ARG65381
anti-CD19 antibody [1D3] (PE)

Package: 100 µg
Store at: 4°C

Summary

Product Description	PE-conjugated Rat Monoclonal antibody [1D3] recognizes CD19
Tested Reactivity	Ms
Tested Application	FACS
Specificity	The rat monoclonal antibody 1D3 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	PE
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 - 5 µg/ml

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

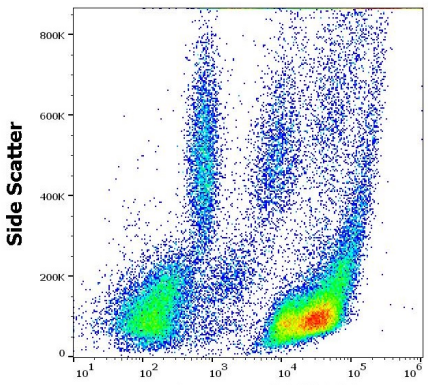
Form	Liquid
Purification Note	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography.
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	0.5 mg/ml
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. 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

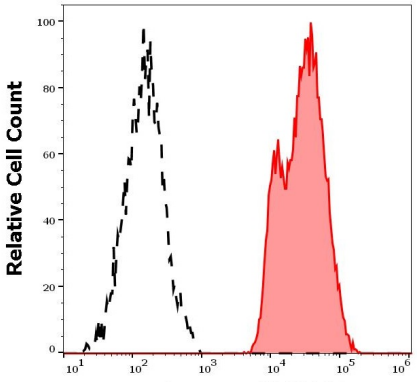
Database links	GeneID: 12478 Mouse Swiss-port # P25918 Mouse
Gene Symbol	Cd19
Gene Full Name	CD19 antigen
Background	CD19: Lymphocytes proliferate and differentiate in response to various concentrations of different antigens. The ability of the B cell to respond in a specific, yet sensitive manner to 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: CD19 antibodies; CD19 ELISA Kits; CD19 Duos / Panels; Anti-Rat Rat 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.

Images



ARG65381 anti-CD19 antibody [1D3] (PE) FACS image

Flow Cytometry: Murine peritoneal fluid cells stained with ARG65381 anti-CD19 antibody [1D3] (PE) at 1 µg/ml dilution.



ARG65381 anti-CD19 antibody [1D3] (PE) FACS image

Flow Cytometry: Separation of murine CD19 positive lymphocytes (red-filled) from CD19 negative lymphocytes (black-dashed). Murine peritoneal fluid cells stained with ARG65381 anti-CD19 antibody [1D3] (PE) at 1 µg/ml dilution.