abcam

Product datasheet

Anti-CD204 antibody [EPR24403-17] - BSA and Azide free ab283512

Recombinant RabMAb

10 Images

Overview

Product name	Anti-CD204 antibody [EPR24403-17] - BSA and Azide free
Description	Rabbit monoclonal [EPR24403-17] to CD204 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, WB, Flow Cyt, IP, ICC/IF
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human liver and Human spleen tissue lysate; THP-1 treated with 80nM PMA for 72 hours whole cell lysate. IHC-P: Human liver, Human lung, Human spleen, Human gastric carcinoma and Human hepatocellular carcinoma tissue. ICC/IF: THP-1 cells treated with PMA Flow Cyt: THP-1 cells treated with PMA IP: THP-1 cells treated with PMA
General notes	ab283512 is the carrier-free version of **ab271070**. 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**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C.
Storage buffer	pH: 7.2 Constituent: 100% PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR24403-17
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab283512 in the following tested applications.

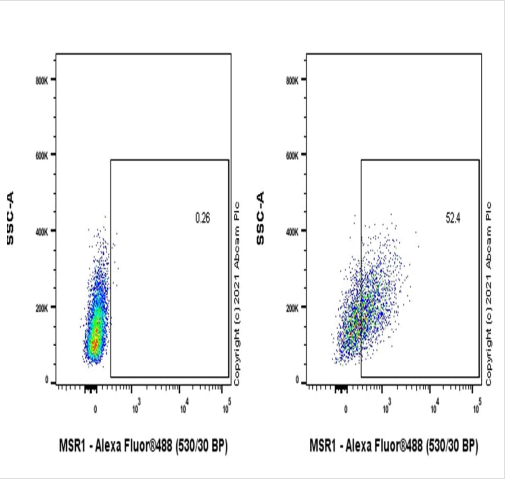
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
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.
WB		Use at an assay dependent concentration. Predicted molecular weight: 50 kDa.
Flow Cyt		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

Target

Function	Membrane glycoproteins implicated in the pathologic deposition of cholesterol in arterial walls during atherogenesis. Two types of receptor subunits exist. These receptors mediate the endocytosis of a diverse group of macromolecules, including modified low density lipoproteins (LDL). Isoform III does not internalize actetylated LDL.
Tissue specificity	Isoform I, isoform II and isoform III are expressed in monocyte-derived macrophages.
Sequence similarities	Contains 1 collagen-like domain. Contains 1 SRCR domain.
Cellular localization	Membrane.

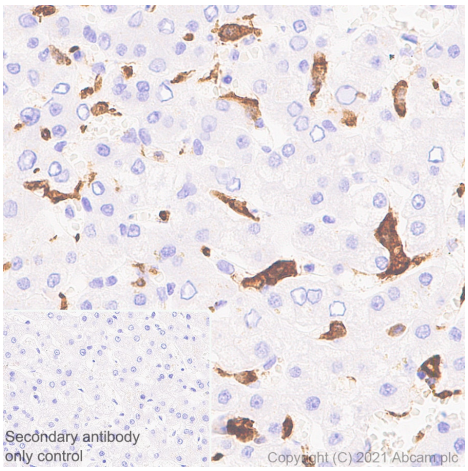
Images



Flow Cytometry - Anti-CD204 antibody [EPR24403-17] - BSA and Azide free (ab283512)

This data was developed using **ab271070**, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of THP-1 (Human monocytic leukemia monocyte) cells treated with 80nM phorbol 12-myristate 13-acetate (PMA) for 72 hours (Right) / Untreated control (Left), labelling CD204 with **ab271070** at 1/50 dilution (1ug). Goat F(ab')2 Anti-Rabbit IgG (DyLight® 488, **ab98507**) at 1/500 dilution was used as the secondary antibody. Gated on viable cells.



