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CD19 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1494a

Specification

CD19 Antibody (N-term) - Product Information

Application	**IF, WB, IHC-P, FC,E**
Primary Accession	P15391
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**143-172**

CD19 Antibody (N-term) - Additional Information

Gene ID 930

Other Names
B-lymphocyte antigen CD19, B-lymphocyte surface antigen B4, Differentiation antigen CD19, T-cell surface antigen Leu-12, CD19, CD19

Target/Specificity
This CD19 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 143-172 amino acids from the N-terminal region of human CD19.

Dilution
IF~~1:10~50
WB~~1:500
IHC-P~~1:10~50
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CD19 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CD19 Antibody (N-term) - Protein Information

Name CD19

Function Functions as a coreceptor for the B-cell antigen receptor complex (BCR) on B-lymphocytes (PubMed:29523808). Decreases the threshold for activation of downstream signaling pathways and for triggering B-cell responses to antigens (PubMed:1373518, PubMed:16672701, PubMed:2463100). Activates signaling pathways that lead to the activation of phosphatidylinositol 3-kinase and the mobilization of intracellular Ca(2+) stores (PubMed:12387743, PubMed:16672701, PubMed:9317126, PubMed:9382888). Is not required for early steps during B cell differentiation in the blood marrow (PubMed:9317126). Required for normal differentiation of B-1 cells (By similarity). Required for normal B cell differentiation and proliferation in response to antigen challenges (PubMed:1373518, PubMed:2463100). Required for normal levels of serum immunoglobulins, and for production of high-affinity antibodies in response to antigen challenge (PubMed:12387743, PubMed:16672701, PubMed:9317126).

Cellular Location
Cell membrane; Single-pass type I membrane protein. Membrane raft {ECO:0000250|UniProtKB:P25918}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P25918}

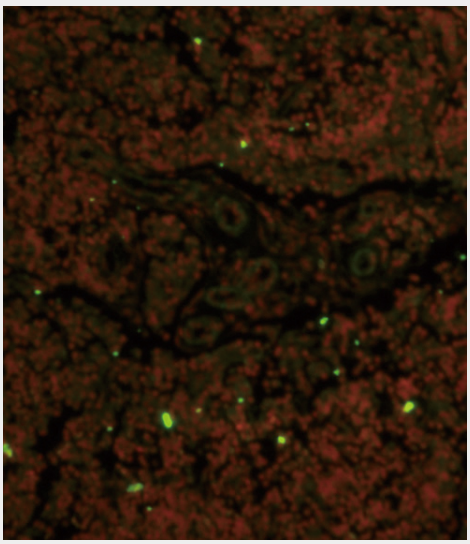
Tissue Location
Detected on marginal zone and germinal center B cells in lymph nodes (PubMed:2463100). Detected on blood B cells (at protein level) (PubMed:16672701, PubMed:2463100)

CD19 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

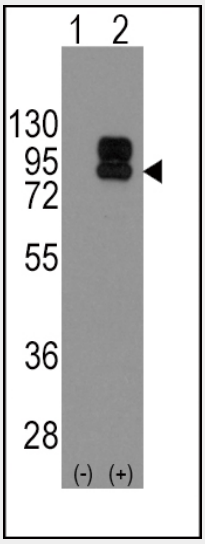
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CD19 Antibody (N-term) - Images

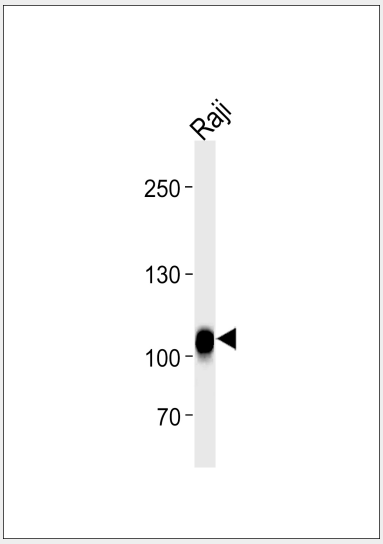


Immunofluorescence analysis of CD19 Antibody (N-term) with paraffin-embedded human lymph

tissue . 0.05 mg/ml primary antibody was followed by FITC-conjugated goat anti-rabbit IgG (whole molecule). FITC emits green fluorescence.Red counterstaining is PI.



