

Alexa Fluor[®] 700 anti-human CD19 Antibody

Catalog# / Size	302225 / 25 µg 302226 / 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 [®] 700 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	FC - Quality tested
Recommended Usage	<p>Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. The suggested use of this reagent is ≤1.0 µg per million cells in 100 µl volume. It is highly recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Alexa Fluor[®] 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor[®] 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.</p> <p>Alexa Fluor[®] and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p>View full statement regarding label licenses</p>
Excitation Laser	Red Laser (633 nm)
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	1. Schlossman S, <i>et al.</i> 1995. Leucocyte Typing V. Oxford University Press. New York.

(PubMed link indicates BioLegend citation)

2. Knapp W, *et al.* 1989. Leucocyte Typing IV. Oxford University Press. New York.
3. Bradbury L, *et al.* 1993. *J. Immunol.* 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)

Product Citations

1. Viny AD, *et al.* 2019. *Cell Stem Cell.* 25:682. [PubMed](#)
2. Ivan Jelcic *et al.* 2018. *Cell.* 175(1):85-100 . [PubMed](#)
3. Brouwer PJM, *et al.* 2020. *Science.* 369:643. [PubMed](#)
4. Fasbender F, *et al.* 2017. *Front Immunol.* 0.88125. [PubMed](#)
5. Schmitz T, *et al.* 2021. *J Reprod Immunol.* 148:103424. [PubMed](#)
6. Quast I, *et al.* 2015. *Neurol Neuroimmunol Neuroinflamm.* 2: e148. [PubMed](#)
7. Wang J, *et al.* 2020. *Cell.* 183:1264. [PubMed](#)
8. Boyle M, *et al.* 2015. *J Infect Dis.* 212: 416-425. [PubMed](#)
9. Miles B, *et al.* 2015. *Nat Commun.* 6: 8608. [PubMed](#)
10. Rubio-Pérez C, *et al.* 2021. *Nat Commun.* 1503:12. [PubMed](#)
11. Jagannathan P, *et al.* 2017. *Sci Rep.* 10.1038/s41598-017-10624-3. [PubMed](#)
12. Tardif V, *et al.* 2019. *Nat Commun.* 10:823. [PubMed](#)
13. Feldman J, *et al.* 2021. *Sci Immunol.* 6:eabl5842. [PubMed](#)
14. Shin JJ, *et al.* 2022. *J Clin Immunol.* .: [PubMed](#)
15. Caduff N, *et al.* 2021. *Cell Reports.* 35(5):109056. [PubMed](#)
16. Ramos RN, *et al.* 2022. *Clin Transl Immunology.* 11:e1392. [PubMed](#)
17. Urlaub D, *et al.* 2019. *Arthritis Res Ther.* 1.067361111. [PubMed](#)
18. Sefik E, *et al.* 2021. *Nat Biotechnol.* . [PubMed](#)
19. Port JR, *et al.* 2020. *J Virol.* 94.: [PubMed](#)
20. Gorman JA, *et al.* 2019. *Front Immunol.* 10:44. [PubMed](#)
21. Berry MR *et al.* 2017. *Cell.* 170(5):860-874 . [PubMed](#)
22. Shin CH, *et al.* 2020. *J Immunol.* 205:3179. [PubMed](#)
23. Hood SP, *et al.* 2020. *Elife.* 9:00. [PubMed](#)
24. Teng F, *et al.* 2021. *Cell Rep.* 37:110051. [PubMed](#)
25. Inglis H, *et al.* 2015. *J Vis Exp.* 97: 52484. [PubMed](#)
26. Serr I, *et al.* 2016. *Nat Commun.* 7:10991. [PubMed](#)
27. Plum T, *et al.* 2020. *Immunity.* 52(2):404-416. [PubMed](#)
28. Harris LD, *et al.* 2020. *Front Cell Infect Microbiol.* 10:120. [PubMed](#)
29. Faissner S, *et al.* 2022. *Front Immunol.* 13:980526. [PubMed](#)

RRID

AB_493750 (BioLegend Cat. No. 302225)
AB_493751 (BioLegend Cat. No. 302226)

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

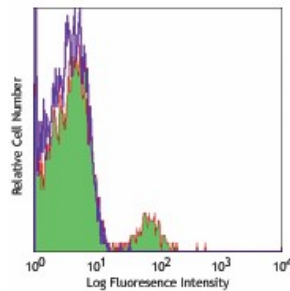
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

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® 700

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