

## anti-human CD19 FITC-conjugated

The CD19 antibody recognizes a 95-kDa type-I transmembrane glycoprotein which is restricted to B cell antigen. CD19 antigen is expressed on normal and neoplastic B cells and also in some bone marrow cells. CD19 expression by B progenitor cells is presumably at late pro-B or early pre-B stages around the time of Ig heavy chain rearrangement. Expression persists during all stages of B cell maturation and is lost on terminal differentiation to plasma cells. CD19 antigen is also found on the follicular dendritic cells and the early cells of myelomonocytic lineage but not on normal T cells, NK cells, monocytes, granulocytes, erythrocytes and platelets. In normal peripheral blood, 8-20% of lymphocytes express CD19 antigen. CD19 antigen plays a role in regulating B cell proliferation.

**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.

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| <b>Clone:</b>          | HIB19  |
| <b>Isotype:</b>        | Mouse IgG1, k  |
| <b>Physical state:</b> | Liquid for direct use  |
| <b>Form:</b>           | purified antibody conjugated with Fluorescein isothiocyanate (FITC)  |
| <b>Buffer:</b>         | PBS containing 1 % BSA and 0.09 % sodium azide (pH 7.2)  |
| <b>Storage:</b>        | Store at 4 °C. Do not freeze. Avoid prolonged exposure to light.   |
| <b>Application:</b>    | Flow Cytometry   |
| <b>Reference:</b>      | Elias F et al. : J Immunol.2003 Oct 1;171(7):3697-704.<br>Lin CW et al. : 2005 Nov 15;106(10):3567-74. Epub 2005 Jul 26. |
| <b>Quantity:</b>       | 1.0 ml   |
| <b>Order N°:</b>       | H12507F  |

**Warning:** Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink and animal feeding stuff (S13). Wear suitable protective clothing (S36). If swallowed, seek medical advice immediately and show this container or label (S46). Contact with acids liberates very toxic gas (R32).

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