

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 (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

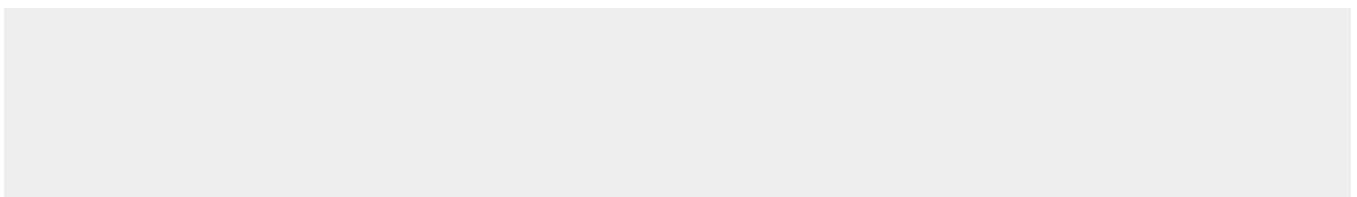
Detected on marginal zone and germinal center B cells in lymph nodes (PubMed:2463100).
Detected on blood B cells (at protein level) (PubMed:16672701, PubMed:2463100)

CD19 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD19 Antibody - Images



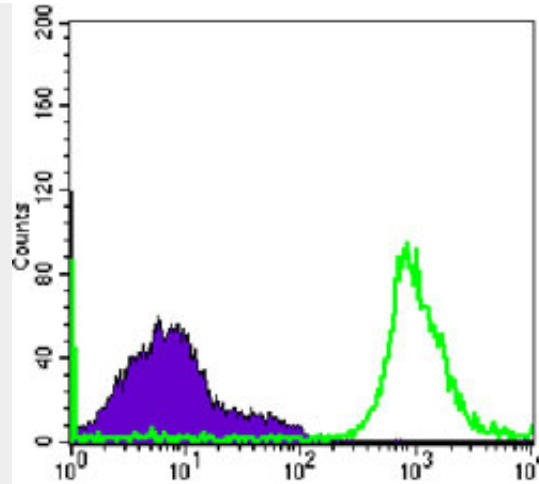


Figure 1: Flow cytometric analysis of Raji cells using CD19 mouse mAb (green) and negative control (purple).

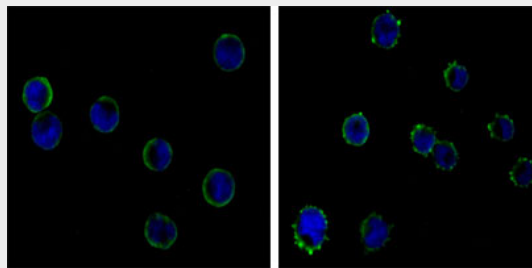


Figure 2: Immunofluorescence analysis of HL-60(left) and K562 (right) cells using CD19 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

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.](#)