

APC/Cyanine7 anti-human CD19 Antibody

Catalog# / Size	302217 / 25 tests 302218 / 100 tests
Clone	H1B19
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, Cynomolgus, Rhesus
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 APC/Cyanine7 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The CD19 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	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 staining volume or 5 µl per 100 µl of whole blood.
Excitation Laser	Red Laser (633 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections ⁸ and blocking of B cell proliferation. Clone H1B19 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 H1B19 partially blocks anti-human CD19 clones 4G7 and SJ25C1 staining based on in-house testing
Additional Product Notes	BioLegend is in the process of converting the name APC/Cy7 to APC/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our APC/Cyanine7 products. Please contact Technical Service if you have any questions.
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. PubMed
(PubMed link indicates BioLegend citation)	

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. Shoda H, *et al.* 2017. *Arthritis Research & Therapy* . 10.1186/s13075-017-1308-y. [PubMed](#)
2. Sander J *et al.* 2017. *Immunity*. 47(6):1051-1066 . [PubMed](#)
3. Turaj AH *et al.* 2017. *Cancer cell*. 32(6):777-791 . [PubMed](#)
4. Neff CP *et al.* 2018. *EBioMedicine*. 30:192-202 . [PubMed](#)
5. Yamauchi T *et al.* 2018. *Cancer cell*. 33(3):386-400 . [PubMed](#)
6. Novakova L *et al.* 2018. *Journal of neurochemistry*. 146(3):322-332 . [PubMed](#)
7. Shehata L, *et al.* 2019. *Nat Commun*. 10:1126. [PubMed](#)
8. Körner C *et al.* 2017. *Cell host & microbe*. 22(1):111-119 . [PubMed](#)
9. Tomellini E, *et al.* 2020. *Cell Reports*. 28(4):1063-1073.e5.. [PubMed](#)
10. Suzuki D, *et al.* 2020. *Stem Cell Reports*. 14:49. [PubMed](#)
11. Martín-Gayo E, *et al.* 2020. *Cell Rep*. 30:984. [PubMed](#)
12. Shehata L, *et al.* 2019. *Cell Rep*. 28:3300. [PubMed](#)
13. Zhou Y, *et al.* 2017. *Front Cell Infect Microbiol*. 7:457. [PubMed](#)
14. Samarani S, *et al.* 2020. *Mediators Inflamm*. 2020:6401969. [PubMed](#)
15. Chabi S, *et al.* 2020. *Cell Reports*. 29(8):2307-2320.e6.. [PubMed](#)
16. Urlaub D, *et al.* 2019. *Arthritis Res Ther*. 1.067361111. [PubMed](#)
17. Joseph A, *et al.* 2010. *J Virol*. 84:6645. [PubMed](#)
18. Simpfendorfer K, *et al.* 2012. *Hum Mol Genet*. 21:3918. [PubMed](#)
19. Lee J, *et al.* 2015. *J Exp Med*. 212:385. [PubMed](#)
20. Breton G, *et al.* 2015. *J Exp Med*. 212:401. [PubMed](#)
21. Zhang J, *et al.* 2015. *J Biol Chem*. 290 19093 . [PubMed](#)
22. Kuebler P, *et al.* 2015. *Proc Natl Acad Sci U S A*. 112: 8379 - 8384. [PubMed](#)
23. Chung Y, *et al.* 2014. *J Vis Exp*. 89: 51660. [PubMed](#)
24. Deng C, *et al.* 2016. *Diabetes Care*. 39: 434 - 440. [PubMed](#)
25. Li H, *et al.* 2016. *J Immunol*. 196: 4064 - 4074. [PubMed](#)
26. Nagafuchi Y, *et al.* 2016. *Sci Rep*. 6:29338. [PubMed](#)
27. AC Belkina, JE Snyder-Cappione 2017. *Cytometry A*. 91:175-179. [PubMed](#)
28. Tsuchida Y, *et al.* 2017. *PLoS One*. 10.1371/journal.pone.0169646. [PubMed](#)
29. Corrado M, *et al.* 2020. *Cell Metab*. 32:981. [PubMed](#)
30. James KR, *et al.* 2020. *Nat Immunol*. 1.113194444. [PubMed](#)
31. Yu B, *et al.* 2021. *Cell*. 184(7):1790-1803.e17. [PubMed](#)
32. Delacher M, *et al.* 2021. *Immunity*. 54(4):702-720.e17. [PubMed](#)
33. Herati RS, *et al.* 2021. *Cell Reports Medicine*. 2(5):100262. [PubMed](#)
34. Pan YG, *et al.* 2021. *Immunity*. 54(6):1245-1256.e5. [PubMed](#)
35. Kreutmair S, *et al.* 2021. *Immunity*. . [PubMed](#)
36. Punik J, *et al.* 2021. *Cell Reports*. 35(13):109320. [PubMed](#)

RRID

AB_314247 (BioLegend Cat. No. 302217)
 AB_314248 (BioLegend Cat. No. 302218)

Antigen Details

Structure	lg 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

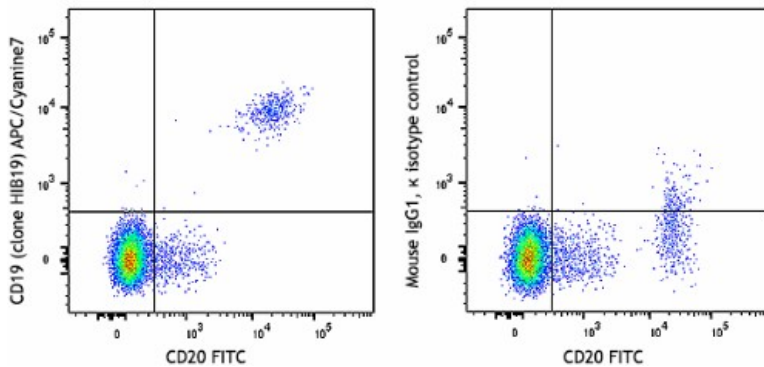
Related Protocols

[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

Product Data



Human peripheral blood lymphocytes were stained with CD20 FITC and CD19 (clone HIB19) APC/Cyanine7 (left) or Mouse IgG1, κ isotype control (right)

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