Western blot analysis of CD19 (arrow) using rabbit polyclonal CD19 Antibody (N-term) (Cat.#AP1494a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the CD19 gene (Lane 2) (Origene Technologies).



CD19 Antibody (N-term) (Cat.# AP1494a) western blot analysis in Raji cell line lysates (35ug/lane).This demonstrates the CD19 antibody detected the CD19 protein (arrow).

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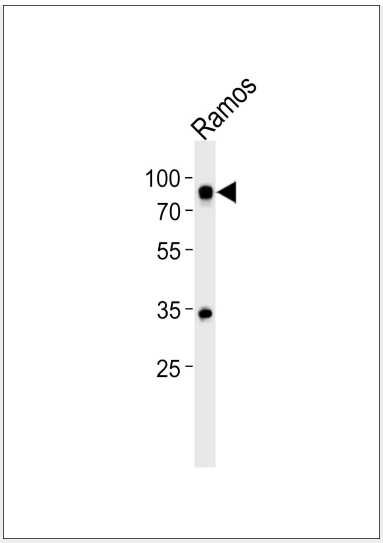
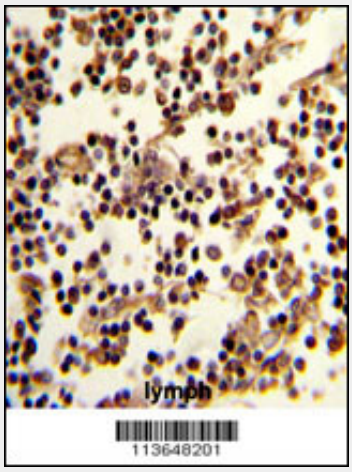


Western blot analysis of lysate from Ramos cell line, using CD19Antibody (N-term)(Cat. #AP1494a). AP1494a was diluted at 1:500. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.



Formalin-fixed and paraffin-embedded human lymph reacted with CD19 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

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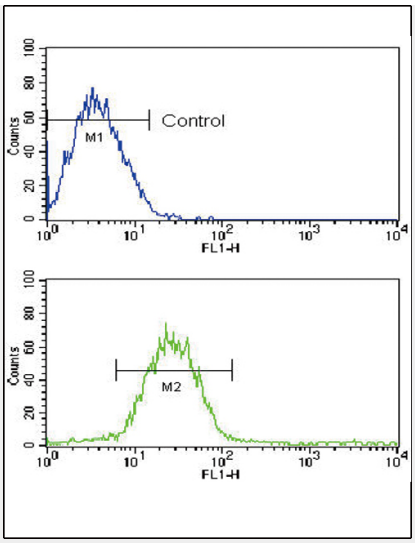

Flow cytometric analysis of CEM cells using CD19 Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CD19 Antibody (N-term) - Background

Lymphocytes proliferate and differentiate in response to various concentrations of different antigens. The ability of the B cell to respond in a specific, yet sensitive manner to the various antigens is achieved with the use of low-affinity antigen receptors. CD19 is a cell surface molecule which assembles with the antigen receptor of B lymphocytes in order to decrease the threshold for antigen receptor-dependent stimulation.

CD19 Antibody (N-term) - References

Deaglio,S., Blood 109 (12), 5390-5398 (2007)
Bradbury,L.E., J. Immunol. 149 (9), 2841-2850 (1992)
Kozmik,Z., Mol. Cell. Biol. 12 (6), 2662-2672 (1992)

CD19 Antibody (N-term) - Citations

- Homing of human B cells to lymphoid organs and B-cell lymphoma engraftment are controlled by cell adhesion molecule JAM-C.