A23278

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CD19 Rabbit mAb

Catalog No.: A23278 Recombinant

Basic Information

Observed MW
95kDa

Calculated MW
61kDa

Category
SMab Recombinant Monoclonal 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

Immunogen Information

Gene ID
102145514

Swiss Prot

Immunogen
Recombinant fusion protein containing a sequence corresponding to amino acids 20-292 of monkey CD19 (XP_005591597.1).

Synonyms
CD19

Contact

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Product Information

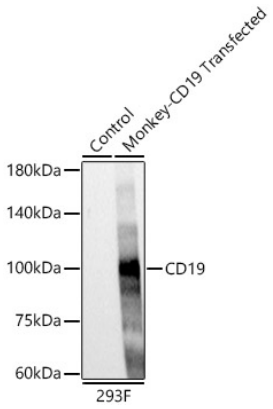
Source
Rabbit

Isotype
IgG

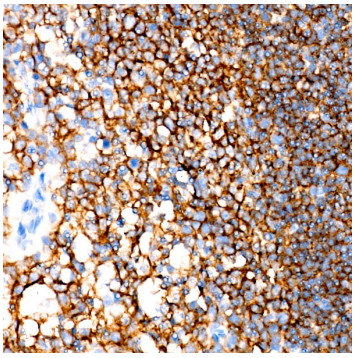
Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.05% proclin300,0.05% BSA,50% glycerol,pH7.3.

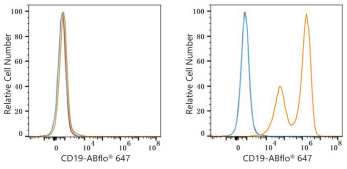
Validation Data



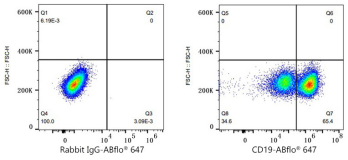
Western blot analysis of lysates from wild type (WT) and 293F cells transfected with CD19 using CD19 Rabbit mAb (A23278) at 1:2000 dilution.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 1s.



Immunohistochemistry analysis of CD19 in paraffin-embedded human tonsil using CD19 Rabbit mAb (A23278) at dilution of 1:300 (40x lens).Perform high pressure antigen retrieval with 10 mM Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Flow cytometry: 1X10^6 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: 1X10^6 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.