

Product datasheet

Anti-CD20 antibody [EP459Y] - Low endotoxin, Azide free ab166865

Recombinant RabMAb

10 Images

Overview

Product name	Anti-CD20 antibody [EP459Y] - Low endotoxin, Azide free
Description	Rabbit monoclonal [EP459Y] to CD20 - Low endotoxin, Azide free
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, Flow Cyt, WB, IP, IHC-P
Species reactivity	Reacts with: Human, Monkey
Immunogen	Synthetic peptide corresponding to Human CD20 (C terminal) conjugated to keyhole limpet haemocyanin.
General notes	<p>The formulation and the concentration of this product is compatible for metal-conjugation for mass cytometry (CyTOF[®]).</p> <p>ab166865 is a PBS-only buffer formulated version of ab78237, containing no BSA or sodium azide, ideal for antibody labeling. Please refer to ab78237 for information on protocols, dilutions, and image data.</p> <p>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.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>This product is a recombinant rabbit monoclonal antibody.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot. Store at -20°C.
Storage buffer	Constituent: 100% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP459Y

Isotype

IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab166865** 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
ICC/IF		Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 33 kDa.
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration.

Target

Function

This protein may be involved in the regulation of B-cell activation and proliferation.

Tissue specificity

Expressed on B-cells.

Involvement in disease

Defects in *MS4A1* are the cause of immunodeficiency common variable type 5 (CVID5) [MIM:613495]; also called antibody deficiency due to CD20 defect. CVID5 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

Belongs to the MS4A family.

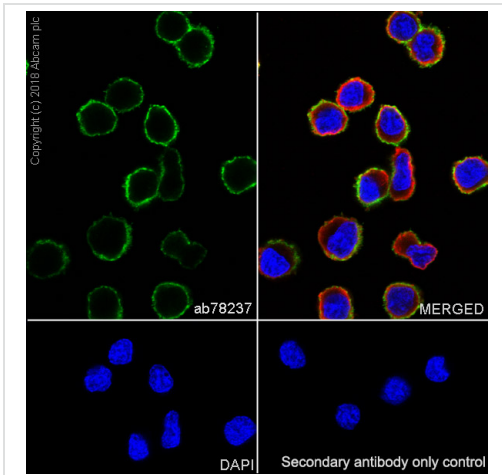
Post-translational modifications

Phosphorylated. Might be functionally regulated by protein kinase(s).

Cellular localization

Membrane.

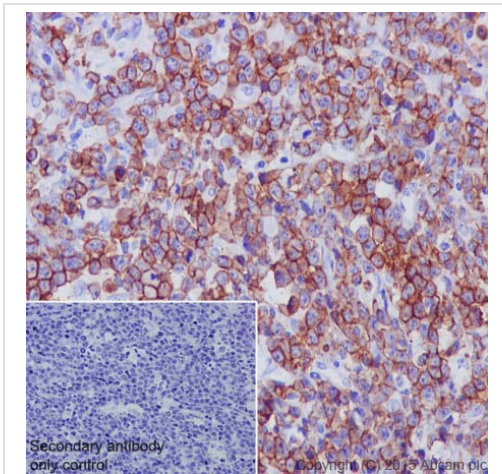
Images



Immunocytochemistry/ Immunofluorescence - Anti-CD20 antibody [EP459Y] - Low endotoxin, Azide free (ab166865)

Immunocytochemistry/ Immunofluorescence analysis of Ramos (human Burkitt's lymphoma B lymphocyte) labeling CD20 with purified [ab78237](#) at 1/10 dilution. Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) at 1/1000 was used as the secondary antibody. Cells were counterstained with [ab195889](#), Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1/200. PBS instead of the primary antibody was used as negative control. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Nuclei were stained with DAPI (blue).

