

## Purified anti-human CD19 Antibody

<b>Catalog# / Size</b>	302201 / 25 µg 302202 / 100 µg
<b>Clone</b>	HIB19
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	V CD19.11
<b>Other Names</b>	B4
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	CD19 is a 95 kD type I transmembrane glycoprotein also known as B4. It is a member of the immunoglobulin superfamily expressed on B-cells (from pro-B to blastoid B cells, absent on plasma cells) and follicular dendritic cells. CD19 is involved in B cell development, activation, and differentiation. CD19 forms a complex with CD21 (CR2) and CD81 (TAPA-1), and functions as a BCR co-receptor.

### Product Details

<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	Chimpanzee
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography.
<b>Concentration</b>	0.5 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C.
<b>Application</b>	<a href="#">FC - Quality tested</a> <a href="#">CyTOF® IHC-F - Verified</a> <a href="#">PG - Reported in the literature, not verified in house</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is ≤ 0.5 µg per 10 <sup>6</sup> cells in 100 µl volume or 100 µl of whole blood. For immunohistochemistry, a concentration range of 5.0 - 10 µg/ml is suggested. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections <sup>8</sup> and blocking of B cell proliferation. Clone HIB19 is not recommended for formalin-fixed paraffin-embedded sections. The Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 302267 & 302268).  Clone HIB19 partially blocks anti-human CD19 clones 4G7 and SJ25C1 staining based on in-house testing
<b>Application References</b>	<ol style="list-style-type: none"> <li>Schlossman S, <i>et al.</i> 1995. Leucocyte Typing V. Oxford University Press. New York.</li> <li>Knapp W, <i>et al.</i> 1989. Leucocyte Typing IV. Oxford University Press. New York.</li> <li>Bradbury L, <i>et al.</i> 1993. <i>J. Immunol.</i> 151:2915.</li> <li>Joseph A, <i>et al.</i> 2010. <i>J. Virol.</i> 84:6645. <a href="#">PubMed</a></li> <li>Wang X, <i>et al.</i> 2010. <i>Haematologica.</i> 95:884. (FC) <a href="#">PubMed</a></li> <li>Walker JD, <i>et al.</i> 2009. <i>J. Immunol.</i> 182:1548. (Block) <a href="#">PubMed</a></li> <li>Yoshino N, <i>et al.</i> 2000. <i>Exp. Anim. (Tokyo)</i> 49:97. (FC)</li> <li>Hansen A, <i>et al.</i> 2002. <i>Arthritis Rheum.</i> 46:2160. (IHC)</li> <li>Stoeckius M, <i>et al.</i> 2017. <i>Nat. Methods.</i> 14:865. (PG)</li> </ol>
<b>(PubMed link indicates BioLegend citation)</b>	

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## RRID

AB\_314231 (BioLegend Cat. No. 302201)  
AB\_314232 (BioLegend Cat. No. 302202)

## Antigen Details

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<b>Structure</b>	Ig superfamily, type I transmembrane glycoprotein, 95 kD
<b>Distribution</b>	B lineage (except plasma cells), follicular dendritic cells
<b>Function</b>	B cell activation and differentiation

<b>Ligand/Receptor</b>	Forms complex with CD21 (CR2) and CD81 (TAPA-1), BCR coreceptor
<b>Cell Type</b>	B cells, Dendritic cells
<b>Biology Area</b>	Costimulatory Molecules, Immunology
<b>Molecular Family</b>	CD Molecules
<b>Antigen References</b>	1. Tedder T, <i>et al.</i> 1994. <i>Immunol. Today</i> 15:437. 2. Bradbury L, <i>et al.</i> 1993. <i>J. Immunol.</i> 151:2915.
<b>Gene ID</b>	<a href="#">930</a>

## Related Protocols

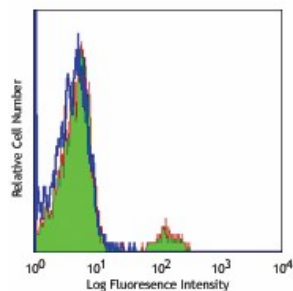
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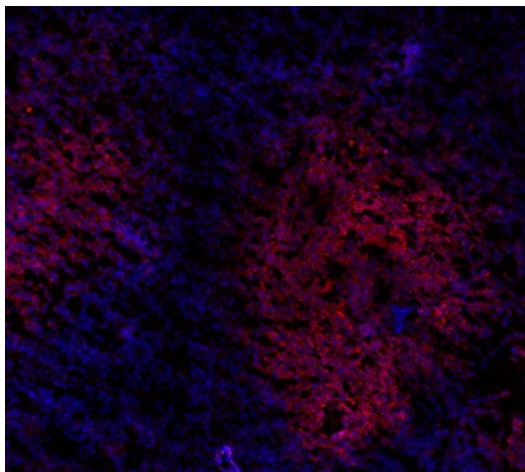
## Other Formats

APC anti-human CD19, Biotin anti-human CD19, FITC anti-human CD19, PE anti-human CD19, PE/Cyanine5 anti-human CD19, Purified anti-human CD19, APC/Cyanine7 anti-human CD19, PE/Cyanine7 anti-human CD19, Alexa Fluor® 488 anti-human CD19, Alexa Fluor® 647 anti-human CD19, Pacific Blue™ anti-human CD19, Alexa Fluor® 700 anti-human CD19, PerCP anti-human CD19, PerCP/Cyanine5.5 anti-human CD19, Brilliant Violet 421™ anti-human CD19, Brilliant Violet 570™ anti-human CD19, Brilliant Violet 650™ anti-human CD19, Brilliant Violet 785™ anti-human CD19, Brilliant Violet 510™ anti-human CD19, Brilliant Violet 605™ anti-human CD19, Brilliant Violet 711™ anti-human CD19, Purified anti-human CD19 (Maxpar® Ready), Alexa Fluor® 594 anti-human CD19, PE/Dazzle™ 594 anti-human CD19, APC/Fire™ 750 anti-human CD19, TotalSeq™-A0050 anti-human CD19, Brilliant Violet 750™ anti-human CD19, TotalSeq™-B0050 anti-human CD19, TotalSeq™-C0050 anti-human CD19, Spark NIR™ 685 anti-human CD19, Ultra-LEAF™ Purified anti-human CD19, APC/Fire™ 810 anti-human CD19, PE/Fire™ 640 anti-human CD19, PE/Fire™ 700 anti-human CD19, TotalSeq™-D0050 anti-human CD19, Spark YG™ 593 anti-human CD19, GMP Pacific Blue™ anti-human CD19, Spark Violet™ 423 anti-human CD19, GMP PE anti-human CD19, GMP APC anti-human CD19, KIRAVIA Blue 520™ anti-human CD19, GMP PerCP/Cyanine5.5 anti-human CD19, GMP PE/Cyanine7 anti-human CD19, Spark Violet™ 500 anti-human CD19

## Product Data



Human peripheral blood lymphocytes stained with purified HIB19, followed by anti-mouse IgGs FITC



Human frozen spleen tissue slices were fixed with 4% PFA for ten minutes and blocked with 5% FBS for 30 minutes. Then, the tissue was stained with 10 µg/mL of purified anti-human CD19 antibody (clone HIB19) overnight at 4°C. On the next day, tissue was incubated with Alexa Fluor® 594 Goat anti-mouse IgG (clone Poly4053, red). Nuclei were counter-stained with DAPI (blue). The image was scanned with a 10X objective and stitched with MetaMorph® software.

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