

GMP Pacific Blue™ anti-human CD20 Antibody

Catalog# / Size	260216 / 100 tests
Clone	2H7
Workshop	IV B201
Other Names	B1, Bp35
Isotype	Mouse IgG2b, κ
Description	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 ²⁺ 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

Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human tonsillar B cells
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA) and a stabilizer
Preparation	The antibody was purified by affinity chromatography and conjugated with Pacific Blue™ under optimal conditions.
Concentration	100 µg/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. 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. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ 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	Violet Laser (405 nm)
Application Notes	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 ⁴ and immunohistochemical staining of acetone-fixed frozen sections ⁵ .
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. McMichael A, <i>et al.</i> Eds. 1987. Leucocyte Typing III Oxford University Press. New York. Polyak MJ, <i>et al.</i> 2002. <i>Blood</i> 99:3256. (IP) Mack CL, <i>et al.</i> 2004. <i>Pediatr. Res.</i> 56:79. (IHC)
(PubMed link indicates BioLegend citation)	

Disclaimer

GMP RUO Flow Cytometry Antibodies. BioLegend GMP RUO fluorophore conjugated antibodies are manufactured in a dedicated GMP facility and compliant with ISO 13485:2016. For research use only. Not for use in diagnostic or therapeutic procedures. Our processes include:

- Batch-to-batch consistency
- Material traceability
- Documented procedures
- Documented employee training
- Equipment maintenance and monitoring records
- Lot-specific certificates of analysis
- Quality audits per ISO 13485:2016
- QA review of released products

Antigen Details

Structure	Four transmembrane protein (TM4SF), heavily phosphorylated after activation, 33-37 kD
Distribution	B cell, T cell subsets
Function	B cell activation
Ligand/Receptor	Src family tyrosine kinases, MHC class I, II, CD53, CD81, CD82
Cell Type	B cells, T cells
Biology Area	Costimulatory Molecules, Immunology
Molecular Family	CD Molecules
Antigen References	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.
Gene ID	931

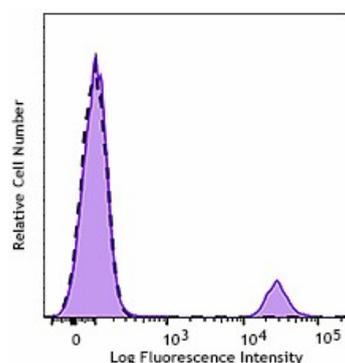
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

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



Typical results from human peripheral blood lymphocytes stained either with anti-CD20 (clone 2H7) Pacific Blue™ at 5 μ L/test (solid line) or with an isotype control (dashed line).

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