SONY

Product Data Sheet

PE/Dazzle™ 594 anti-human CD20

Catalog # / Size: 2111735 / 25 tests
2111740 / 100 tests

Clone: 2H7

Isotype: Mouse IgG2b, κ

Immunogen: Human tonsillar B cells

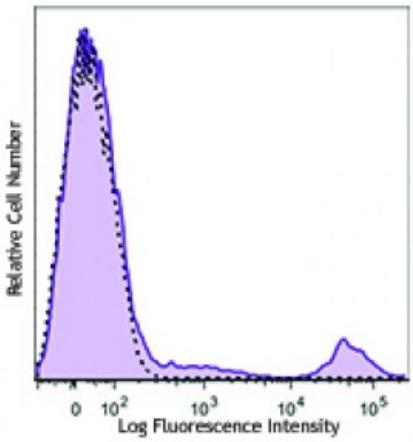
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Workshop Number: IV B201

Concentration: Lot-specific



Human peripheral blood lymphocytes were stained with CD20 PE/Dazzle™ 594 (clone 2H7) (filled histogram) or Mouse IgG2b, κ PE/Dazzle™ 594 (open histogram).

Applications:

Applications: Flow Cytometry

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 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

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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: immunoprecipitation4 and immunohistochemical staining of acetone-fixed frozen sections5.

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

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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.

Antigen References:

1. Hultin L, *et al.* 1993. *Cytometry* 14:196.
2. Tedder T, *et al.* 1994. *Immunol. Today* 15:450.