

Product datasheet for **SM1050P**

Cd19 Rat Monoclonal Antibody [Clone ID: 1D3]

Product data:

Product Type:	Primary Antibodies
Clone Name:	1D3
Applications:	FC, FN, IHC, IP
Recommended Dilution:	Flow cytometry. Immunoprecipitation. Immunohistochemistry (frozen sections). Functional application: This antibody can induce down-regulation of CD19, affecting the proportions of B cell subpopulations.
Reactivity:	Mouse
Host:	Rat
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Mouse CD19-transfected cell line
Specificity:	This antibody detects CD19, 95 kDa type I transmembrane glycoprotein (immunoglobulin superfamily) expressed on B lymphocytes and follicular dendritic cells; it is lost on plasma cells.
Formulation:	Phosphate buffered saline (PBS) State: Purified State: Liquid Ig fraction Preservative: 15 mM sodium azide, approx. pH 7.4
Concentration:	lot specific
Purification:	Protein-G affinity chromatography (> 95% pure by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C. DO NOT FREEZE!
Stability:	Shelf life: one year from despatch.
Gene Name:	CD19 antigen



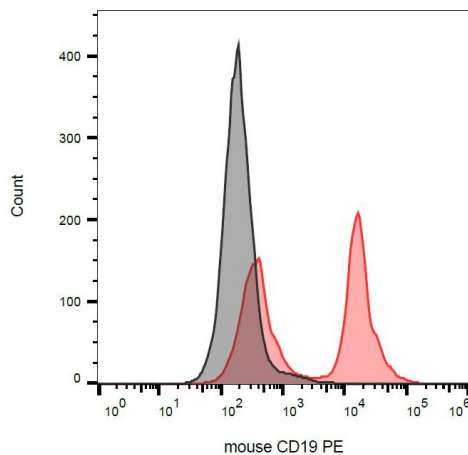
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Database Link: [Entrez Gene 12478 Mouse P25918](#)

Background: CD19 is a transmembrane glycoprotein of Ig superfamily expressed by B cells from the time of heavy chain rearrangement until plasma cell differentiation. It forms a tetrameric complex with CD21 (complement receptor type 2), CD81 (TAPA-1) and Leu13. Together with BCR (B cell antigen receptor), this complex signals to decrease B cell threshold for activation by the antigen. Besides being signal-amplifying coreceptor for BCR, CD19 can also signal independently of BCR coligation and it turns out to be a central regulatory component upon which multiple signaling pathways converge. Mutation of the CD19 gene results in hypogammaglobulinemia, whereas CD19 overexpression causes B cell hyperactivity.

Synonyms: Leu-12, B-cell marker

Product images:



Surface staining of CD19 in murine splenocytes with anti-CD19 (1D3) PE.