

Product datasheet

Anti-CD19 antibody [EPR5906] ab134114

Recombinant RabMAb

★★★★★ [4 Abreviews](#) [39 References](#) [14 Images](#)

Overview

Product name	Anti-CD19 antibody [EPR5906]
Description	Rabbit monoclonal [EPR5906] to CD19
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P, ICC/IF, IHC-Fr Unsuitable for: IP
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment within Human CD19 aa 300 to the C-terminus. The exact sequence is proprietary. Database link: P15391
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. IHC (Frozen sections) - Human tonsil. ICC/IF: Raji cells. Flow Cyt (intra): Raji cells.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - 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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, 59% PBS
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR5906
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab134114 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

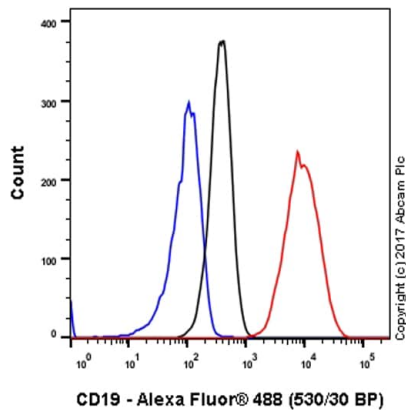
Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB	★★★★★ (1)	1/1000 - 1/10000. Detects a band of approximately 95 kDa (predicted molecular weight: 61 kDa).
IHC-P	★★★★★ (2)	1/250 - 1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <u>IHC antigen retrieval protocols</u> .
ICC/IF		1/500 - 1/1000.
IHC-Fr		Use a concentration of 1 µg/ml.

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 Ig-like C2-type (immunoglobulin-like) domains.
Post-translational modifications	Phosphorylated on serine and threonine upon DNA damage, probably by ATM or ATR. Phosphorylated on tyrosine following B-cell activation.
Cellular localization	Membrane.

Images

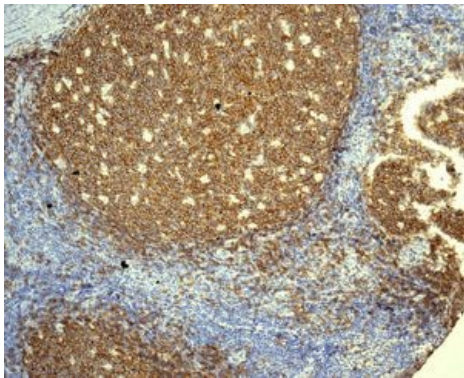


Flow Cytometry (Intracellular) - Anti-CD19 antibody
[EPR5906] (ab134114)

Intracellular Flow Cytometry analysis of Raji cells (Human Burkitt's lymphoma B lymphocyte) labelling CD19 with ab134114 at 1/1000 dilution, 1.186µg/ml (red). Cells were fixed with 4% paraformaldehyde, permeabilised with 90% methanol. Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) was used as the secondary antibody at 1/2000.

Isotype control (black) - Rabbit monoclonal IgG ([ab172730](#))

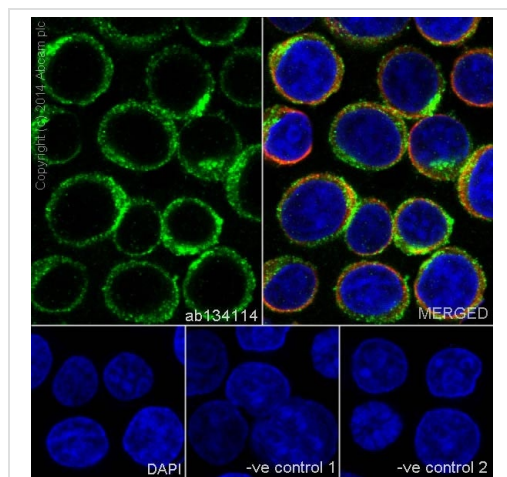
Unlabeled control (blue) - Unlabelled cells



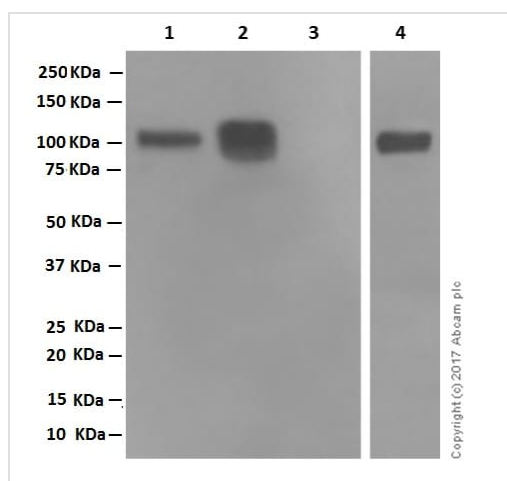
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD19 antibody
[EPR5906] (ab134114)

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

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



Immunocytochemistry/ Immunofluorescence - Anti-CD19 antibody [EPR5906] (ab134114)



Western blot - Anti-CD19 antibody [EPR5906] (ab134114)

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

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

Control 2: **ab7291** (1/1000) and secondary antibody, **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000).

