APC/Fire™ 810 anti-human CD20 Antibody

Catalog# / Size	302379 / 25 tests 302380 / 100 tests
Clone	2H7
Regulatory Status	RUO
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

Verified Reactivity	Human, Cynomolgus, Rhesus
Reported Reactivity	Baboon, Capuchin Monkey, Chimpanzee, Pigtailed Macaque, Squirrel Monkey
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human tonsillar B cells
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/Fire™ 810 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
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	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. * APC/Fire™ 810 has a maximum excitation of 650 nm and a maximum emission of 810 nm. Excessive exposure to light, and commonly used fixation, permeabilization buffers can affect APC/Fire™ 810 fluorescence signal intensity and spread. Please keep conjugates protected from light exposure. For more information and representative data, visit our Fire Dyes page.
Excitation Laser	Red Laser (633 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 **(PubMed link indicates BioLegend citation)**	1. Schlossman S, *et al.* 1995. Leucocyte Typing V. Oxford University Press. New York. 2. Knapp W, *et al.* 1989. Leucocyte Typing IV. Oxford University Press. New York. 3. McMichael A, *et al.* Eds. 1987. Leucocyte Typing III Oxford University Press. New York. 4. Polyak MJ, *et al.* 2002. *Blood* 99:3256. (IP) 5. Mack CL, *et al.* 2004. *Pediatr. Res.* 56:79. (IHC)
RRID	AB_3675026 (BioLegend Cat. No. 302379) AB_3675026 (BioLegend Cat. No. 302380)

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, *et al.* 1993. *Cytometry* 14:196. 2. Tedder T, *et al.* 1994. *Immunol. Today* 15:450.
Gene ID	931

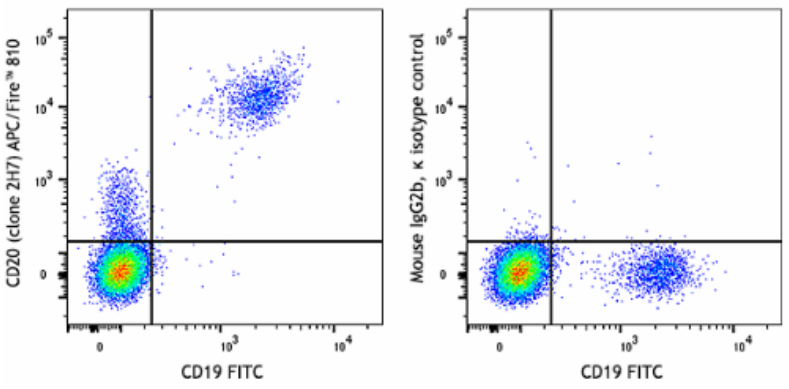
Related Protocols

- 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, Spark Violet™ 500 anti-human CD20, GMP Pacific Blue™ anti-human CD20, GMP PerCP/Cyanine5.5 anti-human CD20, Spark Violet™ 538 anti-human CD20, GMP PE/Cyanine7 anti-human CD20, Spark Blue™ 515 anti-human CD20, GMP APC/Fire™ 750 anti-human CD20, GMP PE anti-human CD20, Spark Blue™ 550 anti-human CD20 (Flexi-Fluor™), Spark Blue™ 574 anti-human CD20 (Flexi-Fluor™), Spark Red™ 718 anti-human CD20 (Flexi-Fluor™), Brilliant Violet 750™ anti-human CD20, APC/Fire™ 810 anti-human CD20, Alexa Fluor® 660 anti-human CD20, Spark YG™ 581 anti-human CD20 (Flexi-Fluor™)

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD19 (clone HIB19) FITC and anti-human CD20 (clone 2H7) APC/Fire™ 810 (left), or mouse IgG2b, κ APC/Fire™ 810 isotype control (right).

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