

Alexa Fluor[®] 594 anti-human CD19 Antibody

Catalog# / Size	302250 / 100 µg
Clone	HIB19
Regulatory Status	RUO
Workshop	V CD19.11
Other Names	B4
Isotype	Mouse IgG1, κ
Description	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

Verified Reactivity	Human
Reported Reactivity	Chimpanzee
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor [®] 594 under optimal conditions.
Concentration	0.5 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	ICC - Quality tested IHC-F - Verified
Recommended Usage	<p>Each lot of this antibody is quality control tested by immunocytochemistry. For immunocytochemistry, a concentration range of 2.0 - 10 µg/mL is recommended. For immunohistochemical staining on frozen tissue sections, the suggested use of this reagent is 5.0 - 10 µg per mL. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Alexa Fluor[®] 594 has an excitation maximum of 590 nm, and a maximum emission of 617 nm.</p> <p>Alexa Fluor[®] and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p>View full statement regarding label licenses</p>
Application Notes	<p>Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections⁸ 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).</p> <p>Clone HIB19 partially blocks anti-human CD19 clones 4G7 and SJ25C1 staining based on in-house testing</p>
Application References	<ol style="list-style-type: none">Schlossman S, <i>et al.</i> 1995. Leucocyte Typing V. Oxford University Press. New York.Knapp W, <i>et al.</i> 1989. Leucocyte Typing IV. Oxford University Press. New York.Bradbury L, <i>et al.</i> 1993. <i>J. Immunol.</i> 151:2915.

4. Joseph A, *et al.* 2010. *J. Virol.* 84:6645. [PubMed](#)
5. Wang X, *et al.* 2010. *Haematologica.* 95:884. (FC) [PubMed](#)
6. Walker JD, *et al.* 2009. *J. Immunol.* 182:1548. (Block) [PubMed](#)
7. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
8. Hansen A, *et al.* 2002. *Arthritis Rheum.* 46:2160. (IHC)
9. Stoeckius M, *et al.* 2017. *Nat. Methods.* 14:865. (PG)
10. Peterson VM, *et al.* 2017. *Nat. Biotechnol.* 35:936. (PG)

RRID AB_2563233 (BioLegend Cat. No. 302250)

Antigen Details

Structure	Ig superfamily, type I transmembrane glycoprotein, 95 kD
Distribution	B lineage (except plasma cells), follicular dendritic cells
Function	B cell activation and differentiation
Ligand/Receptor	Forms complex with CD21 (CR2) and CD81 (TAPA-1), BCR coreceptor
Cell Type	B cells, Dendritic cells
Biology Area	Costimulatory Molecules, Immunology
Molecular Family	CD Molecules
Antigen References	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.
Gene ID	930

Related Protocols

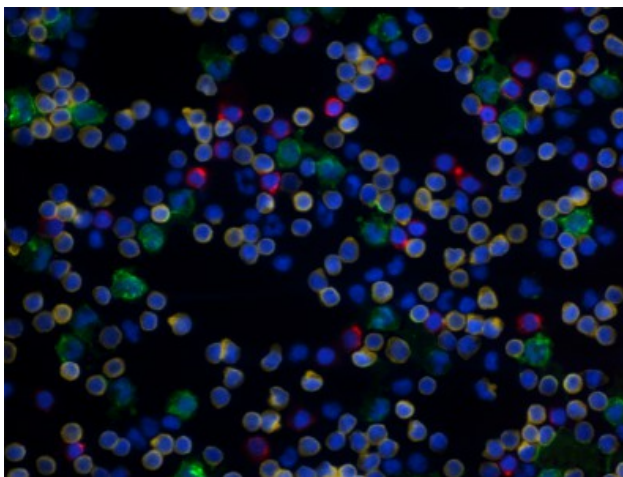
[Immunohistochemistry Protocol for Frozen Sections](#)

[Immunocytochemistry Staining Protocol](#)

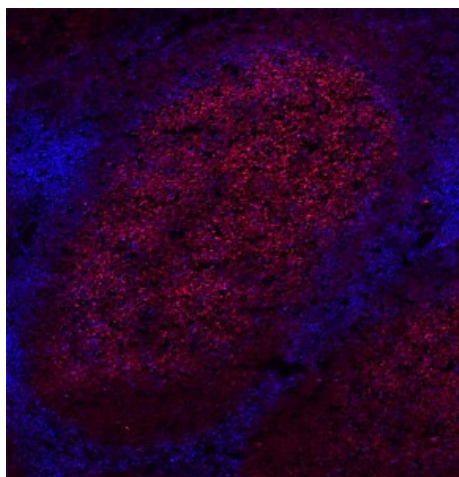
Other Formats

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 mononuclear cells were fixed with 2% paraformaldehyde (PFA), and then stained with 10 $\mu\text{g}/\text{ml}$ CD19 (clone H1B19) Alexa Fluor® 594 (red), 10 $\mu\text{g}/\text{ml}$ CD3 (clone UCHT1) Alexa Fluor® 488 (yellow), and 10 $\mu\text{g}/\text{ml}$ CD14 (clone HCD14) Alexa Fluor® 647 (green) for 30 minutes at room temperature. Nuclei were counterstained with DAPI (blue). The image was captured with a 40X objective.



Human frozen tonsil tissue slices were fixed with 4% PFA for ten minutes and blocked with 5% FBS for 30 minutes. Then, the tissue was stained with 5 $\mu\text{g}/\text{mL}$ of Alexa Fluor® 647 anti-human CD3 antibody (blue) and Alexa Fluor® 594 anti-human CD19 antibody (red) overnight at 4°C. The image was scanned with a 10X objective and stitched with MetaMorph® software.

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587