissue lysate
Lane 4 : Rat spleen tissue lysate
Lane 5 : Rat brain tissue lysate
Lane 6 : Rat hippocampus tissue lysate

Lysates/proteins at 20 µg per lane.

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

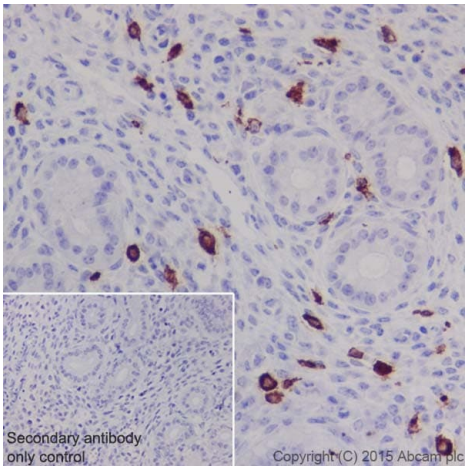
Predicted band size: 17 kDa
Observed band size: 17 kDa

Exposure time: 40 seconds

This data was developed using **ab178847**, the same antibody clone in a different buffer formulation.

Blocking/Dilution buffer: 5% NFDM/TBST.

IBA1 is a relatively minor protein of brain and is much more abundant in spleen (PMID: 8912632, PMID: 29232670). We suggest loading higher amount of brain lysate or using lower dilution of antibody for detecting signal in brain related lysates.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Iba1 antibody [EPR16589] - BSA and Azide free (ab221790)

Immunohistochemical analysis of paraffin-embedded Mouse endometrium tissue labeling Iba1 with **ab178847** at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

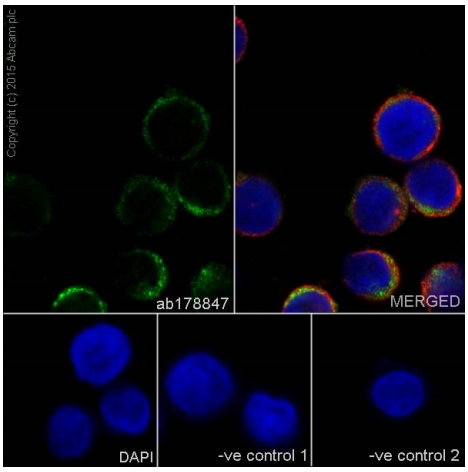
Cytoplasm staining on macrophages of the mouse endometrium.

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab178847**).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Iba1 antibody [EPR16589] - BSA and Azide free (ab221790)

Immunofluorescent analysis of 100% methanol-fixed, 0.1% Triton X-100 permeabilized U937 (Human histiocytic lymphoma cell line) cells labeling Iba1 with **ab178847** at 1/100 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Confocal image showing cytoplasmic staining on U937 cell line.

The nuclear counterstain is DAPI (blue).

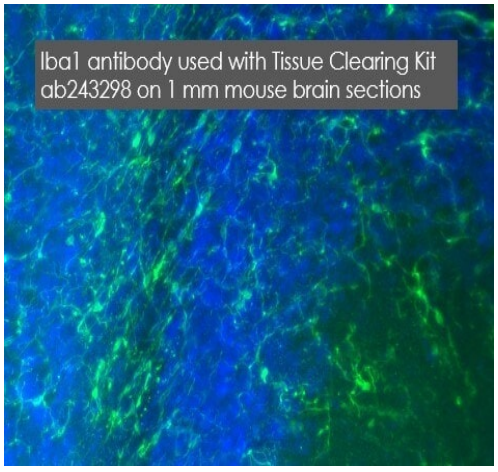
Tubulin is detected with Anti-alpha Tubulin - Loading Control (**ab7291**) at 1/1000 dilution and Goat Anti-Mouse IgG (AlexaFluor®594) preadsorbed (**ab150120**) at 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: **ab178847** at 1/100 dilution followed by **ab150120** at 1/1000 dilution.