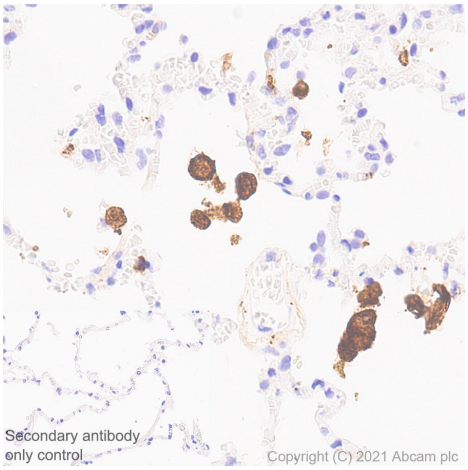
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD204 antibody [EPR24403-17] - BSA and Azide free (ab283512)

This data was developed using **ab271070**, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Human liver tissue labelling CD204 with **ab271070** at 1/100 (5.16 ug/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on Kupffer cells in human liver (PMID: 28202073). The section was incubated with **ab271070** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



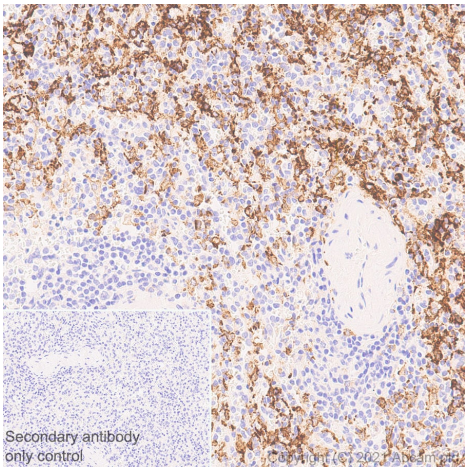
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD204 antibody [EPR24403-17] - BSA and Azide free (ab283512)

This data was developed using **ab271070**, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Human lung tissue labelling CD204 with **ab271070** at 1/100 (5.16 ug/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on macrophages in human lung. The section was incubated with **ab271070** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



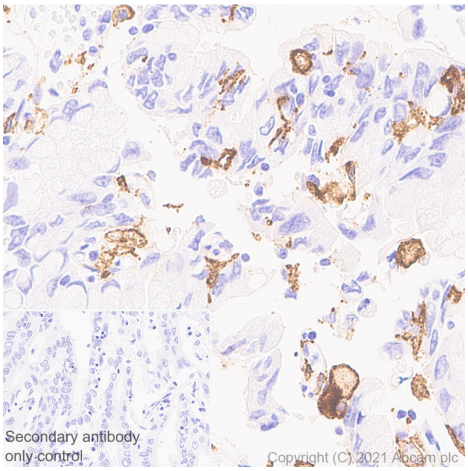
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD204 antibody [EPR24403-17] - BSA and Azide free (ab283512)

This data was developed using **ab271070**, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Human spleen tissue labelling CD204 with **ab271070** at 1/100 (5.16 ug/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on human spleen. The section was incubated with **ab271070** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



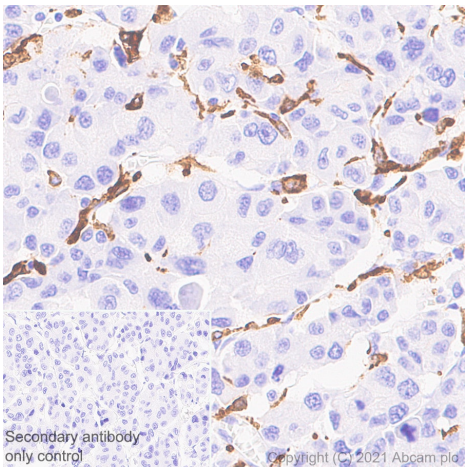
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD204 antibody [EPR24403-17] - BSA and Azide free (ab283512)

This data was developed using **ab271070**, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Human gastric carcinoma tissue labelling CD204 with **ab271070** at 1/100 (5.16 ug/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on immune cells in human gastric carcinoma (PMID: 28202073). The section was incubated with **ab271070** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



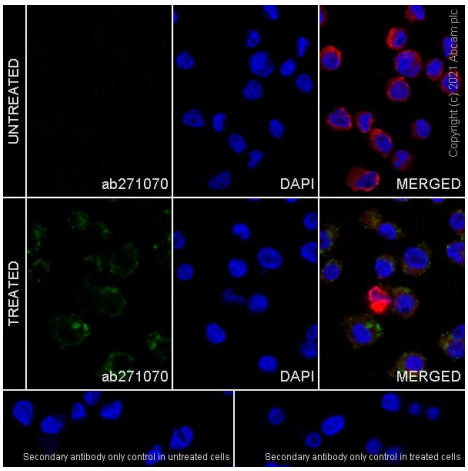
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD204 antibody [EPR24403-17] - BSA and Azide free (ab283512)

