



# CD19 Monoclonal Antibody (HIB19), PE, eBioscience™

<b>Product Details</b>	
Size	100 Tests
Species Reactivity	Human
Published Species	Human, Mouse
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), PE, eBioscience™
Class	Monoclonal
Туре	Antibody
Clone	HIB19
Conjugate	PE
Excitation/Emission Max	565/576 nm
Form	Liquid
Concentration	5 μL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1834376

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 μL (0.25 μg)/test	44 Publications

# **Product Specific Information**

Description: The HIB19 monoclonal antibody reacts with human CD19, a 95 kDa transmembrane glycoprotein. CD19 is expressed by B cells during all stages of development excluding the terminally differentiated plasma cells. Follicular dendritic cells also express CD19. Together CD21, CD81, Leu13, MHC class II, and CD19 form a multimolecular complex that associates with BCR. Signaling through CD19 induces tyrosine phosphorylation, calcium flux and proliferation of B cells. The SJ25C1 antibody and the HIB19 monoclonal antibody recognize overlapping epitopes.

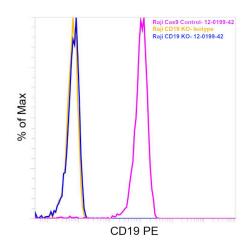
Applications Reported: The HIB19 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This HIB19 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5  $\mu$ L (0.25  $\mu$ g) per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test.

Excitation: 488-561 nm; Emission: 578 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

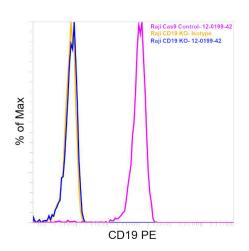
Filtration: 0.2 µm post-manufacturing filtered.

# Product Images For CD19 Monoclonal Antibody (HIB19), PE, eBioscience™



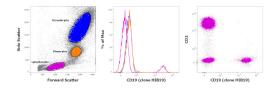
#### CD19 Antibody (12-0199-42)

Antibody clone (HIB19) specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. Loss of signal was observed for target protein in CD19 KO cells (blue histogram) compared to the control Cas9 cells (pink histogram) using CD19 Monoclonal Antibody (HIB19), PE, eBioscience™ (Product # 12-0199-42). Yellow histogram represents staining with the isotype control. {KO}



## CD19 Antibody (12-0199-42) in Flow

Knockout of CD19 was achieved by CRISPR-Cas9 genome editing using LentiArray™ Lentiviral sgRNA (Product # A32042, Assay ID CRISPR807388\_LV) and LentiArray Cas9 Lentivirus (Product # A32064). Flow cytometry analysis of CD19 was performed by staining Raji CD19 Knock out cells with 0.25 μg Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), PE, eBioscience™ (Product # 12-4714-82, yellow histogram) or 0.25 μg CD19 Monoclonal Antibody (HIB19), PE, eBioscience™ (Product # 12-0199-42, blue histogram). Raji Cas9 control cells were also stained with 0.25 μg CD19 Monoclonal Antibody (HIB19), PE, eBioscience™ (Product # 12-0199-42, pink histogram). Loss of signal was observed in the CD19 KO cells stained with anti-CD19 antibody clone HIB19 but not in the control Cas9 cells. Fixable Viability Dye eFluor 780 (Product # 65-0865-18) was used for staining and selecting viable cells for analysis.



#### CD19 Antibody (12-0199-42)

Staining of human peripheral blood mononuclear cells with CD45 Pacific Blue, CD3 APC and CD19 PE5. As expected based on known relative expression patterns, CD19clone HIB19 stains a subset of lymphocytes (pink), but not monocytes (orange) and granulocytes (blue). {RE}

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#### **□ 44 References**

# Flow Cytometry (44)

Annals of translational medicine

Human serum albumin promotes self-renewal and expansion of umbilical cord blood CD34<sup>+</sup> hematopoietic stem/progenitor cells.

Year 2023

"Published figure using CD19 monoclonal antibody (Product # 12-0199-42) in Flow Cytometry" Authors: Hua J,Jiao T,Qiao Y,Zhang S,Xiao T,Zhang Y,Yan J

Cell discovery

Decoding the pathogenesis of Diamond-Blackfan anemia using single-cell RNA-seq.

"Published figure using CD19 monoclonal antibody (Product # 12-0199-42) in Flow Cytometry"

Authors: Wang B,Wang C,Wan Y,Gao J,Ma Y,Zhang Y,Tong J,Zhang Y,Liu J,Chang L,Xu C,Shen B,Chen Y,Jiang E, Kurita R,Nakamura Y,Lim KC,Engel JD,Zhou J,Cheng T,Zhu X,Zhu P,Shi L

**Year** 2022

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## More applications with references on thermofisher.com

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