

A19013

Leader in Biomolecular Solutions for Life Science



CD19 Rabbit mAb

Catalog No.: A19013

Recombinant

7 Publications

Basic Information

Observed MW

95kDa

Calculated MW

61kDa

Category

SMab Recombinant Monoclonal
Antibody

Applications

WB,IHC-P,IF/ICC,ELISA

Cross-Reactivity

Human

CloneNo number

ARC0418

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

IHC-P 1:200 - 1:800

IF/ICC 1:200 - 1:800

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID

930

Swiss Prot

P15391

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

B4; CVID3; CD19

Product Information

Source

Rabbit

Isotype

IgG

Purification

Affinity purification

Storage

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

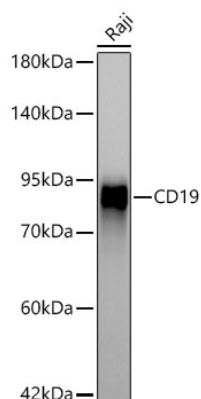
Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

Contact

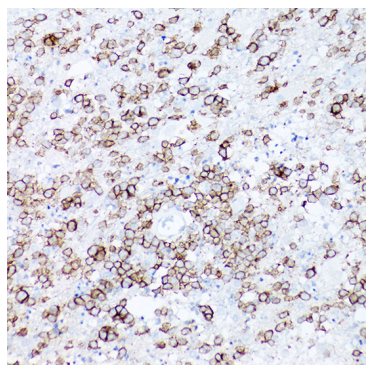


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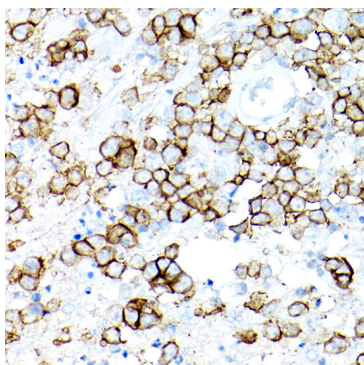
Validation Data



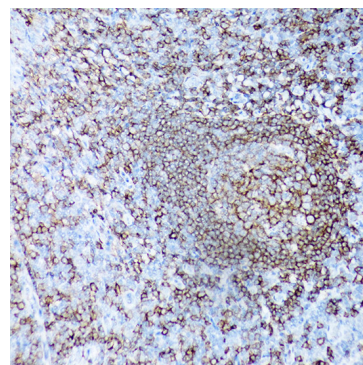
Western blot analysis of lysates from Raji cells using CD19 Rabbit mAb (A19013) at 1:1000 dilution.
 Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
 Lysates/proteins: 25µg per lane.
 Blocking buffer: 3% nonfat dry milk in TBST.
 Detection: ECL Enhanced Kit (RM00021).
 Exposure time: 3min.



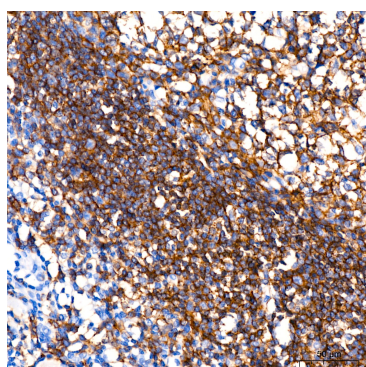
Immunohistochemistry analysis of paraffin-embedded Human B-cell lymphoma (200X) using CD19 Rabbit mAb (A19013) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



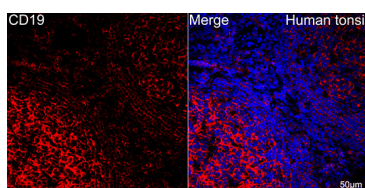
Immunohistochemistry analysis of paraffin-embedded Human B-cell lymphoma (400X) using CD19 Rabbit mAb (A19013) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human tonsil (200X) using CD19 Rabbit mAb (A19013) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human tonsil using CD19 Rabbit mAb (A19013) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Confocal imaging of paraffin-embedded Human tonsil tissue using CD19 Rabbit mAb (A19013, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 40x. Perform high pressure antigen retrieval with 0.01 M citrate buffer

Validation Data

(pH 6.0) prior to IF staining.