

## Alexa Fluor<sup>®</sup> 700 anti-human CD20 Antibody

<b>Catalog# / Size</b>	302322 / 100 µg
<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.
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor <sup>®</sup> 700 under optimal conditions.
<b>Concentration</b>	0.5 mg/ml
<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>	<p>Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a>. 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<sup>®</sup> 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor<sup>®</sup> 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.</p> <p>Alexa Fluor<sup>®</sup> and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p><a href="#">View full statement regarding label licenses</a></p>
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>Application Notes</b>	The epitope recognized by clone 2H7 has been mapped to the sequence YNCEPANPSEKNSPST 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>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></ol>
<b>(PubMed link indicates</b>	

- BioLegend citation)**
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  4. Polyak MJ, *et al.* 2002. *Blood* 99:3256. (IP)
  5. Mack CL, *et al.* 2004. *Pediatr. Res.* 56:79. (IHC)

#### Product Citations

1. Basu M, *et al.* 2020. *Cell Rep Med.* :1. [PubMed](#)
2. Schmitz T, *et al.* 2021. *J Reprod Immunol.* 148:103424. [PubMed](#)
3. Panciera T, *et al.* 2016. *Cell Stem Cell.* 19:725-737. [PubMed](#)
4. Wang LT, *et al.* 2020. *Immunity.* 53:733. [PubMed](#)
5. , *et al.* 2021. *Eur J Immunol.* 51:2708. [PubMed](#)
6. Sefik E, *et al.* 2021. *Nat Biotechnol.* . [PubMed](#)
7. Seydoux E, *et al.* 2021. *Cell Reports.* 35(5):109084. [PubMed](#)
8. Weinfurter J, *et al.* 2011. *PLoS One.* 6:e1002381. [PubMed](#)
9. Wang C, *et al.* 2020. *Oncologist.* 25:382. [PubMed](#)
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11. Krishnan S, *et al.* 2021. *Clin Exp Immunol.* 203:458. [PubMed](#)
12. Harris M, *et al.* 2013. *J Virol.* 87:9353. [PubMed](#)
13. Kerkman P, *et al.* 2016. *Ann Rheum Dis.* 75: 1170 - 1176. [PubMed](#)
14. Piepenbrink M, *et al.* 2016. *PLoS One.* 11: 0158641. [PubMed](#)
15. Cytlik U, *et al.* 2020. *Immunity.* 53(2):353-370. [PubMed](#)

**RRID** AB\_493753 (BioLegend Cat. No. 302322)

## 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>	<ol style="list-style-type: none"><li>1. Hultin L, <i>et al.</i> 1993. <i>Cytometry</i> 14:196.</li><li>2. Tedder T, <i>et al.</i> 1994. <i>Immunol. Today</i> 15:450.</li></ol>
<b>Gene ID</b>	<a href="#">931</a>

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

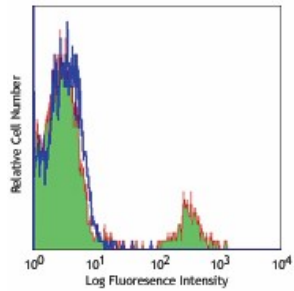
## Other Formats

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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 anti-CD20 (clone 2H7) Alexa Fluor® 700 (filled histogram), or mouse IgG2b, κ Alexa Fluor® 700 (open histogram).

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