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CD19 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1392a

Specification

CD19 Antibody - Product Information

Application	**FC, IF**
Primary Accession	P15391
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG2b**
Calculated MW	**61kDa KDa**

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.

CD19 Antibody - 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
IF~~1/200 - 1/1000

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.

CD19 Antibody - Protein Information

Name CD19

Function
Functions as a coreceptor for the B-cell antigen receptor complex (BCR) on B-lymphocytes. Decreases the threshold for activation of downstream signaling pathways and for triggering B-cell responses to antigens (PubMed:2463100, PubMed:1373518, PubMed:16672701). Activates signaling pathways that lead to the activation of phosphatidylinositol 3-kinase and the mobilization of intracellular Ca(2+) stores (PubMed:9382888, PubMed:9317126, PubMed:12387743, PubMed:16672701). 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:2463100, PubMed:1373518). Required for normal levels of serum immunoglobulins, and for production of high-affinity antibodies in response to antigen challenge (PubMed:9317126, PubMed:12387743, PubMed:16672701).

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:2463100, PubMed:16672701)

CD19 Antibody - 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 - Images

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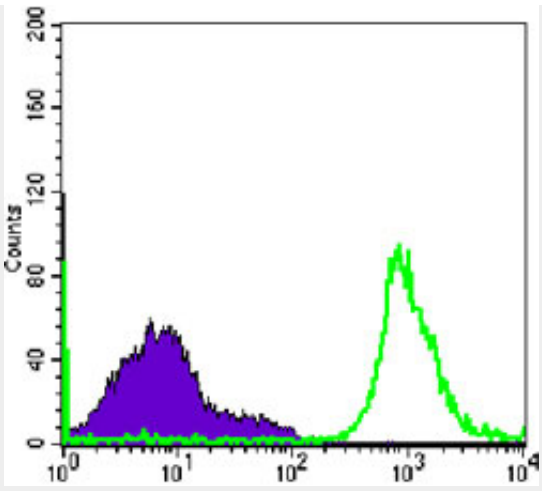


Figure 1: Flow cytometric analysis of Raji cells using CD19 mouse mAb (green) and negative control (purple).

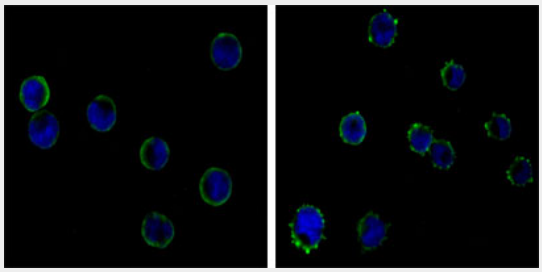


Figure 2: Immunofluorescence analysis of HL-60(left) and K562 (right) cells using CD19 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

CD19 Antibody - References

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

CD19 Antibody - Citations

- The crosstalk between TLR2 and NOD2 in Aspergillus fumigatus keratitis.