

CD19 Rabbit pAb

Catalog No.: A2577SP **3 Publications**

Basic Information

Observed MW

95 kDa

Calculated MW

61 kDa

Category

Primary antibody

Applications

WB, IF-P, IHC-P, ELISA

Cross-Reactivity

Human, Mouse

Background

This gene encodes a member of the immunoglobulin gene superfamily. Expression of this cell surface protein is restricted to B cell lymphocytes. This protein is a reliable marker for pre-B cells but its expression diminishes during terminal B cell differentiation in antibody secreting plasma cells. The protein has two N-terminal extracellular Ig-like domains separated by a non-Ig-like domain, a hydrophobic transmembrane domain, and a large C-terminal cytoplasmic domain. This protein forms a complex with several membrane proteins including complement receptor type 2 (CD21) and tetraspanin (CD81) and this complex reduces the threshold for antigen-initiated B cell activation. Activation of this B-cell antigen receptor complex activates the phosphatidylinositol 3-kinase signalling pathway and the subsequent release of intracellular stores of calcium ions. This protein is a target of chimeric antigen receptor (CAR) T-cells used in the treatment of lymphoblastic leukemia. Mutations in this gene are associated with the disease common variable immunodeficiency 3 (CVID3) which results in a failure of B-cell differentiation and impaired secretion of immunoglobulins. CVID3 is characterized by hypogammaglobulinemia, an inability to mount an antibody response to antigen, and recurrent bacterial infections. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

Recommended Dilutions

WB 1:1000 - 1:2000**IF-P** 1:200 - 1:800**IHC-P** 1:200 - 1:800

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions (≥1:10000)

Immunogen Information

Gene ID

930/12478

Swiss Prot

P15391/P25918

Immunogen

This information is considered to be commercially sensitive.

Synonyms

B4; CVID3; CD19

Contact

 | 400-999-6126 | cn.market@abclonal.com.cn | www.abclonal.com.cn

Product Information

Source

Rabbit

Isotype

IgG

Purification

Affinity purification

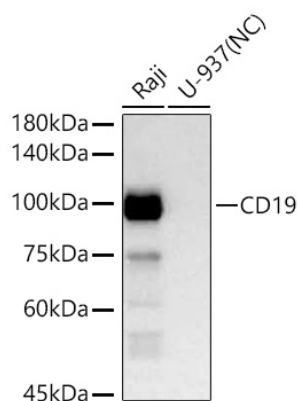
Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS, pH 7.3, containing 50% glycerol. Preserved with Proclin300 or sodium azide.

May contain 0.05% BSA as specified on the Certificate of Analysis.

Validation Data



Western blot analysis of various lysates using CD19 Rabbit pAb (A2577SP) at 1:1000 dilution incubated overnight at 4°C.

Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

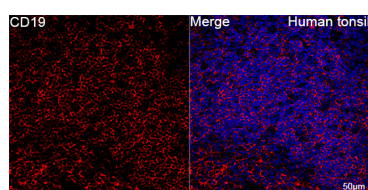
Lysates/proteins: 25 µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

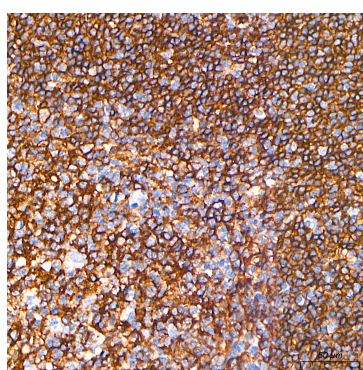
Detection: ECL Basic Kit (RM00020).

Negative control (NC): U-937.

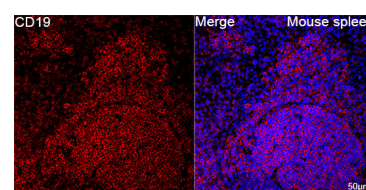
Exposure time: 30 s.



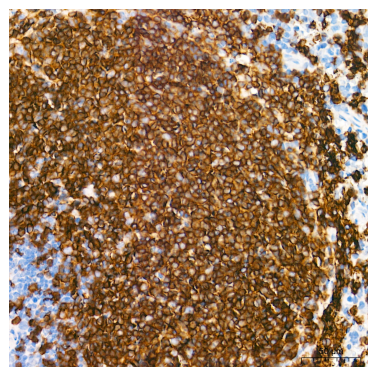
Confocal imaging of paraffin-embedded Human tonsil tissue using CD19 Rabbit pAb (A2577SP, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue using CD19 Rabbit pAb (A2577SP) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Confocal imaging of paraffin-embedded Mouse spleen using CD19 Rabbit pAb (A2577SP, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



Immunohistochemistry analysis of paraffin-embedded Mouse spleen tissue using CD19 Rabbit pAb (A2577SP) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.