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CD19 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1028a

Product Information

Application	WB, IHC, E
Primary Accession	P15391
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2E2B6B10
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	Purified antibody in PBS 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	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 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

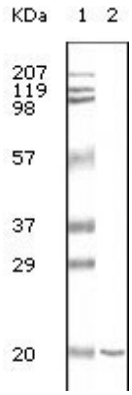

Figure 1: Western blot analysis using CD19 mouse mAb against CD19 recombinant protein.

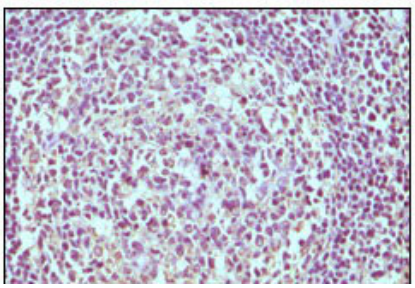

Figure 2: Immunohistochemical analysis of paraffin-embedded human normal lymph node, showing cytoplasmic localization using CD19 mouse mAb with DAB staining.