

## Product datasheet

### Anti-CD16 antibody [EPR22409-124] ab246222

Recombinant **RabMAb**

★★★★★ [3 Abreviews](#) [3 References](#) [8 Images](#)

#### Overview

<b>Product name</b>	Anti-CD16 antibody [EPR22409-124]
<b>Description</b>	Rabbit monoclonal [EPR22409-124] to CD16
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, ICC/IF, Flow Cyt, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	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.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <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>

#### 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 long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: PBS, 40% Glycerol, 0.05% BSA</p>
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR22409-124
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab246222 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. Detects a band of approximately 50-70 kDa (predicted molecular weight: 29 kDa).
IHC-P	★★★★★ (1)	1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF	★★★★★ (1)	1/100.
Flow Cyt		1/600.
IP		1/30.

## 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.

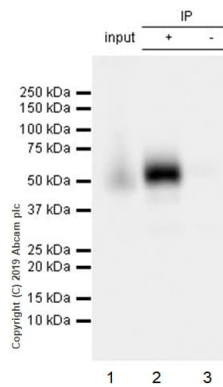
### Post-translational modifications

Glycosylated. Contains high mannose- and complex-type oligosaccharides. 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] (ab246222)

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 as the secondary antibody at 1/5000 dilution.

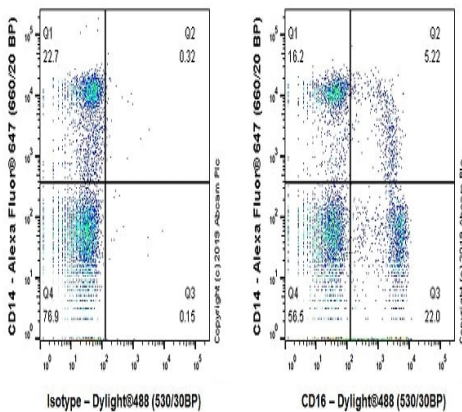
Lane 1: Human spleen lysate 10 µg (Input).

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.

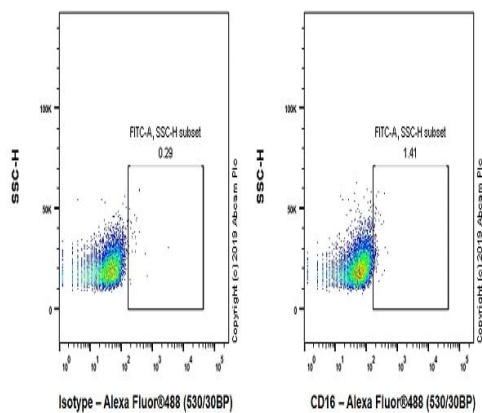
Exposure time: 5 seconds.



Flow Cytometry - Anti-CD16 antibody [EPR22409-124] (ab246222)

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 that described in the literature. (PMID: 21738687)

Gated on viable cells.

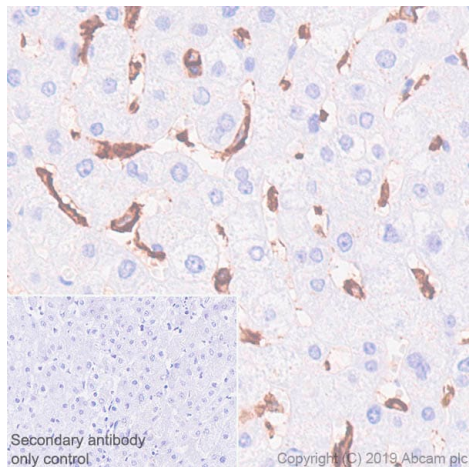


Flow Cytometry - Anti-CD16 antibody [EPR22409-124] (ab246222)

**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.

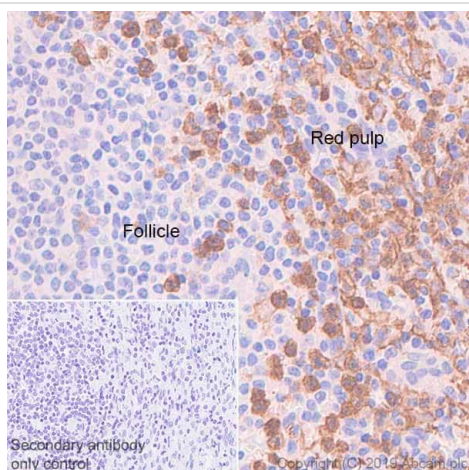


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD16 antibody  
[EPR22409-124] (ab246222)

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**).

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

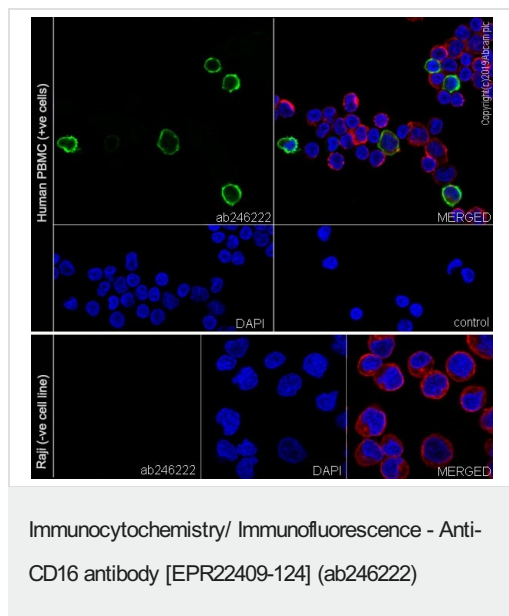


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD16 antibody  
[EPR22409-124] (ab246222)

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**).

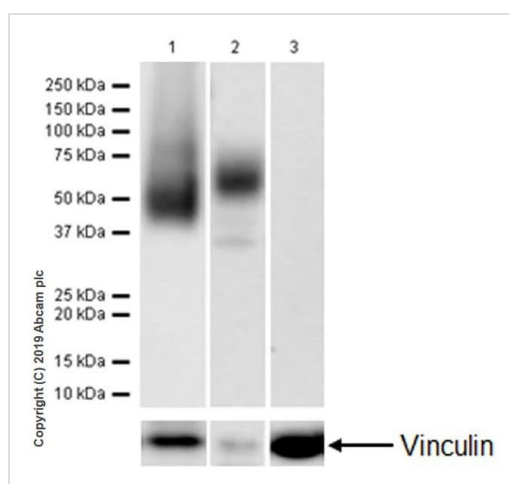
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



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 is observed. 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).



**All lanes :** Anti-CD16 antibody [EPR22409-124] (ab246222) at 1/1000 dilution

**Lane 1 :** Human spleen lysate

**Lane 2 :** Human colon cancer lysate

**Lane 3 :** Raji (human Burkitt's lymphoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes :** VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) at 1/100000 dilution

**Predicted band size:** 29 kDa

**Observed band size:** 50-70 kDa

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure times.

Lane 1: 92 seconds.

Lanes 2 & 3: 3 minutes.

The expression profile/ molecular weight observed is consistent with what has been described in the literature (PMID: 2526846).

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

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-CD16 antibody [EPR22409-124] (ab246222)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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