

CD19 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1494b

Product Information

Application WB, E Primary Accession P15391

Reactivity Human, Rat, Mouse

HostRabbitClonalityPolyclonalIsotypeRabbit IgGCalculated MW61128Antigen Region393-421

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 393-421 amino acids from the

C-terminal region of human CD19.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

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 (C-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name CD19

Function Functions as a coreceptor for the B-cell antigen receptor complex (BCR) on

B-lymphocytes (PubMed:<u>29523808</u>). Decreases the threshold for activation of downstream signaling pathways and for triggering B-cell responses to antigens (PubMed:<u>1373518</u>, PubMed:<u>16672701</u>, PubMed:<u>2463100</u>). 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)

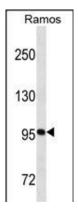
Background

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.

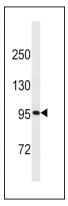
References

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)

Images



CD19 Antibody (C-term) (Cat. #AP1494b) western blot analysis in Ramos cell line lysates (35ug/lane). This demonstrates the CD19 antibody detected the CD19 protein (arrow).



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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.