

## ARG55048 anti-CD19 antibody [1D3]

Package: 100 µg  
Store at: -20°C

### Summary

Product Description	Rat Monoclonal antibody [1D3] recognizes CD19
Tested Reactivity	Ms
Tested Application	FACS, FuncSt, IHC-P, IP
Specificity	This antibody detects mouse CD19, 95 kDa type I transmembrane glycoprotein (immunoglobulin superfamily) expressed on B lymphocytes and follicular dendritic cells; it is lost on plasma cells.
Host	Rat
Clonality	Monoclonal
Clone	1D3
Isotype	IgG2a
Target Name	CD19
Species	Mouse
Immunogen	Mouse CD19-transfected cell line
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 - 4 µg/ml
	FuncSt	Assay-dependent
	IHC-P	Assay-dependent
	IP	Assay-dependent
Application Note	This antibody can induce down-regulation of CD19, affecting the proportions of B cell subpopulations.	

### Properties

Form	Liquid
Purification	Purification with Protein G.
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

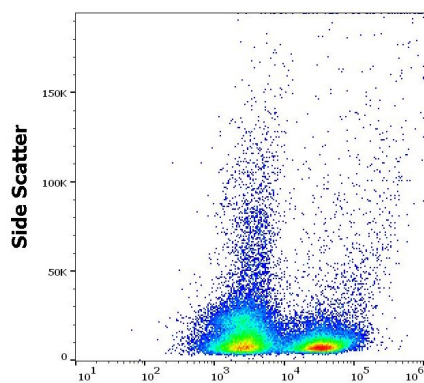
freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

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

## Bioinformation

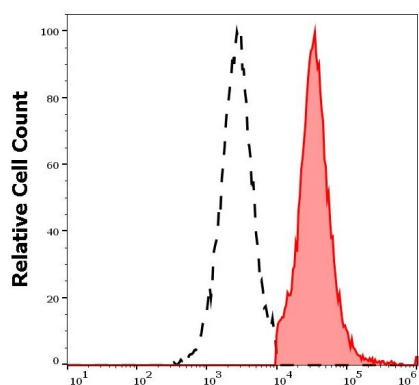
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Database links	<a href="#">GeneID: 12478 Mouse</a> <a href="#">Swiss-port # P25918 Mouse</a>
Gene Symbol	Cd19
Gene Full Name	CD19 antigen
Background	CD19: Lymphocytes proliferate and differentiate in response to various concentrations of different 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: <a href="#">CD19 antibodies</a> ; <a href="#">CD19 ELISA Kits</a> ; <a href="#">CD19 Duos / Panels</a> ; <a href="#">Anti-Rat IgG secondary antibodies</a> ; Related news: <a href="#">Tumor-Infiltrating Lymphocytes (TILs)</a>
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.



ARG55048 anti-CD19 antibody [1D3] FACS image

Flow Cytometry: Murine splenocyte suspension stained with ARG55048 anti-CD19 antibody [1D3] at 0.6  $\mu\text{g}/\text{ml}$  dilution, followed by APC-conjugated Donkey anti-Rat antibody.



ARG55048 anti-CD19 antibody [1D3] FACS image

Flow Cytometry: Separation of murine CD19 positive splenocytes (red-filled) from CD19 negative splenocytes (black-dashed). Murine splenocyte suspension stained with ARG55048 anti-CD19 antibody [1D3] at 0.6  $\mu\text{g}/\text{ml}$  dilution, followed by APC-conjugated Donkey anti-Rat antibody.