# abcam

# Product datasheet

# Anti-CD16a antibody [SP189] - BSA and Azide free ab243936

Recombinant RabMAb

# 15 Images

#### Overview

**Product name** Anti-CD16a antibody [SP189] - BSA and Azide free

**Description** Rabbit monoclonal [SP189] to CD16a - BSA and Azide free

**Host species** Rabbit

**Tested applications** Suitable for: Flow Cyt (Intra), WB, IHC-P

Species reactivity Reacts with: Human

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control IHC-P: Human lung, liver, thymus, spleen, placenta, B-cell lymphoma, cervical squamous cell

carcinoma, colon carcinoma, HK lymphoma, stomach carcinoma, and liver hepatocellular

carcinoma tissue; Flow Cyt: Jurkat cells.

General notes ab243936 is the carrier-free version of ab227665.

> 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 cellbased 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<sup>®</sup> 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.

This product is FOR RESEARCH USE ONLY. For commercial use, please contact

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#### partnerships@abcam.com.

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.20

Constituent: PBS

Carrier free Yes

Purity Protein A/G purified

**Purification notes** Purified from TCS by protein A/G.

**Clonality** Monoclonal

Clone number SP189

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab243936 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
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 29 kDa.
IHC-P		Use at an assay dependent concentration.  Antigen retrieval: Boil tissue section in EDTA buffer, pH 8.0 for 10 minutes followed by cooling at room temperature for 20 minutes.

#### **Target**

Post-translational

**Function** Receptor for the Fc region of lgG. Binds complexed or aggregated lgG and also monomeric lgG.

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.

Involvement in disease Immunodeficiency 20

Sequence similarities Contains 2 lg-like C2-type (immunoglobulin-like) domains.

modifications 180 is mandatory for high affinity binding to the Fc and for discrimination between fucosylated and

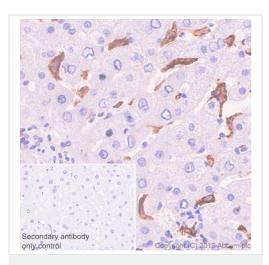
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Glycosylated. Contains high mannose- and complex-type oligosaccharides. Glycosylation at Asn-

afucosylated lgG glycoforms.

The soluble form is produced by a proteolytic cleavage.

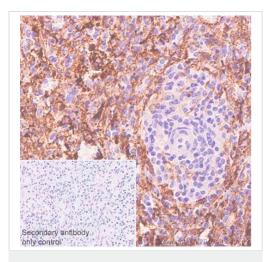
#### **Images**



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD16a antibody [SP189] - BSA and Azide free (ab243936)

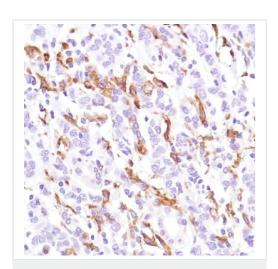
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human liver tissue sections labeling CD16a with <a href="mailto:ab227665">ab227665</a> at 1/100 dilution (1.47 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 10 mins. Rabbit specific IHC polymer detection kit HRP/DAB (<a href="mailto:ab209101">ab209101</a>) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227665)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD16a antibody [SP189] - BSA and Azide free (ab243936)

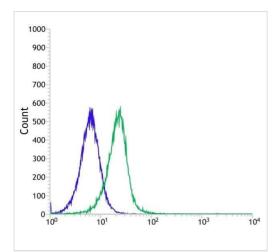
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human spleen tissue sections labeling CD16a with <a href="mailto:ab227665">ab227665</a> at 1/100 dilution (1.47 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 10 mins. Rabbit specific IHC polymer detection kit HRP/DAB (<a href="mailto:ab209101">ab209101</a>) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD16a antibody [SP189] - BSA and Azide free (ab243936)

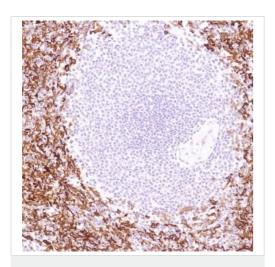
Formalin-fixed, paraffin-embedded human stomach adenocarcinoma tissue stained for CD16a with <u>ab227665</u> at 1/100 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab227665).