Lanes 1-3 : Anti-CD19 antibody [EPR5906] (ab134114) at 1/10000 dilution

Lane 4 : Anti-CD19 antibody [EPR5906] (ab134114) at 1/2000 dilution

Lane 1 : NAMALWA (Human Burkitt's lymphoma) whole cell lysate)

Lane 2 : Human tonsil tissue lysate

Lane 3 : Jurkat (Human acute T cell leukemia) whole cell lysate

Lane 4 : RAMOS (Human Burkitt's lymphoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 61 kDa

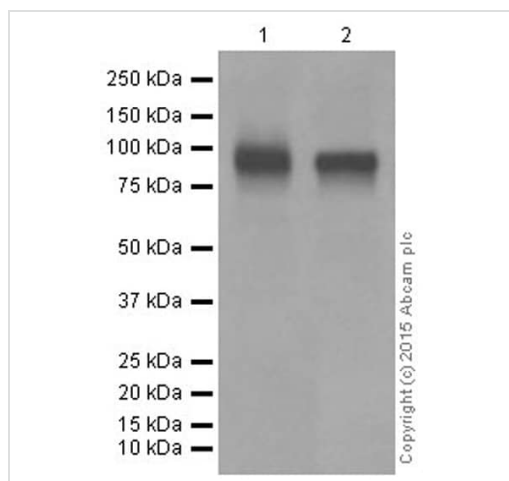
Observed band size: 95 kDa

Exposure time:

Lane 1-3: 3 minutes

Lane 4: 30 seconds

Jurkat is a CD19 null cell line according to the paper (PMID: 19147785).



Western blot - Anti-CD19 antibody [EPR5906]
(ab134114)

All lanes : Anti-CD19 antibody [EPR5906] (ab134114) at 1/5000 dilution (purified)

Lane 1 : Namalwa whole cell lysate

Lane 2 : Daudi whole cell lysate

Lysates/proteins at 20 µg per lane.

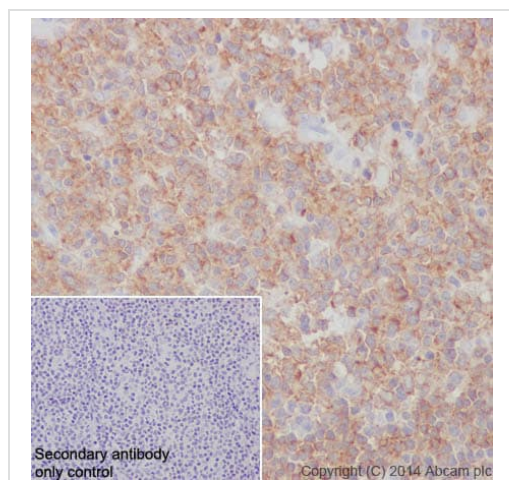
Secondary

All lanes : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 61 kDa

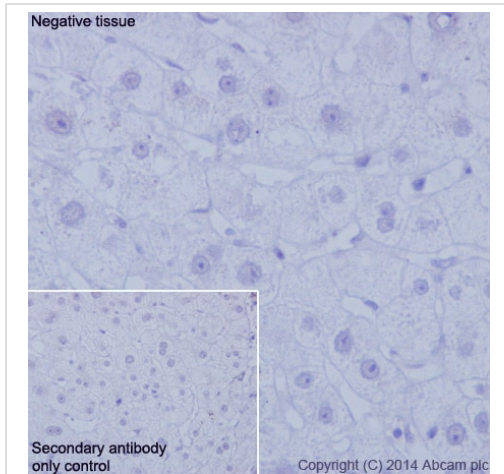
Observed band size: 95 kDa

Blocking and dilution buffer: 5% NFDM/TBST



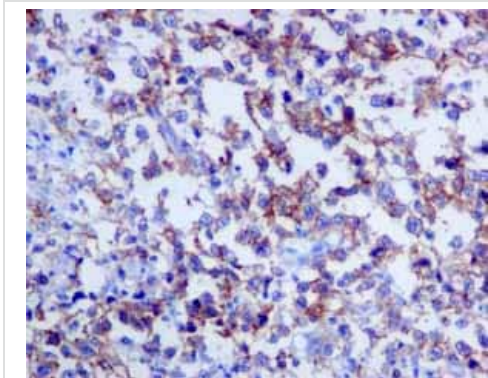
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD19 antibody
[EPR5906] (ab134114)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil 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 IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD19 antibody [EPR5906] (ab134114)