-ve control 2: **ab7291** at 1/1000 dilution followed by **ab150077** at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab178847**).



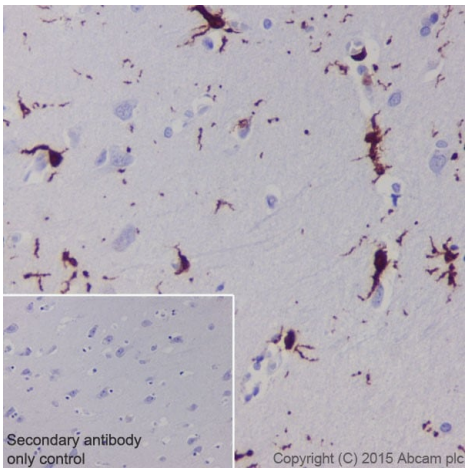
Immunohistochemistry (PFA fixed) - Anti-Iba1 antibody [EPR16589] - BSA and Azide free (ab221790)

This data was developed using **ab178847**, the same antibody clone in a different buffer formulation.

Iba1 antibody **ab178847** was used with Tissue Clearing Kit **ab243298** to penetrate, stain and clear a 1 mm coronal section of mouse brain. Blue: DAPI , Green: Iba1.

Learn more about **tissue clearing kits, reagents, and protocols** designed to make it easier to stain thick tissue sections and get more data from each valuable tissue section.

For 1 mm brain sections, we recommend a starting dilution of 1:100, and also using Goat Anti-Rabbit IgG H&L AlexaFluor488 (**ab150077**) at a dilution of 1:400.



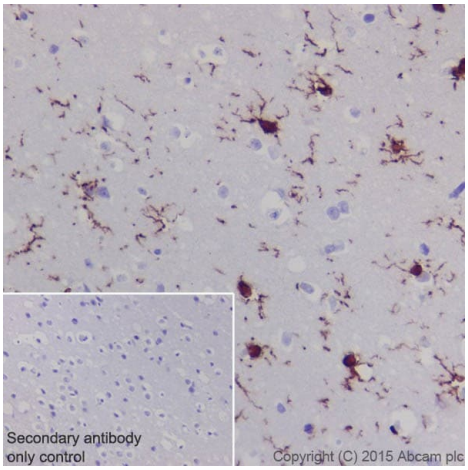
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Iba1 antibody [EPR16589] - BSA and Azide free (ab221790)

Immunohistochemical analysis of paraffin-embedded Human cerebrum tissue labeling Iba1 with **ab178847** at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Cytoplasm staining on microglia of the normal Human cerebrum is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is **ab97051** at 1/500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab178847**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Iba1 antibody [EPR16589] - BSA and Azide free (ab221790)

Immunohistochemical analysis of paraffin-embedded Rat cerebrum tissue labeling Iba1 with **ab178847** at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

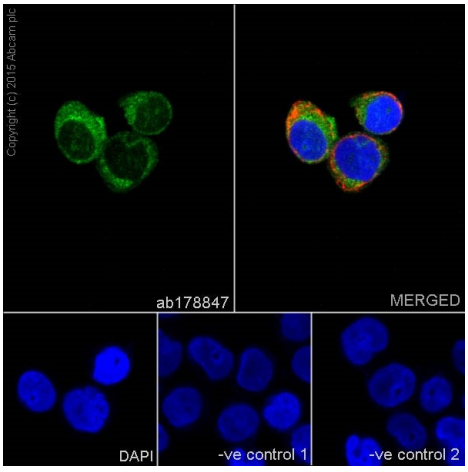
Cytoplasm staining on microglia of the rat cerebrum is observed.

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab178847**).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Iba1 antibody [EPR16589] - BSA and Azide free (ab221790)

Immunofluorescent analysis of 100% methanol-fixed, 0.1% Triton X-100 permeabilized THP-1 (Human monocytic leukemia cell line) cells labeling Iba1 with **ab178847** at 1/100 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Confocal image showing cytoplasmic staining on THP-1 cell line.