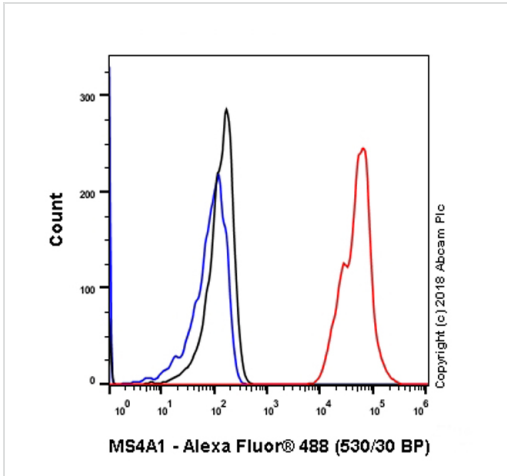
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab78237](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y] - Low endotoxin, Azide free (ab166865)

This IHC data was generated using the same anti-CD20 antibody clone, EP459Y, in a different buffer formulation (cat# [ab78237](#)).

Immunohistochemical staining of paraffin embedded B cell lymphoma with purified [ab78237](#) at a working dilution of 1/50. The secondary antibody used is [ab97051](#), a goat anti-rabbit IgG (H&L) at a dilution of 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



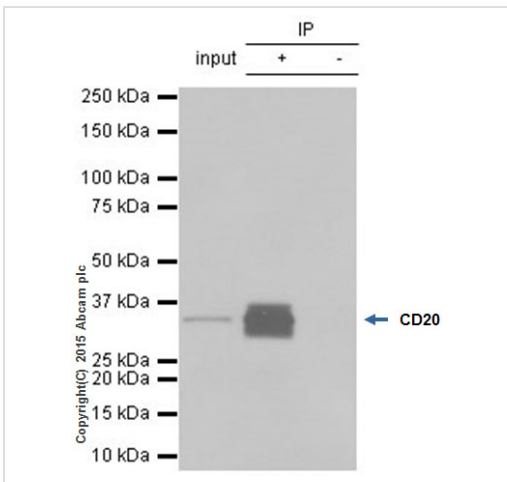
Flow Cytometry - Anti-CD20 antibody [EP459Y] - Low endotoxin, Azide free (ab166865)

Flow cytometry analysis of Ramos (Human Burkitt's lymphoma B lymphocyte) labeling CD20 with purified [ab78237](#) at 1/200 dilution (Red). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150081](#)) at 1/2000 dilution was used as secondary antibody. Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol.

Isotype control: Rabbit monoclonal IgG ([ab172730](#)) (Black)

Unlabelled cells: (Blue)

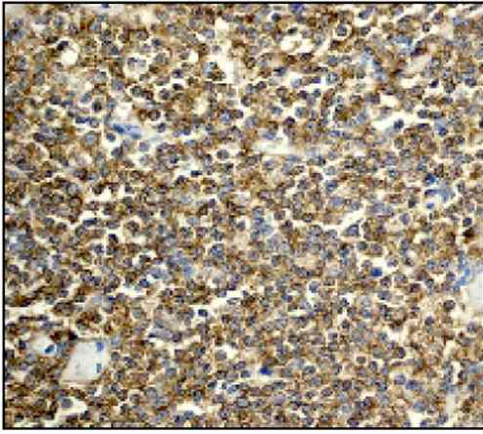
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab78237](#)).



Immunoprecipitation - Anti-CD20 antibody [EP459Y] - Low endotoxin, Azide free (ab166865)

[ab78237](#) (purified) at 1/20 immunoprecipitating CD20 in 10 µg Ramos cell lysate (Lanes 1 and 2, observed at 33 kDa). Lane 3 - Rabbit monoclonal IgG ([ab172730](#)). For western blotting, VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used for detection at 1/10,000 dilution. Blocking buffer and concentration: 5% NFDm/TBST Dilution buffer and concentration: 5% NFDm/TBST

