

**TECHNICAL DATA SHEET**

**redFluor™ 710 Anti-Human CD19 (HIB19)**

Catalog Number: 80-0199

**PRODUCT INFORMATION**

**Contents:** redFluor™ 710 Anti-Human CD19 (HIB19)

**Isotype:** Mouse IgG1, kappa

**Concentration:** 5 uL (0.125 ug)/test

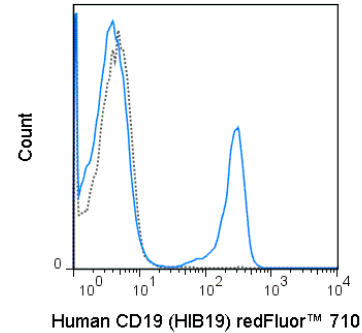
**Clone:** HIB19

**Reactivity:** Human

**Use By:** 12 months from date of receipt

**Storage Conditions:** 2-8°C protected from light

**Formulation:** 10 mM NaH<sub>2</sub>PO<sub>4</sub>, 150 mM NaCl, 0.09% NaN<sub>3</sub>, 0.1% gelatin, pH7.2



Human peripheral blood lymphocytes were stained with 5 uL (0.125 ug) redFluor™ 710 Anti-Human CD19 (80-0199) (solid line) or 0.125 ug redFluor™ 710 Mouse IgG1 isotype control.

**DESCRIPTION**

The HIB19 antibody reacts with human CD19, 95 kDa glycoprotein which acts as a co-receptor, along with CD21, CD81 and CD225, in support of the functional B cell receptor (BCR). This complex provides antigen-specific recognition and subsequent activation of B cells to proliferate and differentiate into antibody-secreting cells (plasma cells) or memory B cells, which are crucial for secondary antigen encounter. CD19 is a lineage-differentiation marker, as its expression is detectable at the earliest B cell stages, through development, and is finally lost upon transition to mature plasma cells. The HIB19 antibody is widely used as a phenotypic marker for CD19 expression on B cells, as well as on dendritic cell subsets.

**PREPARATION & STORAGE**

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

**APPLICATION NOTES**

This antibody preparation has been pre-titrated and quality-tested for flow cytometry using an appropriate cell type. The antibody has been diluted for use at 5 uL per test, defined as the amount of antibody that will stain a cell sample in a final volume of approximately 100 uL. The number of cells within a sample should be determined empirically, but typically ranges between 1x10<sup>5</sup> to 1x10<sup>8</sup> cells.

redFluor™ 710 dye is excited by the red (633-647 nm) laser and has a peak emission of 710 nm. The recommended band pass filter for this dye is 710/50. redFluor™ 710 can be used as an alternative for Alexa Fluor® 700. Confirm that your cytometer is configured to detect this fluorochrome.

**REFERENCES**

Kroenke MA, Eto D, Locci M, Cho M, Davidson T, Haddad EK, and Crotty S. 2012. J. Immunol. 188: 3734-3744. (Flow cytometry) So NSY, Ostrowski MA, and Gray-Owen SD. 2012. J. Immunol. 188: 4008-4022. (in vitro cell capture for microscopy) Zhang L, Yang N, Conejo-Garcia J-R, Katsaros D, Mohamed-Hadley A, Fracchioli S, Schlienger K, Toll A, Levine B, Rubin SC, and Coukos G. 2003. Clin. Cancer Res. 9: 264 – 272. (Immunohistochemistry) Hibe W, Dirnhofer S, Oberwasserlechner F, Eisterer W, Amman K, Schmid T, Hilbe G, Thaler J, and Woll E. 2003. J. Clin. Pathol. 56: 736-741. (Immunohistochemistry – frozen tissues)

Tonbo Biosciences tests all antibodies by flow cytometry. Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

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