

CD19 Rabbit mAb

Catalog No.: A23278 **Recombinant**

Basic Information

Observed MW

95kDa

Calculated MW

61kDa

Category

Primary antibody

Applications

WB,IHC-P,FC,ELISA

Cross-Reactivity

Human, Monkey

CloneNo number

ARC57915

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 - 1:5000**IHC-P** 1:100 - 1:500**FC** 1:500 - 1:1000**ELISA** Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID

102145514

Swiss Prot**Immunogen**

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

Synonyms

CD19

Contact

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

Product Information

Source

Rabbit

Isotype

IgG

Purification

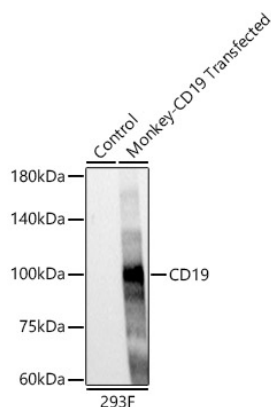
Affinity purification

Storage

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

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

Validation Data



Western blot analysis of lysates from wild type (WT) and 293F cells transfected with CD19 using CD19 Rabbit mAb (A23278) at 1:2000 dilution.

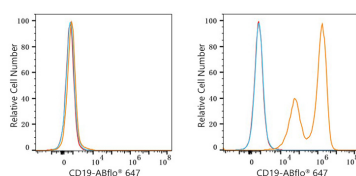
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

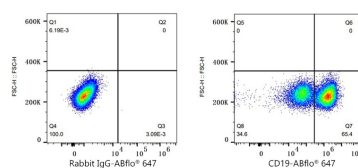
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

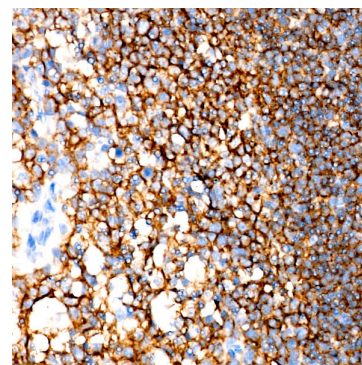
Exposure time: 1s.



Flow cytometry: 1×10^6 293F cells (negative control, left) and 293F (Transfection, right) cells were surface-stained with CD19 Rabbit mAb (A23278, 2 µg/mL, orange line) or Rabbit IgG isotype control (AC042, 2 µg/mL, blue line), followed by Alexa Fluor® 647 conjugated goat anti-rabbit pAb staining. Non-fluorescently stained cells were used as blank control (red line).



Flow cytometry: 1×10^6 293T (Transfection) cells were surface-stained with Rabbit IgG isotype control (AC042, 2 µg/mL, left) or CD19 Rabbit mAb (A23278, 2 µg/mL, right), followed by Alexa Fluor® 647 conjugated goat anti-rabbit pAb staining.



Immunohistochemistry analysis of paraffin-embedded Human tonsil using CD19 Rabbit mAb (A23278) at dilution of 1:300 (40x lens). High pressure antigen retrieval performed with 0.01M Tris/EDTA Buffer (pH 9.0) prior to IHC staining.