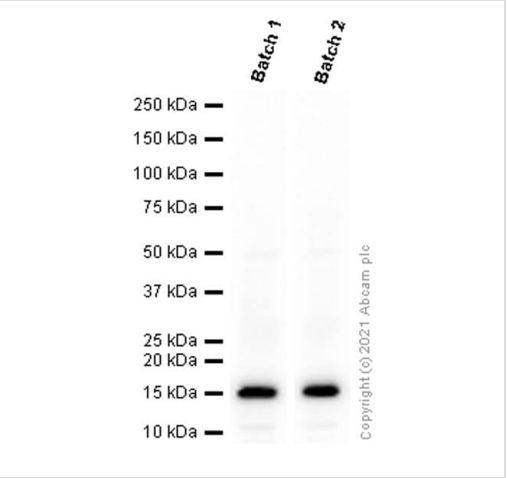
The nuclear counterstain is DAPI (blue). Tubulin is detected with **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution and **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: **ab178847** at 1/100 dilution followed by **ab150120** at 1/1000 dilution.

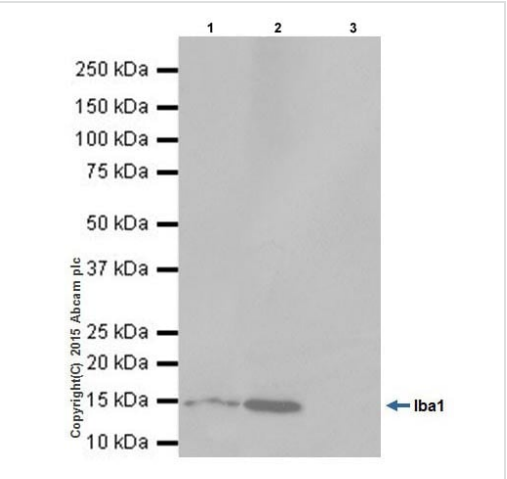
-ve control 2: **ab7291** at 1/1000 dilution followed by **ab150077** at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab178847**).



Western blot - Anti-Iba1 antibody [EPR16589] - BSA and Azide free (ab221790)

This data was developed using **ab178847**, the same antibody clone in a different buffer formulation. Different batches of **ab178847** were tested on U-937 (Human histiocytic lymphoma monocyte) lysate at 0.5 µg/ml. 15 µg of lysate was loaded in each lane. Bands observed at 17 kDa.



Immunoprecipitation - Anti-Iba1 antibody [EPR16589] - BSA and Azide free (ab221790)

Iba1 was immunoprecipitated from 1mg of Mouse spleen whole cell lysate with **ab178847** at 1/40 dilution.

Western blot was performed from the immunoprecipitate using **ab178847** at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10000 dilution.

Lane 1: Mouse spleen whole cell lysate 10µg (Input).

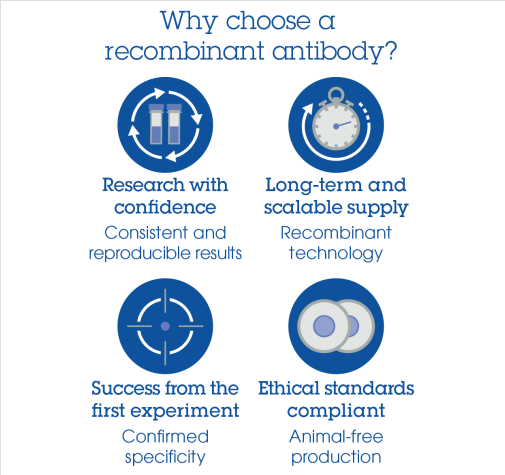
Lane 2: **ab178847** IP in Mouse spleen whole cell lysate.

Lane 3: Rabbit IgG,monoclonal-Isotype Control (**ab172730**) instead of **ab178847** in Mouse spleen whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 5 seconds.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab178847**).



Anti-Iba1 antibody [EPR16589] - BSA and Azide free (ab221790)

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