

## Product datasheet

# Anti-CD20 antibody [EP459Y] ab78237

Recombinant RabMAb

★★★★★ 6 Abreviews 14 References 10 Images

### Overview

<b>Product name</b>	Anti-CD20 antibody [EP459Y]
<b>Description</b>	Rabbit monoclonal [EP459Y] to CD20
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP, IHC-P <b>Unsuitable for:</b> Flow Cyt or ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human, Monkey
<b>Immunogen</b>	Synthetic peptide within Human CD20 aa 250 to the C-terminus (C terminal) conjugated to keyhole limpet haemocyanin. The exact sequence is proprietary.
<b>Positive control</b>	Raji cell lysate. Human lymph node tissue.
<b>General notes</b>	

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMab<sup>®</sup> patents](#).

**We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.**

This product is a [recombinant rabbit monoclonal antibody](#).

### 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. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

**Clone number** EP459Y

**Isotype** IgG

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab78237** 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 - 1/10000. Detects a band of approximately 33 kDa (predicted molecular weight: 33 kDa).
IP		1/20.
IHC-P	★★★★★	1/50 - 1/250.

**Application notes** Is unsuitable for Flow Cyt or ICC/IF.

## Target

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**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.

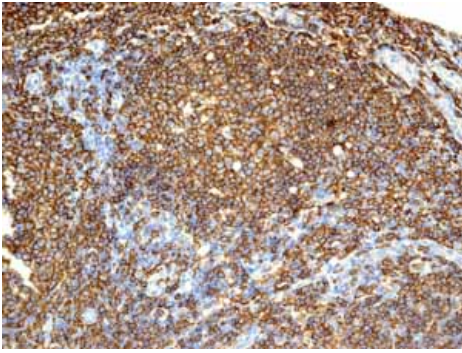
**Sequence similarities** Belongs to the MS4A family.

**Post-translational modifications** Phosphorylated. Might be functionally regulated by protein kinase(s).

**Cellular localization** Membrane.

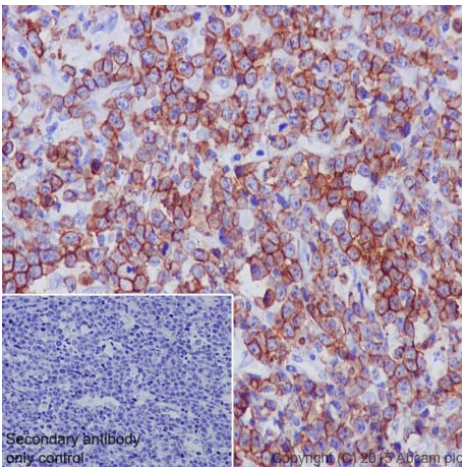
## Images

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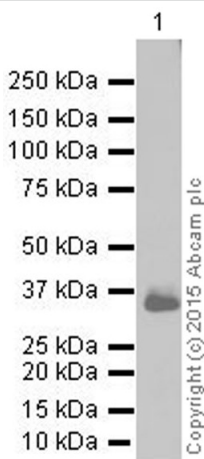
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y] (ab78237)

Unpurified ab78237 showing positive staining in normal tonsil tissue.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y] (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.



Western blot - Anti-CD20 antibody [EP459Y] (ab78237)

Anti-CD20 antibody [EP459Y] (ab78237) at 1/10000 dilution (purified) + Raji whole cell lysate

**Secondary**

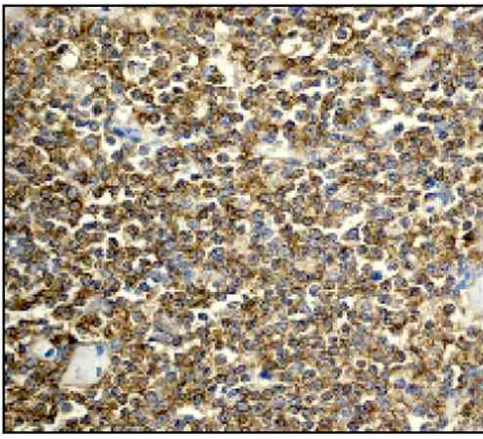
Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 33 kDa

