# abcam

## Product datasheet

# Anti-CD19 antibody [EPR5906] - BSA and Azide free ab271904





#### Overview

Product name Anti-CD19 antibody [EPR5906] - BSA and Azide free

**Description** Rabbit monoclonal [EPR5906] to CD19 - BSA and Azide free

Host species Rabbit

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

Unsuitable for: IP

Species reactivity Reacts with: Human

**Immunogen** Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Namalwa, Daudi and Ramos cell lysates; human tonsil tissue lysate. IHC-P: Human tonsil,

diffuse large B-cell lymphoma, B-cell chronic lymphocytic leukaemia and spleen tissue. ICC/IF:

Raji cells. Flow Cyt (intra): Raji cells.

**General notes** ab271904 is the carrier-free version of <u>ab134114</u>.

Our <u>carrier-free</u> 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<sup>®</sup> 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.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

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# 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. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR5906

**Isotype** IgG

### **Applications**

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab271904 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 before commencing with IHC staining protocol. See IHC antigen retrieval protocols.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 95 kDa (predicted molecular weight: 61 kDa).
Flow Cyt (Intra)		Use at an assay dependent concentration.

**Application notes** Is unsuitable for IP.

**Target** 

**Function** Assembles with the antigen receptor of B lymphocytes in order to decrease the threshold for

antigen receptor-dependent stimulation.

**Involvement in disease** Defects in CD19 are the cause of immunodeficiency common variable type 3 (CVID3)

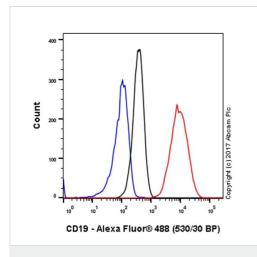
[MIM:613493]; also called antibody deficiency due to CD19 defect. CVID3 is a primary immunodeficiency characterized by antibody deficiency, hypogammaglobulinemia, recurrent bacterial infections and an inability to mount an antibody response to antigen. The defect results from a failure of B-cell differentiation and impaired secretion of immunoglobulins; the numbers of

circulating B cells is usually in the normal range, but can be low.

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

**Post-translational** Phosphorylated on serine and threonine upon DNA damage, probably by ATM or ATR.

#### **Images**



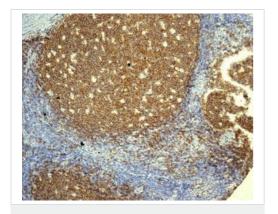
Flow Cytometry (Intracellular) - Anti-CD19 antibody [EPR5906] - BSA and Azide free (ab271904)

Intracellular Flow Cytometry analysis of Raji cells (Human Burkitt's lymphoma B lymphocyte) labelling CD19 with <u>ab134114</u> at 1/1000 dilution, 1.186  $\mu$ g/ml (red). Cells were fixed with 4% paraformaldehyde, permeabilised with 90% methanol. Goat anti rabbit lgG (Alexa Fluor<sup>®</sup> 488, <u>ab150077</u>) was used as the secondary antibody at 1/2000.

Isotype control (black) - Rabbit monoclonal IgG (ab172730)

Unlabeled control (blue) - Unlabelled cells

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab134114).



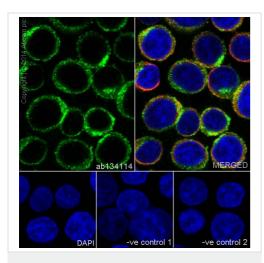
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD19 antibody

[EPR5906] - BSA and Azide free (ab271904)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labelling CD19 with unpurified <u>ab134114</u> at a dilution of 1/250.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab134114).



Immunocytochemistry/ Immunofluorescence - Anti-CD19 antibody [EPR5906] - BSA and Azide free (ab271904)

Secondary antibody, only control

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD19 antibody

[EPR5906] - BSA and Azide free (ab271904)

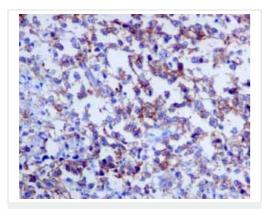
Immunocytochemistry/Immunofluorescence analysis of Raji cells labelling CD19 with purified <u>ab134114</u> at a dilution of 1/500. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. <u>ab150077</u>, an Alexa Fluor<sup>®</sup> 488-conjugated goat antirabbit lgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. <u>ab7291</u>, a mouse antitubulin (1/1000) and <u>ab150120</u>, an Alexa Fluor<sup>®</sup> 594-conjugated goat anti-mouse lgG (1/1000) were also used.

Control 1: primary antibody (1/500) and secondary antibody, **ab150120**, an Alexa Fluor<sup>®</sup> 594-conjugated goat anti-mouse IgG (1/1000).

Control 2: <u>ab7291</u> (1/1000) and secondary antibody, <u>ab150077</u>, an Alexa Fluor<sup>®</sup> 488-conjugated goat anti-rabbit lgG (1/1000). This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab134114</u>).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labelling CD19 with purified <u>ab134114</u> at a dilution of 1/500. Heat mediated antigen retrieval was performed using EDTA buffer pH 9. <u>ab97051</u>, a HRP-conjugated goat anti-rabbit lgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab134114).



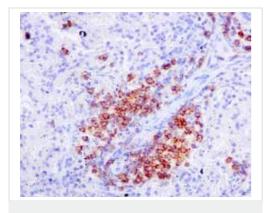
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD19 antibody

[EPR5906] - BSA and Azide free (ab271904)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human diffuse large B-cell lymphoma tissue labelling CD19 with unpurified <u>ab134114</u>.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab134114).



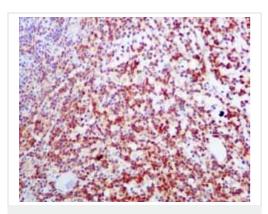
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD19 antibody

[EPR5906] - BSA and Azide free (ab271904)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human spleen tissue labelling CD19 with unpurified <u>ab134114</u>.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab134114</u>).



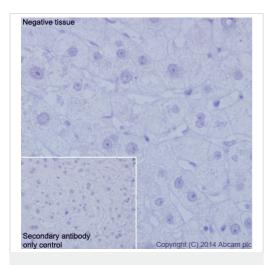
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD19 antibody

[EPR5906] - BSA and Azide free (ab271904)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human B-cell chronic lymphocytic leukaemia tissue labelling CD19 with unpurified <u>ab134114</u>.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab134114</u>).

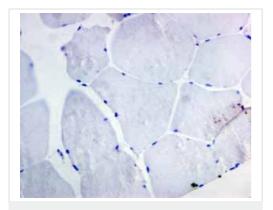


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD19 antibody

[EPR5906] - BSA and Azide free (ab271904)

Negative tissue: Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue labelling CD19 with purified ab134114 at a dilution of 1/500. Heat mediated antigen retrieval was performed using EDTA buffer pH 9. ab97051, a HRP-conjugated goat anti-rabbit lgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and

sodium azide (ab134114).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD19 antibody

[EPR5906] - BSA and Azide free (ab271904)

Immunohistochemical analysis of paraffin embedded human skeletal muscle tissue using unpurified <u>ab134114</u> showing negative staining.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab134114).



free (ab271904)

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