

CD19 Antibody

Purified Mouse Monoclonal Antibody

Catalog # AO1392a

Product Information

Application	FC, ICC, E
Primary Accession	P15391
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2E2
Isotype	IgG2b
Calculated MW	61128
Description	The CD19 antigen (95kDa) is expressed from the earliest stage of B progenitor development, on all peripheral B cells including germinal centre B cells, and all B cell lines and B cell leukaemia tested. T cell and monocytic cell lines are negative and the antigen is lost on B cell maturation to plasma cells. The antigen is a type I integral membrane glycoprotein whose in vitro inhibition will influence B cell activation and proliferation.
Immunogen	Purified recombinant fragment of human CD19 expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

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
Dilution	FC~~1/200 - 1/400 ICC~~N/A E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CD19 Antibody 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: 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](#))

References

1. Rie, M.A. de, J. of Immunol. Methods, 1987. 102: 187. 2. Rie, M.A. de, Leukaemia Research, 1988. 12: 135.

Images

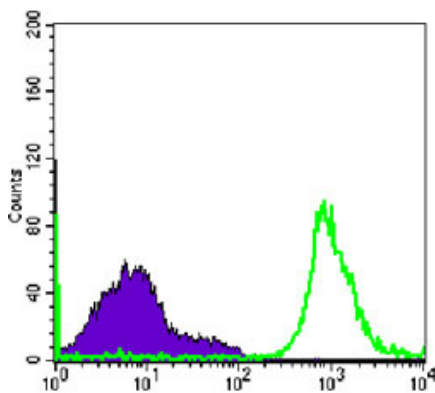


Figure 1: Flow cytometric analysis of Raji cells using CD19 mouse mAb (green) and negative control (purple).

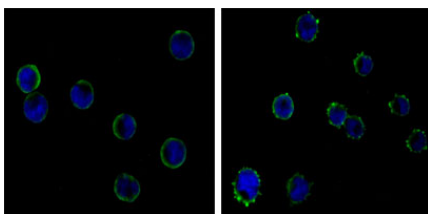


Figure 2: Immunofluorescence analysis of HL-60(left) and K562 (right) cells using CD19 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

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