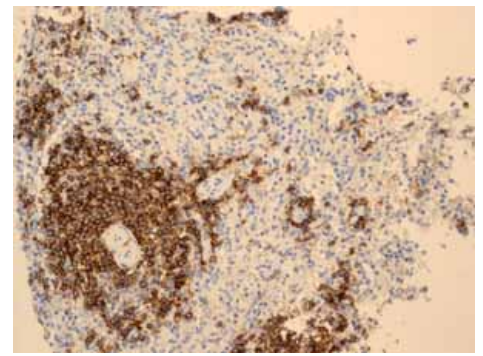
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab78237](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y]
- Low endotoxin, Azide free (ab166865)

Unpurified [ab78237](#) staining human CD20 in human lymphoma tissue by immunohistochemistry using formalin fixed, paraffin embedded tissue.

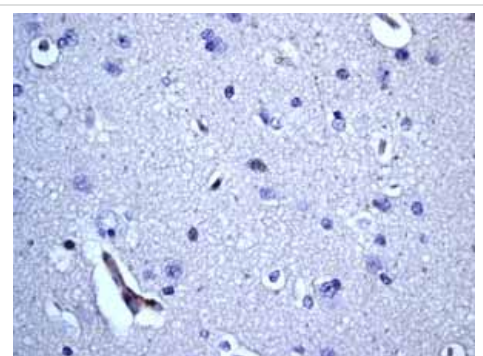
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab78237](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y]
- Low endotoxin, Azide free (ab166865)

Unpurified [ab78237](#) showing positive staining in normal spleen tissue.

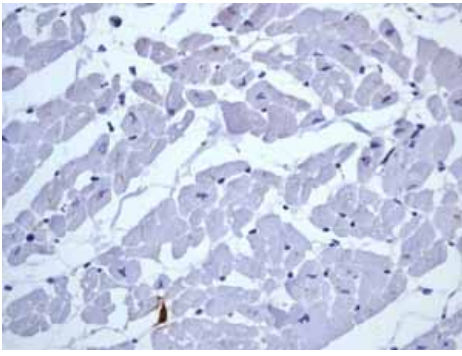
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab78237](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y]
- Low endotoxin, Azide free (ab166865)

Unpurified [ab78237](#) showing negative staining in normal brain tissue.

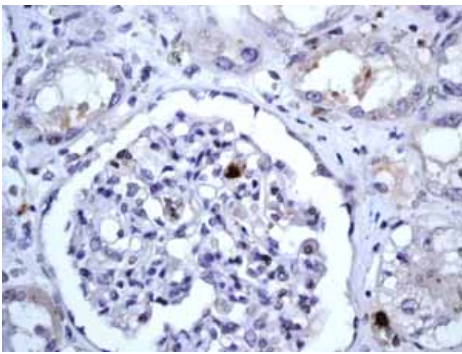
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab78237](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y]
- Low endotoxin, Azide free (ab166865)

Unpurified [ab78237](#) showing negative staining in normal heart tissue.

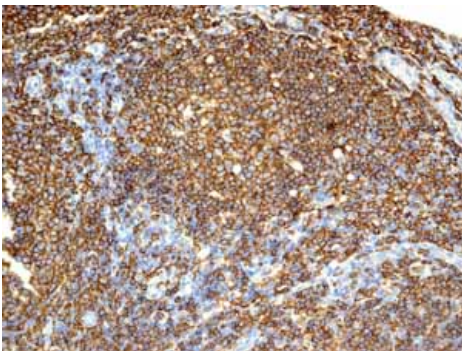
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab78237](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y]
- Low endotoxin, Azide free (ab166865)

Unpurified [ab78237](#) showing negative staining in normal kidney tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab78237](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y]
- Low endotoxin, Azide free (ab166865)

This IHC data was generated using the same anti-CD20 antibody clone, EP459Y, in a different buffer formulation (cat# [ab78237](#)).

Unpurified [ab78237](#) showing positive staining in normal tonsil tissue.

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors