

Purified anti-human CD20

Catalog # / Size: 2111510 / 100 µg
2111505 / 25 µg

Clone: 2H7

Isotype: Mouse IgG2b, κ

Immunogen: Human tonsillar B cells

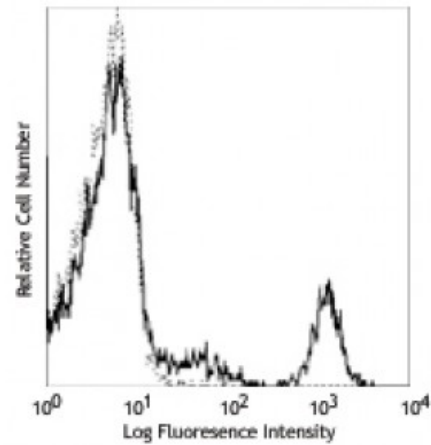
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Workshop Number: IV B201

Concentration: 0.5



Human peripheral blood lymphocytes were stained with purified anti-CD20 (clone 2H7) (solid line), or mouse IgG2b, κ (dashed line) followed by anti-mouse IgGs FITC.

Applications:

Applications: Other

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 ≤2.0 microg per million cells in 100 microL volume. For immunohistochemical staining on frozen tissue sections, the suggested use of this reagent is 5.0 - 10 microg per ml. It is recommended that the reagent be titrated for optimal performance for each application.

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:

- Schlossman S, *et al.* 1995. Leucocyte Typing V. Oxford University Press. New York.
- Knapp W, *et al.* 1989. Leucocyte Typing IV. Oxford University Press. New York.
- McMichael A, *et al.* Eds. 1987. Leucocyte Typing III Oxford University Press. New York.
- Polyak MJ, *et al.* 2002. *Blood* 99:3256. (IP)
- Mack CL, *et al.* 2004. *Pediatr. Res.* 56:79. (IHC)

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 Ca²⁺ 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** 1. Hultin L, *et al.* 1993. *Cytometry* 14:196.
References: 2. Tedder T, *et al.* 1994. *Immunol. Today* 15:450.