abcam

Product datasheet

# Anti-CD16 antibody [EPR22409-124] - BSA and Azide free ab252908

Recombinant RabMAb

1 References 7 Images

## Overview

| | |
|---|---|
| **Product name** | Anti-CD16 antibody [EPR22409-124] - BSA and Azide free |
| **Description** | Rabbit monoclonal [EPR22409-124] to CD16 - BSA and Azide free |
| **Host species** | Rabbit |
| **Tested applications** | **Suitable for:** WB, IHC-P, ICC/IF, Flow Cyt, IP |
| **Species reactivity** | **Reacts with:** Human |
| **Immunogen** | Recombinant fragment. This information is proprietary to Abcam and/or its suppliers. |
| **Positive control** | WB: Human spleen and colon cancer lysates. IP: Human spleen lysate. IHC-P: Human spleen and liver tissue. ICC/IF: Human PBMCs. Flow cyt: Human PBMCs. |
| **General notes** | ab252908 is the carrier-free version of **ab246222**.<br><br>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.<br><br>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.<br><br>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.<br><br>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.<br><br>This product is a recombinant monoclonal antibody, which offers several advantages including:<br>- High batch-to-batch consistency and reproducibility<br>- Improved sensitivity and specificity<br>- Long-term security of supply<br>- Animal-free production<br>For more information **see here**.<br><br>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

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|---|---|
| **Form** | Liquid |
| **Storage instructions** | Shipped at 4°C. Store at +4°C. Do Not Freeze. |
| **Storage buffer** | pH: 7.2<br>Constituent: PBS |
| **Carrier free** | Yes |
| **Purity** | Protein A purified |
| **Clonality** | Monoclonal |
| **Clone number** | EPR22409-124 |
| **Isotype** | IgG |

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab252908 in the following tested applications.

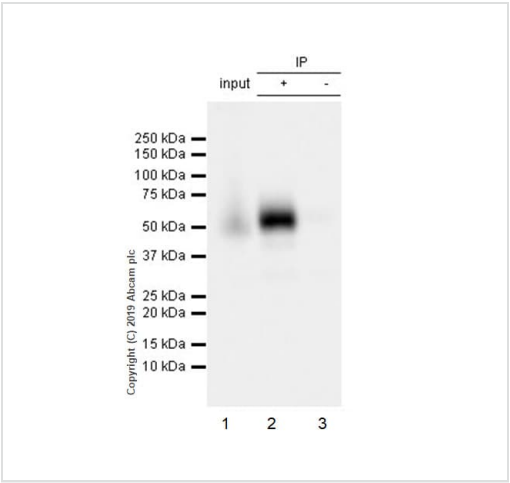
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|---|---|---|
| **WB** | | Use at an assay dependent concentration. Detects a band of approximately 50-70 kDa (predicted molecular weight: 29 kDa). |
| **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. |
| **Flow Cyt** | | Use at an assay dependent concentration. |
| **IP** | | Use at an assay dependent concentration. |

## Target

| | |
|---|---|
| **Function** | Receptor for the Fc region of IgG. Binds complexed or aggregated IgG and also monomeric IgG. Mediates antibody-dependent cellular cytotoxicity (ADCC) and other antibody-dependent responses, such as phagocytosis. |
| **Tissue specificity** | Expressed on natural killer cells, macrophages, subpopulation of T-cells, immature thymocytes and placental trophoblasts. |
| **Sequence similarities** | Contains 2 Ig-like C2-type (immunoglobulin-like) domains. |
| **Post-translational modifications** | Glycosylated. Contains high mannose- and complex-type oligosaccharides.<br>The soluble form is produced by a proteolytic cleavage. |
| **Cellular localization** | Cell membrane. Secreted. Exists also as a soluble receptor. |

## Images




Immunoprecipitation - Anti-CD16 antibody [EPR22409-124] - BSA and Azide free (ab252908)

CD16 was immunoprecipitated from 0.35 mg of human spleen lysate with **ab246222** at 1/30 dilution. Western blot was performed from the immunoprecipitate using **ab246222** at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/5000 dilution.

**Lane 1:** Human spleen lysate 10 µg (Input).

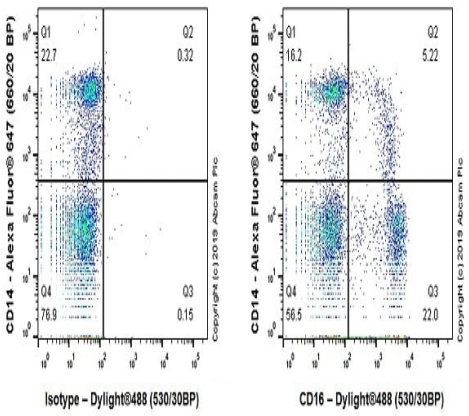
**Lane 2:** **ab246222** IP in human spleen lysate.

**Lane 3:** Rabbit monoclonal IgG (**ab172730**) instead of **ab246222** in human spleen 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 (**ab246222**).

