Product Data Sheet

Pacific Blue™ anti-human CD19

Catalog # / Size: 2111160 / 100 tests

2111115 / 25 µg

2111120 / 100 µg

Clone: HIB19

Isotype: Mouse IgG1, κ

Reactivity: Human

Preparation: The antibody was purified by affinity

chromatography, and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated

Pacific Blue™.

Formulation: test size: Phosphate-buffered solution,

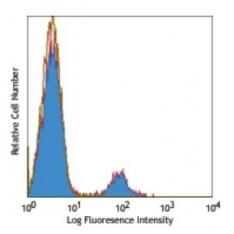
pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA). microg sizes: Phosphate-buffered solution, pH 7.2, containing 0.09%

sodium azide.

Workshop Number: V CD19.11

Concentration: test size: lot-specific; microg sizes: 0.5

mg/ml



Human peripheral blood lymphocytes stained with HIB19 Pacific Blue™

Applications:

Applications: Flow Cytometry

Recommended Usage:

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis.

 $\textbf{For test sizes}, \ \text{the suggested use of this reagent for immunofluorescent}$

staining is 5 microL per 10^6 cells in 100 microL volume.

For microg sizes, the suggested use of this reagent for immunofluorescent

staining is ≤ 0.5 microg per 10^6 cells in 100 microL volume.

It is recommended that the reagent be titrated for optimal performance for each

application.

* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

Application Notes:

Additional reported applications (for the relevant formats) include:

immunohistochemical staining of acetone-fixed frozen tissue sections⁸ and blocking of B cell proliferation. Clone HIB19 is not recommended for formalin-fixed paraffin-embedded sections. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No.

302214).

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. Bradbury L, et al. 1993. J. Immunol. 151:2915.

4. Joseph A, et al. 2010. J. Virol. 84:6645. PubMed

5. Wang X, et al. 2010. Haematologica. 95:884. (FC) PubMed

- 6. Walker JD, et al. 2009. J. Immunol. 182:1548. (Block) PubMed
- 7. Yoshino N, et al. 2000. Exp. Anim. (Tokyo) 49:97. (FC)
- 8. Hansen A, et al. 2002. Arthritis Rheum. 46:2160. (IHC)
- 9. Santos JM, et al. 2013. J Transl Med. 11:18. PubMed
- 10. Bartholomaeus P, et al. 2014. J. Immunol. 192:2091. PubMed
- 11. Steinsbo O, et al. 2014. Nat Commun. 5:4041. PubMed
- 12. Della-Torre E, et al. 2014. Ann Rheum Dis. PubMed
- 13. Tungatt K, et al. 2015. J Immunol. 194:463. PubMed

Description: CD19 is a 95 kD type I transmembrane glycoprotein also known as B4. It is a

member of the immunoglobulin superfamily expressed on B-cells (from pro-B to blastoid B cells, absent on plasma cells) and follicular dendritic cells. CD19 is involved in B cell development, activation, and differentiation. CD19 forms a complex with CD21 (CR2) and CD81 (TAPA-1), and functions as a BCR co-receptor.

Antigen 1. Tedder T, *et al.* 1994. *Immunol. Today* 15:437.

References: 2. Bradbury L, *et al.* 1993. *J. Immunol.* 151:2915.