## **Product Data Sheet**

## PE/Cy7 anti-human CD20

Catalog # / Size: 2111555 / 25 tests

2111560 / 100 tests

Clone:

Isotype: Mouse IgG2b, κ

Human tonsillar B cells Immunogen:

Reactivity: Human

**Preparation:** The antibody was purified by affinity

> chromatography, and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7

and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

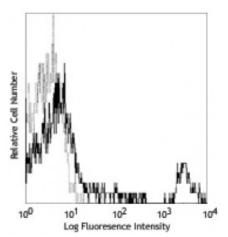
containing 0.09% sodium azide and

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

Workshop

**IV B201 Number:** 

**Concentration:** Lot-specific



Human peripheral blood lymphocytes were stained with anti-CD20 (clone 2H7) PE/Cy7 (solid line), or mouse IaG2b, κ PE/Cv7 (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 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

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

4. Polyak MJ, et al. 2002. Blood 99:3256. (IP)

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

6. Spencer AJ, et al. 2014. PLoS One. 9:100538. PubMed

7. Kusner LL, et al. 2014. PLoS One. 9:102231. 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.