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Anti-CD19 Antibody

Mouse Monoclonal Antibody
Catalog # AP53447

Product Information

Application	IF, FC
Primary Accession	P15391
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Purification	Affinity purified
Calculated MW	61128

Additional Information

Gene ID	930
Other Names	Antibody deficiency due to defect in CD19; AW495831; B lymphocyte antigen CD19; B lymphocyte surface antigen B4; B-lymphocyte antigen CD19; B-lymphocyte surface antigen B4; B4; CD19; CD19 antigen; CD19 molecule; Cd19 protein; CD19_HUMAN; CVID3; Differentiation antigen CD19; Leu 12; Leu-12; Leu12; MGC109570; MGC12802; T-cell surface antigen Leu-1.
Dilution	IF~~1:50~200 FC~~1:10~50
Format	Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

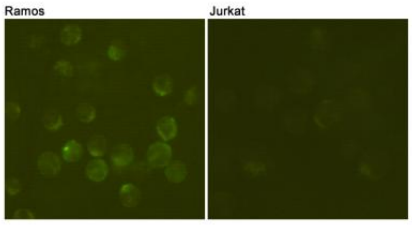
Name	CD19
Function	Functions as a coreceptor for the B-cell antigen receptor complex (BCR) on B-lymphocytes (PubMed:29523808). Decreases the threshold for activation of downstream signaling pathways and for triggering B-cell responses to antigens (PubMed:1373518, PubMed:16672701, PubMed:2463100). Activates 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)

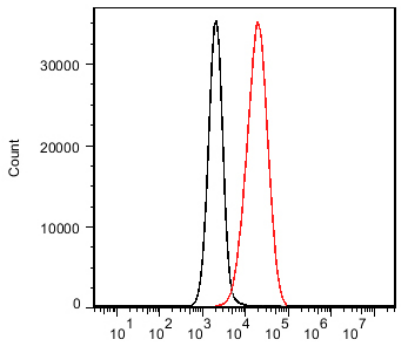
Background

Assembles with the antigen receptor of B-lymphocytes in order to decrease the threshold for antigen receptor-dependent stimulation.

Images



Confocal immunofluorescent analysis of Ramos (positive cell, left) and Jurkat (negative cell, right) using anti-CD19 mouse mAb (dilution 1:100).



Flow cytometric analysis of Jurkat T cells (black) and Ramos B cells (red), using anti-CD19 mouse mAb.