

Alexa Fluor® 488 anti-human CD19 Antibody

Catalog# / Size	302219 / 100 tests
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 and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 488 under optimal conditions.
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	FC - Quality tested ICC - Verified
Recommended Usage	<p>Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells in 100 µl volume or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 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.Joseph A, <i>et al.</i> 2010. <i>J. Virol.</i> 84:6645. PubMedWang X, <i>et al.</i> 2010. <i>Haematologica.</i> 95:884. (FC) PubMedWalker JD, <i>et al.</i> 2009. <i>J. Immunol.</i> 182:1548. (Block) PubMed
(PubMed link indicates BioLegend citation)	

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)

Product Citations

1. Robinson GA, *et al.* 2021. *EBioMedicine.* 103243:. [PubMed](#)
2. Yeung Y, *et al.* 2016. *Nat Commun.* 7:13376. [PubMed](#)
3. Lindesmith LC, *et al.* 2020. *Cell Mol Gastroenterol Hepatol.* 0.586805556. [PubMed](#)
4. Weinstein S, *et al.* 2016. *Proc Natl Acad Sci U S A.* 113: 16 - 22. [PubMed](#)
5. Zhang HG, *et al.* 2022. *Cell Res.* .: [PubMed](#)
6. Zimmerman B *et al.* 2016. *Cell.* 167(4):1041-1051 . [PubMed](#)
7. Domanska D, *et al.* 2022. *J Exp Med.* 219:. [PubMed](#)
8. Aguilar-Briseño JA, *et al.* 2020. *Nat Commun.* 2.664583333. [PubMed](#)
9. Upasani V, *et al.* 2019. *Front Immunol.* 2.152777778. [PubMed](#)

RRID

AB_389313 (BioLegend Cat. No. 302219)

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

[Cell Surface Flow Cytometry Staining Protocol](#)

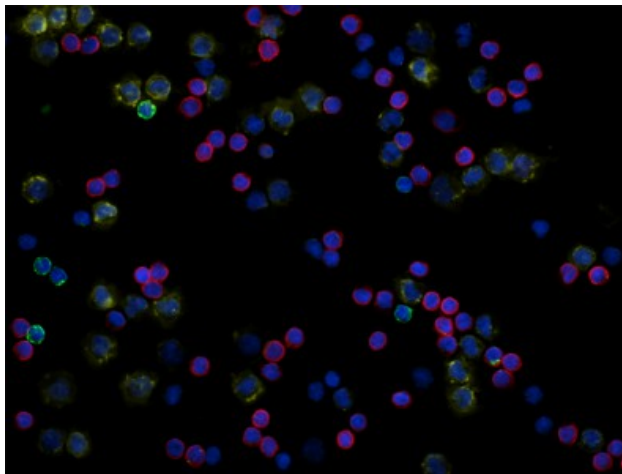
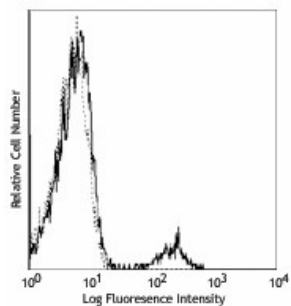
[Immunocytochemistry Staining Protocol](#)

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 lymphocytes stained with HIB19 Alexa Fluor® 488



Human peripheral blood mononuclear cells were fixed with 2% paraformaldehyde (PFA), and then stained with 10 µg/ml CD14 (clone HCD14) Alexa Fluor® 647 (yellow), 10 µg/ml CD19 (clone HIB19) Alexa Fluor® 488 (green), and 10 µg/ml CD3 (clone UCHT1) Alexa Fluor® 594 (red) for 30 minutes at room temperature. Nuclei were counterstained with DAPI (blue). The image was captured with a 40X objective.

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