

Mouse Anti-Human CD19 Monoclonal Antibody

Mouse, Monoclonal (CD19)

Cat. No. DMAB2511MH Lot. No. (See product label)

PRODUCT INFORMATION

Antigen Description: 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.

Isotype: IgG1

Specificity: Recognizes a (Mr 90kDa) B-cell surface glycoprotein which is present at all stages of maturation. Anti-CD19 does not react with T-cells, granulocytes, monocytes, erythrocytes or platelets. Is expressed on approximately 5-25% of human peripheral blood lymphocytes and approximately 60% of splenic lymphocytes.

Clone: TJ26-C2

Format: Purified, Liquid

Host animal: Mouse.

Source: Tissue culture *Purification:* Protein A chromatography.

Application: May be used to enumerate B-cells in peripheral blood or tissue. We recommend using 1µg to stain 1.0 x 10⁶ cells in flow cytometric applications. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded. Centrifuge before opening to ensure complete recovery of vial contents.

PACKAGING

Concentration: 100µg/ml (OD280nm) Buffer: 0.01M PBS, pH 7.2, containing 1% BSA Preservative: 0.1% Sodium azide

Storage: Short term (up to two weeks) store at 2-8°C. Long term, store at -20°C. Avoid multiple freeze/thaw cycles. *Warning:* This product contains sodium azide, which has been classified as Xn (Harmful), in European Directive 67/548/EEC in the concentration range of 0.1-1.0%. When disposing of this reagent through lead or copper plumbing, flush with copious volumes of water to prevent azide build-up in drains.

ANTIGEN GENE INFORMATION

Gene Name: CD19 CD19 molecule [Homo sapiens]

Official Symbol: CD19 *Synonyms:* B4; CVID3; MGC12802; CD19; B-lymphocyte antigen CD19; OTTHUMP00000122551; differentiation antigen CD19; T-cell surface antigen Leu-12; B-lymphocyte surface antigen B4

GenelD: <u>930</u> mRNA Refseq: <u>NM 001770</u>

Protein Refseq: <u>NP 001761</u> *MIM:* <u>107265</u>

UniProt ID: P15391 Chromosome Location: 16p11.2

Pathway: B Cell Receptor Signaling Pathway, organismspecific biosystem; B cell receptor signaling pathway, organismspecific biosystem; B cell receptor signaling pathway, conserved biosystem; BCR signaling pathway, organismspecific biosystem; Hematopoietic cell lineage, organism

specific biosystem; Hematopoietic cell lineage, conserved biosystem; Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell, organism-specific biosystem; Primary immunodeficiency, organism-specific biosystem; Primary immunodeficiency, conserved biosystem; Signaling in Immune system, organism-specific biosystem

Function: protein binding; receptor signaling protein activity

REFERENCES

 Neuberger, M. S.; Honjo, T.; Alt, Frederick W. (2004). Molecular biology of B cells. Amsterdam: Elsevier. pp. 189–191.
Bertil Glader; Greer, John G.; John Foerster; Rodgers, George G.; Paraskevas, Frixos (2008). Wintrobe's Clinical Hematology, 2-Vol. Set. Hagerstwon, MD: Lippincott Williams & Wilkins. pp. 347.

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