

CD19 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1494b

Product Information

Application	WB, E
Primary Accession	<u>P15391</u>
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	61128
Antigen Region	393-421
Host Clonality Isotype Calculated MW	Polyclonal Rabbit IgG 61128

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: <u>12387743</u> , PubMed: <u>16672701</u> , PubMed: <u>9317126</u> , PubMed: <u>9382888</u>). Is not required for early steps during B cell differentiation in the blood marrow (PubMed: <u>9317126</u>). Required for normal differentiation of B-1 cells (By similarity). Required for normal B cell differentiation and proliferation in response to antigen challenges (PubMed: <u>1373518</u> , PubMed: <u>2463100</u>). Required for normal levels of serum immunoglobulins, and for production of high-affinity antibodies in response to antigen challenge (PubMed: <u>12387743</u> , PubMed: <u>16672701</u> , PubMed: <u>9317126</u>).
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)

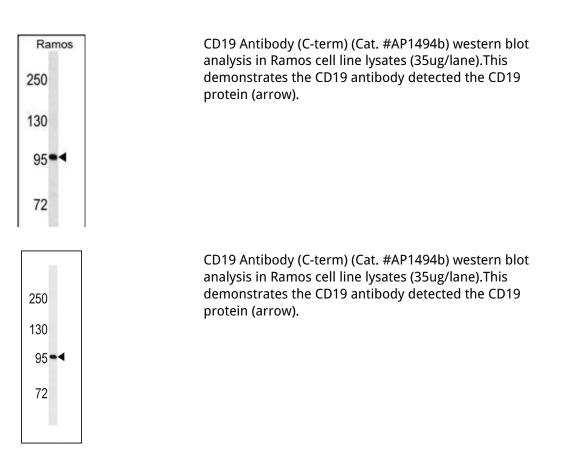
Background

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



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