

ARG62759 anti-CD19 antibody [4G7]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [4G7] recognizes CD19
Tested Reactivity	Hu
Tested Application	FACS, ICC/IF
Specificity	The clone 4G7 recognizes CD19 (B4), a 95 kDa type I transmembrane glycoprotein of immunoglobulin superfamily, expressed on B lymphocytes and follicular dendritic cells; it is lost on plasma cells. WS Code: 2 B43
Host	Mouse
Clonality	Monoclonal
Clone	4G7
Isotype	IgG1
Target Name	CD19
Species	Human
Immunogen	Human CCL (chronic lymphocytic leukemia) cells
Conjugation	Un-conjugated
Alternate Names	Differentiation antigen CD19; T-cell surface antigen Leu-12; B-lymphocyte antigen CD19; B-lymphocyte surface antigen B4; B4; CD antigen CD19; CVID3

Application Instructions

Application table	Application	Dilution
	FACS	1 µg/ml
	ICC/IF	Assay-dependent
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

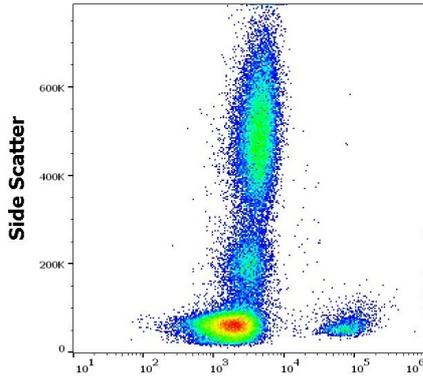
Form	Liquid
Purification	Purified from cell culture supernatant by protein-A affinity chromatography.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

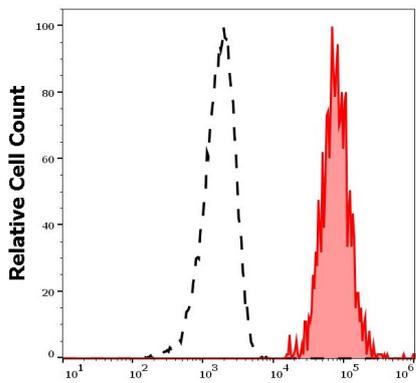
Bioinformation

Database links	GeneID: 930 Human Swiss-port # P15391 Human
Gene Symbol	CD19
Gene Full Name	CD19 molecule
Background	CD19: Lymphocytes proliferate and differentiate in response to various concentrations of different antigens. The ability of the B cell to respond in a specific, yet sensitive manner to the various antigens is achieved with the use of low-affinity antigen receptors. This gene encodes a cell surface molecule which assembles with the antigen receptor of B lymphocytes in order to decrease the threshold for antigen receptor-dependent stimulation. [provided by RefSeq, Jul 2008]
Function	CD19 functions as 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. 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). [UniProt]
Highlight	Related products: CD19 antibodies ; CD19 ELISA Kits ; CD19 Duos / Panels ; Anti-Mouse IgG secondary antibodies ; Related news: Tumor-Infiltrating Lymphocytes (TILs)
Research Area	Developmental Biology antibody; Immune System antibody; Lymphocyte Marker antibody; B cell Marker antibody; Pro-B Cell Marker antibody; Pre-B Cell Marker antibody; Immature B Cell Marker antibody; Follicular dendritic cells antibody
Calculated Mw	61 kDa
PTM	Phosphorylated on serine and threonine upon DNA damage, probably by ATM or ATR. Phosphorylated on tyrosine following B-cell activation. Phosphorylated on tyrosine residues by LYN.



ARG62759 anti-CD19 antibody [4G7] FACS image

Flow Cytometry: Human peripheral blood stained with ARG62759 anti-CD19 antibody [4G7] at 3 $\mu\text{g}/\text{ml}$ dilution, followed by APC-conjugated Goat anti-Mouse antibody.



ARG62759 anti-CD19 antibody [4G7] FACS image

Flow Cytometry: Separation of human CD19 positive lymphocytes (red-filled) from CD19 negative lymphocytes (black-dashed). Human peripheral whole blood stained with ARG62759 anti-CD19 antibody [4G7] at 3 $\mu\text{g}/\text{ml}$ dilution, followed by APC-conjugated Goat anti-Mouse antibody.