

**APC/Cy7 anti-human CD20**

**Catalog # / Size:** 2111565 / 25 tests  
2111570 / 100 tests

**Clone:** 2H7

**Isotype:** Mouse IgG2b, κ

**Immunogen:** Human tonsillar B cells

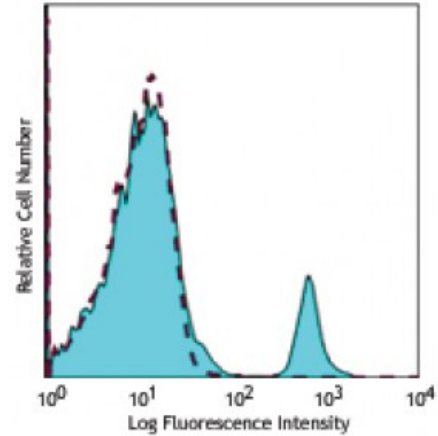
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with APC/Cy7 under optimal conditions. The solution is free of unconjugated APC/Cy7 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 anti-CD20 (clone 2H7) APC/Cy7 (filled histogram), or mouse IgG2b, κ APC/Cy7 (dashed line).

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 microL to 5 microL per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. 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 YNCEPANPSEKNPST which lies in the large extracellular loop of human CD20. 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:**
- 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)
  - Whittle JR, *et al.* 2014. *J Virol.* 88:4047. [PubMed](#)
  - Ratliff ML, *et al.* 2015. *J Immunol.* 194:940. [PubMed](#)
  - Lewis MJ, *et al.* 2015. *Am J Hum Genet.* 96:221. [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. Homooligomeric 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.