

## **Product Data Sheet**

## Pacific Blue™ anti-human CD20

Catalog # / Size: 302319 / 25 μg 302320 / 100 μg

302328 / 100 tests

**Isotype:** Mouse IgG2b,  $\kappa$ 

Workshop Number: IV B201

Reactivity: Human, Cross-Reactivity: Chimpanzee, Baboon, Cynomolgus, Rhesus,

Pigtailed Macaque, Capuchin Monkey, Squirrel Monkey

Preparation: The antibody was purified by affinity chromatography, and conjugated with

Pacific Blue<sup>™</sup> under optimal conditions. The solution is free of unconjugated

Pacific Blue™.

Formulation: test size: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium

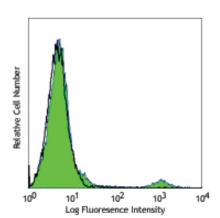
azide and 0.2% (w/v) BSA (origin USA).

µg sizes: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium

Concentration: test size: lot-specific; µg sizes: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C and protected from

prolonged exposure to light. Do not freeze.



Human peripheral blood lymphocytes were stained with anti-CD20 (clone 2H7) Pacific Blue™ (filled histogram), or mouse IgG2b, κ Pacific Blue™ (open histogram).

## **Applications:**

Applications: FC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For test size, the suggested use of this reagent for immunofluorescent staining is 5 μl per 10<sup>6</sup> cells in 100 μl volume. For μg sizes, the suggested use of this reagent for immunofluorescent staining is ≤0.5 μg per 10<sup>6</sup> cells in 100 μl

volume.

It is recommended that the reagent be titrated for optimal performance for each application.

\* 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.

Pacific Blue™ is a registered trademark of Molecular Probes, Inc. Pacific Blue™ dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

Application Notes: Additional reported applications (for the relevant formats) include: immunoprecipitation<sup>4</sup> and immunohistochemical staining of acetone-fixed frozen sections<sup>5</sup>.

- Application References: 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)

  - Mack CL, et al. 2004. Pediatr. Res. 56:79. (IHC)
    Davis ZB, et al. 2011. J Vis Exp. 49:2668. PubMed.
    Rusmini M, et al. 2013. PLoS One. 8:e59066. PubMed.

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<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.

Antigen References: 1. Hultin L, et al. 1993. Cytometry 14:196.

2. Tedder T, et al. 1994. Immunol. Today 15:450.

Application **Related Products: Product** Clone Cell Staining Buffer FC, ICC, ICFC

Pacific Blue™ Mouse IgG2b, κ Isotype Ctrl Human TruStain FcX™ (Fc Receptor Blocking Solution) FC, ICFC MPC-11 FC, ICC, ICFC



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