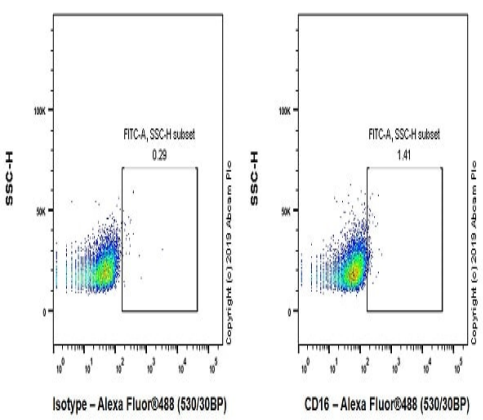



Flow Cytometry - Anti-CD16 antibody [EPR22409-124] - BSA and Azide free (ab252908)

Human PBMCs (human peripheral blood mononuclear cells) were stained with Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**)(Left) or **ab246222** (Right) followed by a Goat anti rabbit IgG (Dylight ® 488) at 1/2000 dilution. They were then stained with Alexa Fluor® 647-conjugated anti-CD14. The expression pattern is consistent with what described in the literature. (PMID: 21738687)

Gated on viable cells.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab246222**).



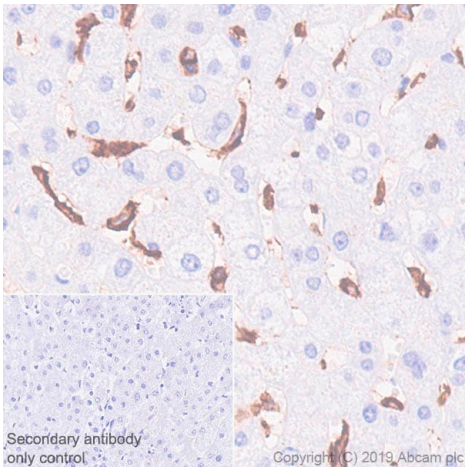

Flow Cytometry - Anti-CD16 antibody [EPR22409-124] - BSA and Azide free (ab252908)

**Negative control:** Raji. (PMID:11207281).

Raji (human Burkitt's lymphoma cell line) were stained with Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**)(Left) or **ab246222** (Right) followed by a Goat anti rabbit IgG (Dylight ® 488) at 1/2000 dilution.

Gated on viable cells.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab246222**).




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD16 antibody [EPR22409-124] - BSA and Azide free (ab252908)

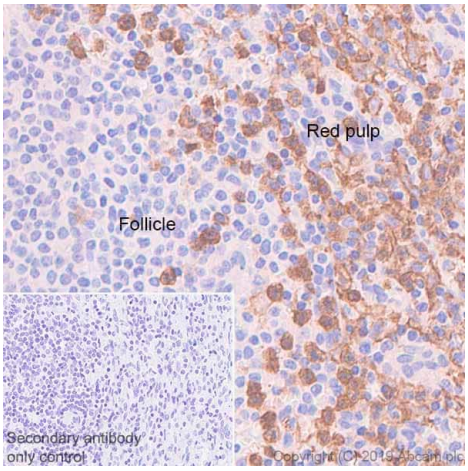
Immunohistochemical analysis of paraffin-embedded human liver tissue labeling CD16 with **ab246222** at 1/500 dilution, followed by Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on Kuffer cells of human liver (PMID: 26512139) is observed. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 minutes.

The section was incubated with **ab246222** for 10 minutes at 37?. The immunostaining staining was performed on a Leica Biosystems BOND® RX instrument.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab246222**).




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD16 antibody [EPR22409-124] - BSA and Azide free (ab252908)

Immunohistochemical analysis of paraffin-embedded human spleen tissue labeling CD16 with **ab246222** at 1/500 dilution, followed by Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on red pulp of human spleen (PMID: 26512139; 29692344). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 minutes.

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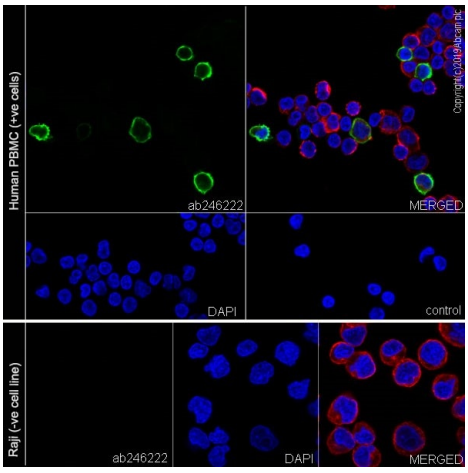


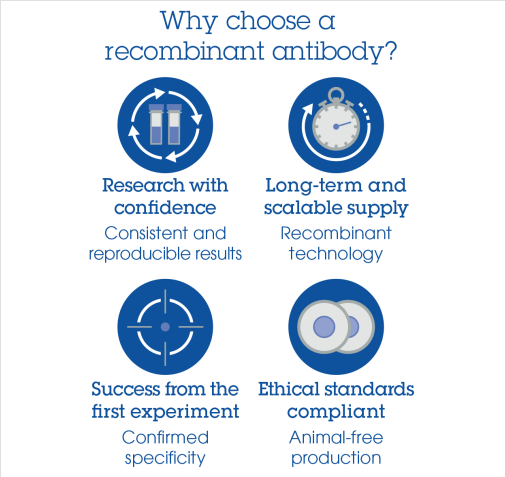

Immunocytochemistry/ Immunofluorescence - Anti-CD16 antibody [EPR22409-124] - BSA and Azide free (ab252908)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized human PBMCs (human peripheral blood mononuclear cells) or Raji (human Burkitt's lymphoma cell line) cell line labeling CD16 with **ab246222** at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining in subsets of human PBMC cells. The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) at 1/200 dilution (red).

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

Negative control: Raji (PMID:11207281).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab246222**).




Anti-CD16 antibody [EPR22409-124] - BSA and Azide free (ab252908)

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