abcam

Product datasheet

Anti-CD20 antibody [EP459Y] ab78237

Recombinant RabMAb

★★★★★ 6 Abreviews 14 References 10 Images

Overview

Product name Anti-CD20 antibody [EP459Y]

Description Rabbit monoclonal [EP459Y] to CD20

Host species Rabbit

Tested applications Suitable for: WB, IP, IHC-P

Unsuitable for: Flow Cyt or ICC/IF

Species reactivity Reacts with: Human, Monkey

Immunogen Synthetic peptide (the amino acid sequence is considered to be commercially sensitive)

corresponding to Human CD20 aa 250 to the C-terminus (C terminal) conjugated to Keyhole

Limpet Haemocyanin (KLH).

Positive control Raji cell lysate. Human lymph node tissue.

General notes

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab® 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

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

pH: 7.20 Storage buffer

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

Purity Protein A purified

1

Clonality Monoclonal Clone number EP459Y Isotype lgG

Applications

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		
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

Sequence similarities Belongs to the MS4A family.

Post-translational modifications

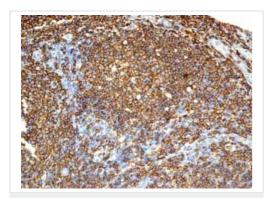
Phosphorylated. Might be functionally regulated by protein kinase(s).

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

from a failure of B-cell differentiation and impaired secretion of immunoglobulins; the numbers of

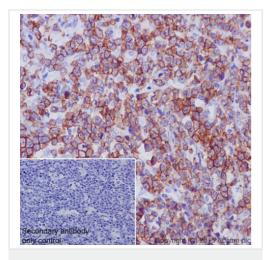
Cellular localization Membrane.

Images



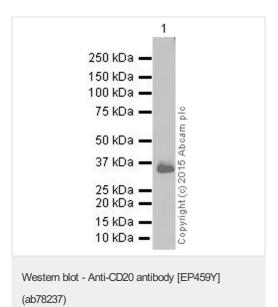
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)-Anti-CD20 antibody [EP459Y] - Carboxyterminal end(ab78237)

Unpurified ab78237 showing positive staining in normal tonsil tissue.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded 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 lgG (H&L) at a dilution of 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was perfomed 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.



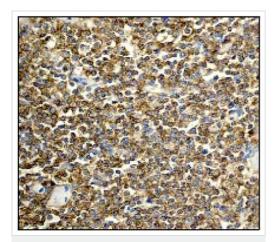
Anti-CD20 antibody [EP459Y] (ab78237) at 1/10000 dilution (purified) + Raji whole cell lysate

Secondary

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

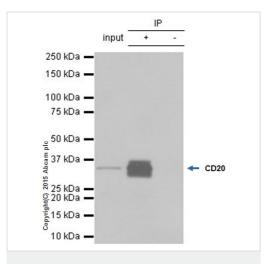
Predicted band size: 33 kDa **Observed band size:** 33 kDa

Blocking buffer: 5% NFDM/TBST Dilution buffer: 5% NFDM/TBST



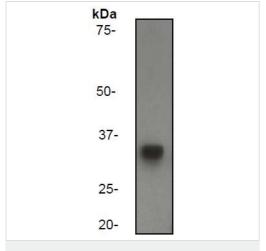
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - CD20 antibody [EP459Y] - Carboxyterminal end (ab78237)

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



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

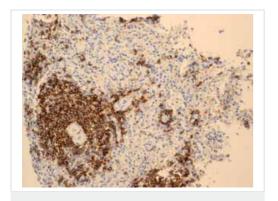
ab78237 (purified) at 1/20 immunoprecipitating CD20 in 10 µg Ramos cell lysate (Lanes 1 and 2, observed at 33 kDa). Lane 3 - Rabbit monoclonal lgG (ab172730). For western blotting, HRP Veriblot for IP (ab131366) was used as the secondary antibody (1/10 000). Blocking buffer and concentration: 5% NFDM/TBST Dilution buffer and concentration: 5% NFDM/TBST



Western blot - CD20 antibody [EP459Y] - Carboxyterminal end (ab78237)

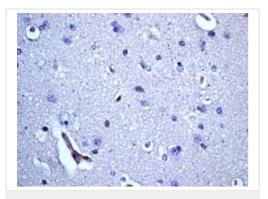
Anti-CD20 antibody [EP459Y] (ab78237) at 1/5000 dilution (unpurified) + Raji cell lysate

Predicted band size: 33 kDa **Observed band size:** 33 kDa



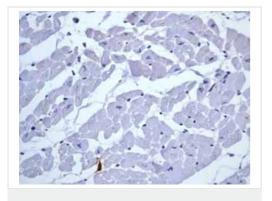
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)-Anti-CD20 antibody [EP459Y] - Carboxyterminal end(ab78237)

Unpurified ab78237 showing positive staining in normal spleen tissue.



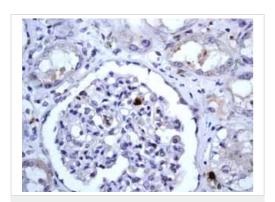
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)-Anti-CD20 antibody [EP459Y] - Carboxyterminal end(ab78237)

Unpurified ab78237 showing negative staining in normal brain tissue.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)-Anti-CD20 antibody [EP459Y] - Carboxyterminal end(ab78237)

Unpurified ab78237 showing negative staining in normal heart tissue.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)-Anti-CD20 antibody [EP459Y] - Carboxyterminal end(ab78237)

Unpurified ab78237 showing negative staining in normal kidney tissue.

 $\textbf{Please note:} \ \ \textbf{All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"$

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 http://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