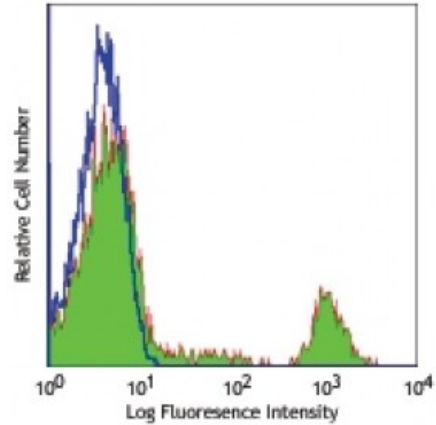


Alexa Fluor® 488 anti-human CD20

Catalog # / Size: 2111580 / 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 Alexa Fluor® 488 under optimal conditions.
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: NULL



Human peripheral blood lymphocytes were stained with anti-CD20 (clone 2H7) Alexa Fluor® 488 (filled histogram), or mouse IgG2b, κ Alexa Fluor® 488 (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.

* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 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: 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)

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. Homooligomeric 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.