Flow Cytometry - Anti-CD16a antibody [SP189] - BSA and Azide free (ab243936)

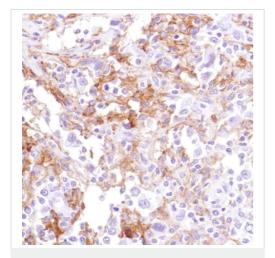
Flow cytometric analysis of Jurkat (human T cell leukemia cell line from peripheral blood) cell line labeling CD16a with <u>ab227665</u> at 1/100 (green) compared with a rabbit isotype control (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD16a antibody [SP189] - BSA and Azide free (ab243936)

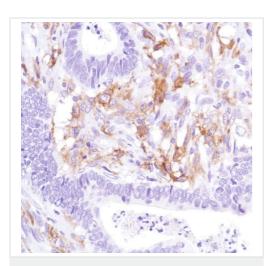
Formalin-fixed, paraffin-embedded human spleen tissue stained for CD16a with <u>ab227665</u> at 1/100 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab227665).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD16a antibody [SP189] - BSA and Azide free (ab243936)

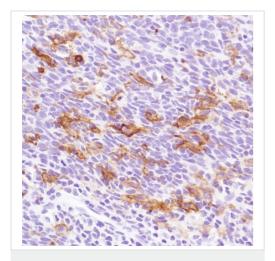
Formalin-fixed, paraffin-embedded human HK lymphoma tissue stained for CD16a with <u>ab227665</u> at 1/100 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD16a antibody [SP189] - BSA and Azide free (ab243936)

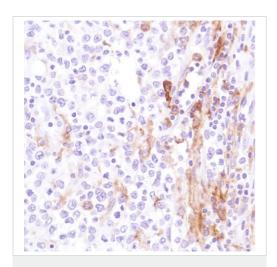
Formalin-fixed, paraffin-embedded human colon adenocarcinoma tissue stained for CD16a with <u>ab227665</u> at 1/100 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab227665).



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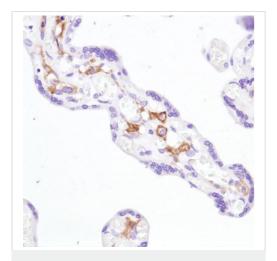
Formalin-fixed, paraffin-embedded human cervical squamous cell carcinoma tissue stained for CD16a with <u>ab227665</u> at 1/100 dilution in immunohistochemical analysis.



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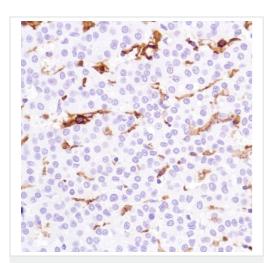
Formalin-fixed, paraffin-embedded human B-cell lymphoma tissue stained for CD16a with <u>ab227665</u> at 1/100 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab227665).



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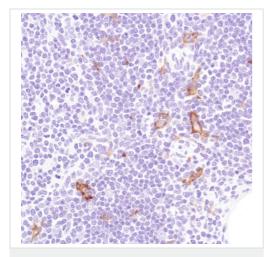
Formalin-fixed, paraffin-embedded human placenta tissue stained for CD16a with <u>ab227665</u> at 1/100 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD16a antibody [SP189] - BSA and Azide free (ab243936)

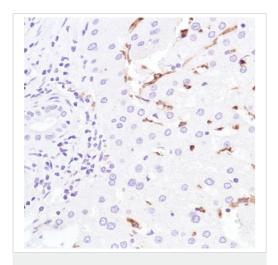
Formalin-fixed, paraffin-embedded human liver hepatocellular carcinoma tissue stained for CD16a with <u>ab227665</u> at 1/100 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab227665).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD16a antibody [SP189] - BSA and Azide free (ab243936)

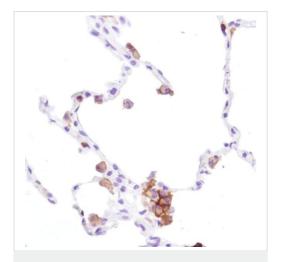
Formalin-fixed, paraffin-embedded human liver tissue stained for CD16a with <u>ab227665</u> at 1/100 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD16a antibody [SP189] - BSA and Azide free (ab243936)

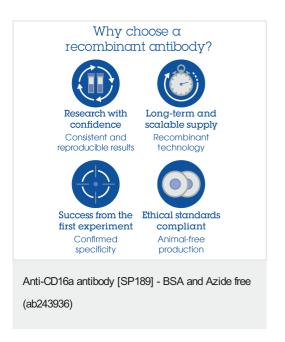
Formalin-fixed, paraffin-embedded human lung tissue stained for CD16a with <u>ab227665</u> at 1/100 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab227665).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD16a antibody [SP189] - BSA and Azide free (ab243936)

Formalin-fixed, paraffin-embedded human lung tissue stained for CD16a with <u>ab227665</u> at 1/100 dilution in immunohistochemical analysis.



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

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