**Observed band size:** 33 kDa

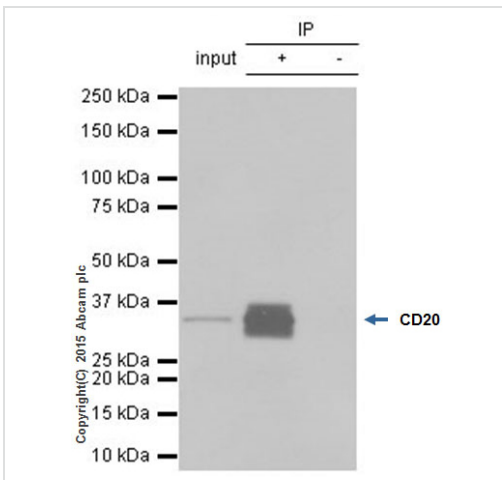
Blocking buffer: 5% NFDm/TBST

Dilution buffer: 5% NFDm/TBST



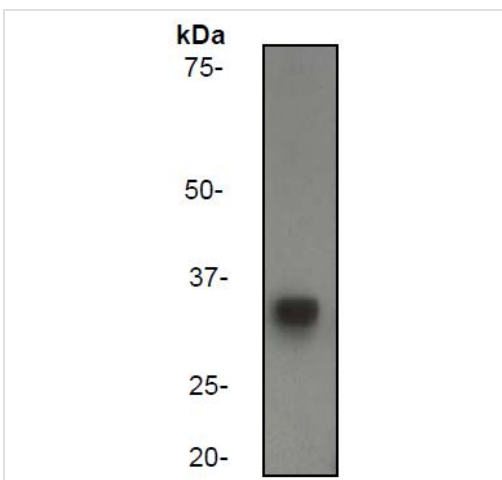
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y] (ab78237)

Unpurified ab78237 staining human CD20 in human lymphoma tissue by immunohistochemistry using formalin fixed, paraffin embedded tissue.



Immunoprecipitation - Anti-CD20 antibody [EP459Y] (ab78237)

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, HRP Veriblot for IP (ab131366) was used as the secondary antibody (1/10 000). Blocking buffer and concentration: 5% NFDm/TBST Dilution buffer and concentration: 5% NFDm/TBST

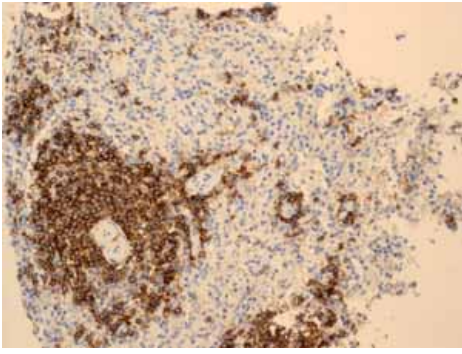


Western blot - Anti-CD20 antibody [EP459Y] (ab78237)

Anti-CD20 antibody [EP459Y] (ab78237) at 1/5000 dilution (unpurified) + Raji cell lysate

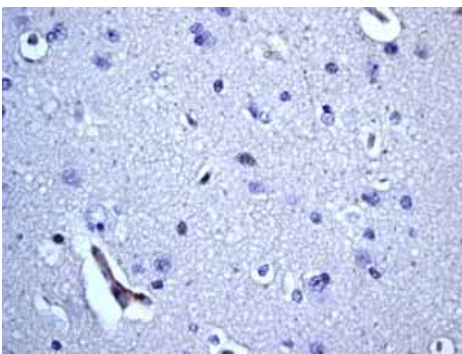
**Predicted band size:** 33 kDa

**Observed band size:** 33 kDa



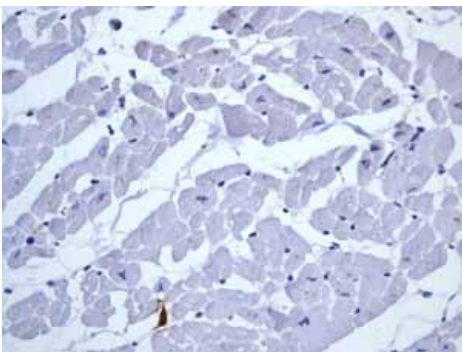
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y] (ab78237)

Unpurified ab78237 showing positive staining in normal spleen tissue.



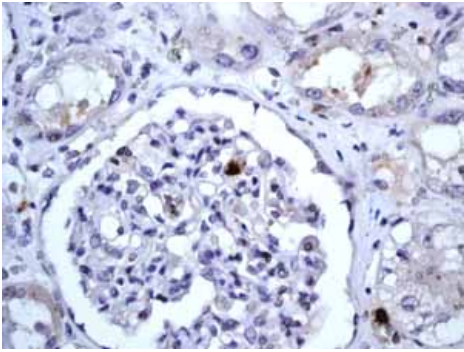
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y] (ab78237)

Unpurified ab78237 showing negative staining in normal brain tissue.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y] (ab78237)

Unpurified ab78237 showing negative staining in normal heart tissue.



Unpurified ab78237 showing negative staining in normal kidney tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y] (ab78237)

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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