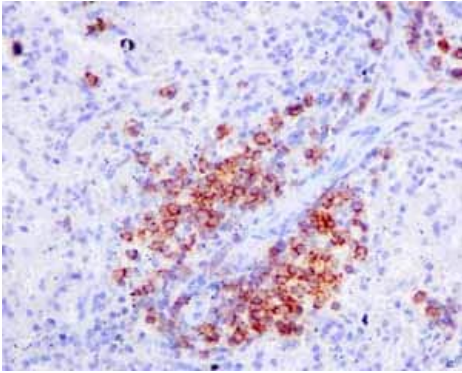
Negative tissue: Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue labelling CD19 with purified ab134114 at a dilution of 1/500. Heat mediated antigen retrieval was performed using EDTA buffer pH 9. **ab97051**, a HRP-conjugated goat anti-rabbit IgG (H+L)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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD19 antibody [EPR5906] (ab134114)

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

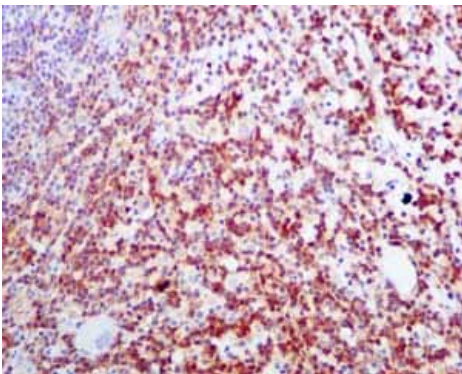
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD19 antibody
[EPR5906] (ab134114)

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

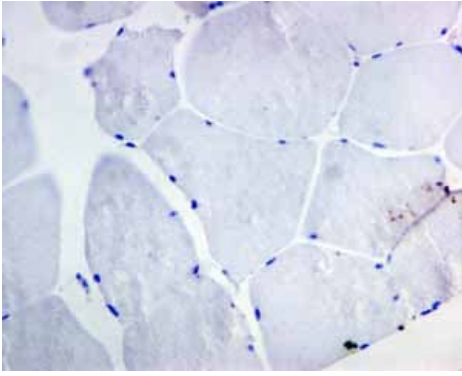
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD19 antibody
[EPR5906] (ab134114)

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

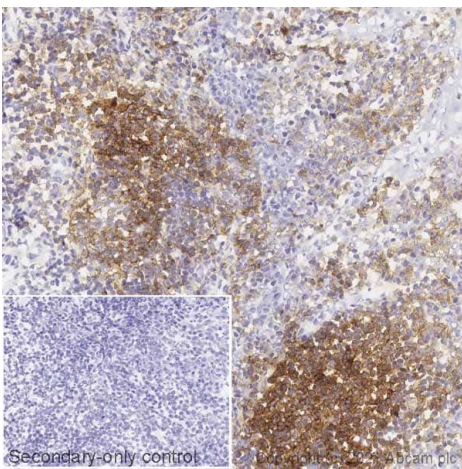
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD19 antibody [EPR5906] (ab134114)

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

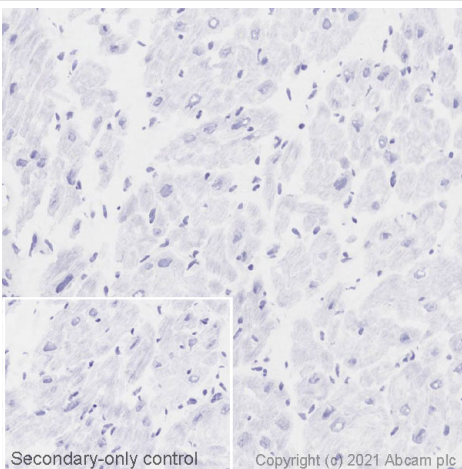
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Frozen sections) - Anti-CD19 antibody [EPR5906] (ab134114)

IHC image of ab134114 staining CD19 in human tonsil frozen tissue sections, performed on a Leica Biosystems BOND® RX instrument. The section was incubated with ab134114 at 1 µg/ml for 30 mins at room temperature and detected using an HRP conjugated compact polymer system (Bond™ Polymer Refine Detection). DAB was used as the chromogen. Positive membrane staining was seen in human tonsil. The section was then counterstained with haematoxylin and mounted with DPX. No primary antibody was used in the secondary only control (shown on the inset).

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Immunohistochemistry (Frozen sections) - Anti-CD19 antibody [EPR5906] (ab134114)

IHC image of ab134114 staining CD19 in human heart frozen tissue sections, performed on a Leica Biosystems BOND® RX instrument. The section was incubated with ab134114 at 1 µg/ml for 30 mins at room temperature and detected using an HRP conjugated compact polymer system (Bond™ Polymer Refine Detection). DAB was used as the chromogen. No staining in human heart (negative tissue) was observed. The section was then counterstained with haematoxylin and mounted with DPX. No primary antibody was used in the secondary only control (shown on the inset).

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody

incubation times.

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-CD19 antibody [EPR5906] (ab134114)

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