

## PerCP/Cyanine5.5 anti-human CD20 Antibody

<b>Catalog# / Size</b>	302325 / 25 tests 302326 / 100 tests
<b>Clone</b>	2H7
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	IV B201
<b>Other Names</b>	B1, Bp35
<b>Isotype</b>	Mouse IgG2b, κ
<b>Description</b>	CD20 is a 33-37 kD, four transmembrane spanning protein, also known as B1 and Bp35. CD20 is expressed on pre-B-cells, resting and activated B cells (not plasma cells), some follicular dendritic cells, and at low levels on a T cell subset. CD20 is heavily phosphorylated on activated B cells and malignant B cells. Homo-oligomeric complexes of CD20 are thought to form Ca <sup>2+</sup> conductive ion channels in the plasma membrane of B cells. The CD20 molecule is involved in B-cell activation and is associated with various Src family kinases (Lyn, Lck, Fyn). It exists in a complex with MHC class I and II, CD53, CD81, and CD82.

### Product Details

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<b>Verified Reactivity</b>	Human, Cynomolgus, Rhesus
<b>Reported Reactivity</b>	Baboon, Capuchin Monkey, Chimpanzee, Pigtailed Macaque, Squirrel Monkey
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Human tonsillar B cells
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography, and conjugated with PerCP/Cyanine5.5 under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</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 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.  * PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.
<b>Application Notes</b>	The epitope recognized by clone 2H7 has been mapped to the sequence YNCEPANPSEKNPST which lies in the large extracellular loop of human CD20. Additional reported applications (for the relevant formats) include: immunoprecipitation <sup>4</sup> and immunohistochemical staining of acetone-fixed frozen sections <sup>5</sup> .
<b>Additional Product Notes</b>	BioLegend is in the process of converting the name PerCP/Cy5.5 to PerCP/Cyanine5.5. The dye molecule remains the same, so you should expect the same quality and performance from our PerCP/Cyanine5.5 products. Contact <a href="#">Technical Service</a> if you have any questions.
<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>McMichael A, <i>et al.</i> Eds. 1987. Leucocyte Typing III Oxford University Press. New York.</li> <li>Polyak MJ, <i>et al.</i> 2002. <i>Blood</i> 99:3256. (IP)</li> </ol>
<b>(PubMed link indicates BioLegend citation)</b>	

5. Mack CL, *et al.* 2004. *Pediatr. Res.* 56:79. (IHC)

## Product Citations

1. Zhou X, *et al.* 2021. *Cell Reports.* 35(6):109109. [PubMed](#)
2. Alcántara-Hernández M *et al.* 2017. *Immunity.* 47(6):1037-1050. [PubMed](#)
3. Pino M, *et al.* 2022. *Nat Commun.* 13:5055. [PubMed](#)
4. Pino M, *et al.* 2020. *Front Immunol.* 11:1275. [PubMed](#)
5. Claireaux M, *et al.* 2018. *MBio.* 9:e00317. [PubMed](#)
6. Chen F, *et al.* 2021. *Immunity.* 54(4):781-796.e4. [PubMed](#)
7. Cheng C, *et al.* 2020. *Cell Reports.* 32(5):107981. [PubMed](#)
8. Asokan M, *et al.* 2020. *Proc Natl Acad Sci U S A.* 117:18754. [PubMed](#)
9. Leylek R, *et al.* 2019. *Cell Rep.* 29:3736. [PubMed](#)
10. Kong R, *et al.* 2019. *Cell.* 178:567. [PubMed](#)
11. He WT, *et al.* 2022. *Nat Immunol.* 23:960. [PubMed](#)
12. Harper JL, *et al.* 2020. *Nat Med.* 519:26. [PubMed](#)
13. Zhao F, *et al.* 2020. *Cell Rep.* 32:108122. [PubMed](#)
14. Leylek R, *et al.* 2020. *Cell Rep.* 32:108180. [PubMed](#)

## RRID

AB\_893285 (BioLegend Cat. No. 302325)  
AB\_893283 (BioLegend Cat. No. 302326)

## Antigen Details

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<b>Structure</b>	Four transmembrane protein (TM4SF), heavily phosphorylated after activation, 33-37 kD
<b>Distribution</b>	B cell, T cell subsets
<b>Function</b>	B cell activation
<b>Ligand/Receptor</b>	Src family tyrosine kinases, MHC class I, II, CD53, CD81, CD82
<b>Cell Type</b>	B cells, T cells
<b>Biology Area</b>	Costimulatory Molecules, Immunology
<b>Molecular Family</b>	CD Molecules
<b>Antigen References</b>	1. Hultin L, <i>et al.</i> 1993. <i>Cytometry</i> 14:196. 2. Tedder T, <i>et al.</i> 1994. <i>Immunol. Today</i> 15:450.
<b>Gene ID</b>	<a href="#">931</a>

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

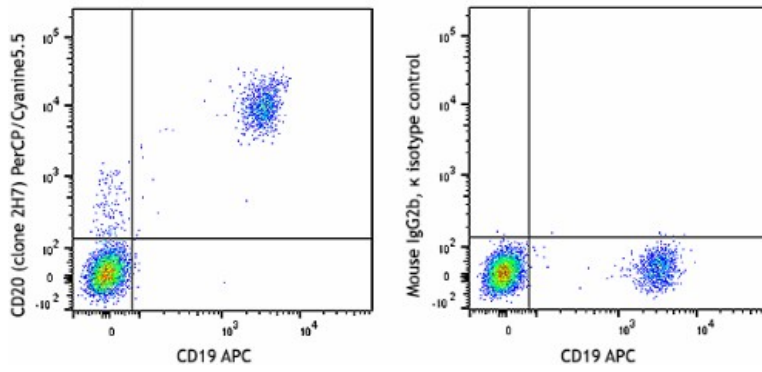
## Other Formats

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APC anti-human CD20, FITC anti-human CD20, PE anti-human CD20, PE/Cyanine5 anti-human CD20, Purified anti-human CD20, APC/Cyanine7 anti-human CD20, PE/Cyanine7 anti-human CD20, Alexa Fluor® 488 anti-human CD20, Alexa Fluor® 647 anti-human CD20, Pacific Blue™ anti-human CD20, Alexa Fluor® 700 anti-human CD20, PerCP anti-human CD20, PerCP/Cyanine5.5 anti-human CD20, Brilliant Violet 421™ anti-human CD20, Brilliant Violet 570™ anti-human CD20, Brilliant Violet 605™ anti-human CD20, Brilliant Violet 650™ anti-human CD20, Brilliant Violet 785™ anti-human CD20, Brilliant Violet 510™ anti-human CD20, Brilliant Violet 711™ anti-human CD20, Purified anti-human CD20 (Maxpar® Ready), PE/Dazzle™ 594 anti-human CD20, Biotin anti-human CD20, APC/Fire™ 750 anti-human CD20, Alexa Fluor® 594 anti-human CD20, TotalSeq™-A0100 anti-human CD20, TotalSeq™-B0100 anti-human CD20, TotalSeq™-C0100 anti-human CD20, Spark NIR™ 685 anti-human CD20, Spark YG™ 593 anti-human CD20, GMP FITC anti-human CD20, TotalSeq™-D0100 anti-human CD20, GMP APC anti-human CD20

## Product Data

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Human peripheral blood lymphocytes were stained with CD19 APC and CD20 (clone 2H7) PerCP/Cyanine5.5 (left), or Mouse IgG2b, κ PerCP/Cyanine5.5 isotype control (right).

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