This data was developed using **ab271070**, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Human hepatocellular carcinoma tissue labelling CD204 with **ab271070** at 1/100 (5.16 ug/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on immune cells in human hepatocellular carcinoma (PMID: 28202073). The section was incubated with **ab271070** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

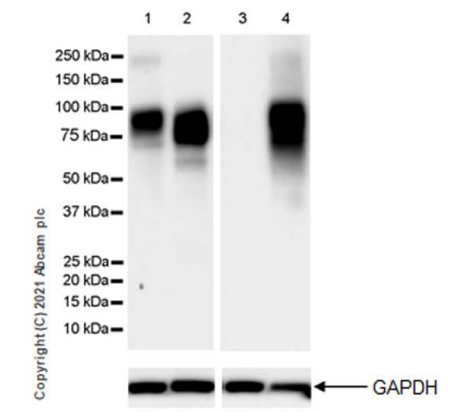


Immunocytochemistry/ Immunofluorescence - Anti-CD204 antibody [EPR24403-17] - BSA and Azide free (ab283512)

This data was developed using **ab271070**, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized THP-1 cells labelling CD204 with **ab271070** at 1/50 (10.32 ug/ml) dilution, followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 (2 ug/ml) dilution (Green). Confocal image showing increased cytoplasmic staining in THP-1 cells treated with Phorbol-12-myristate-13-acetate (80 nM) for 72 hours. **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 (2.5 ug/ml) dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 (2 ug/ml) dilution.



Western blot - Anti-CD204 antibody [EPR24403-17] - BSA and Azide free (ab283512)

All lanes : Anti-CD204 antibody [EPR24403-17] (**ab271070**) at 1/1000 dilution

Lane 1 : Human liver tissue lysate
Lane 2 : Human spleen tissue lysate
Lane 3 : Untreated THP-1 (human monocytic leukemia monocyte) whole cell lysate
Lane 4 : THP-1 treated with 80nM PMA for 72 hours whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution

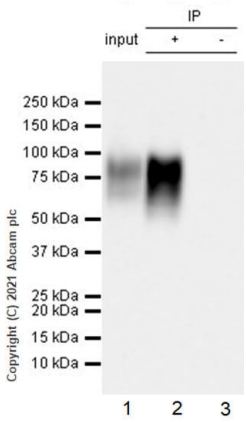
Predicted band size: 50 kDa
Observed band size: 80 kDa

This data was developed using **ab271070**, the same antibody clone in a different buffer formulation.

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

The expression profile/ molecular weight observed is consistent with what has been described in the literature (PMID: 30991038).

Exposure time: Lanes 1-2: 26 seconds; Lanes 3-4: 8 seconds.



Immunoprecipitation - Anti-CD204 antibody [EPR24403-17] - BSA and Azide free (ab283512)

This data was developed using **ab271070**, the same antibody clone in a different buffer formulation.

CD204 was immunoprecipitated from 0.35 mg THP-1 (human monocytic leukemia monocyte), treated with 80nM PMA for 72 hours, whole cell lysate with **ab271070** at 1/30 dilution (2 ug in 0.35 mg lysates). Western blot was performed on the immunoprecipitate using **ab271070** at 1/1000 dilution. VeriBlot for IP secondary antibody (HRP) (**ab131366**) was used at 1/5000 dilution.

Lane 1: THP-1(human monocytic leukemia monocyte) treated with 80nM PMA for 72 hours whole cell lysate 20 ug

Lane 2: **ab271070** IP in THP-1 treated with 80nM PMA for 72 hours whole cell lysate

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab271070** in THP-1 treated with 80nM PMA for 72 hours whole cell lysate

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

Exposure time: 6 seconds.

Anti-CD204 antibody [EPR24403-17] - BSA and Azide free (ab283512)

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