

Technical Data Sheet

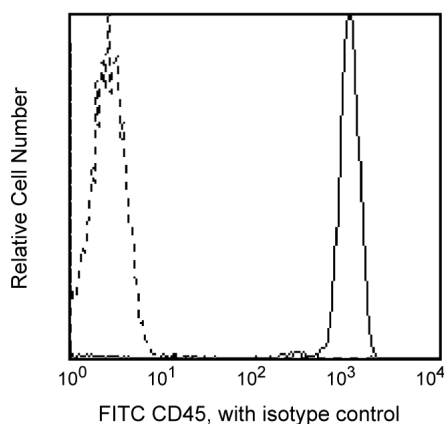
FITC Mouse Anti-Human CD45

Product Information

Material Number:	561865
Alternate Name:	PTPRC; LCA; L-CA; Leukocyte Common Antigen; T200; GP180; LY5
Size:	500 Tests
Vol. per Test:	5 µl
Clone:	HI30
Immunogen:	Human Peripheral Blood Leucocytes
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	IV N816
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The HI30 monoclonal antibody specifically binds to the 180, 190, 205, 220 kDa protein isoforms of CD45. CD45 is encoded by the *PTPRC* (Protein tyrosine phosphatase receptor type C) gene. CD45, also known as the leukocyte common antigen (LCA), is a member of the protein tyrosine phosphatase (PTP) family. It is present on all human leukocytes including lymphocytes, monocytes, granulocytes, eosinophils, and thymocytes. CD45 is absent from circulating erythrocytes, platelets, or mature erythroid cells of bone marrow and non-hemopoietic tissues.



Flow cytometric analysis of CD45 expression on human lymphocytes. Whole blood was stained with either FITC Mouse Anti-Human CD45 (Cat. No. 560976/555482/561865; solid line histogram) or FITC Mouse IgG1, κ Isotype Control (Cat. No. 555748; dashed line histogram). Erythrocytes were lysed with BD FACS™ Lysing Solution (Cat. No. 349202). Fluorescent histograms were derived from gated events with the side and forward light-scatter characteristics of viable lymphocytes. Flow cytometry was performed on a BD FACScan™ flow cytometry system.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

Application Notes

Application

Flow cytometry	Routinely Tested
----------------	------------------

Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 mL	(none)
555748	FITC Mouse IgG1, κ Isotype Control	100 Tests	MOPC-21
554657	Stain Buffer (BSA)	500 mL	(none)
349202	BD FACS™ Lysing Solution	100 mL	(none)
555899	Lysing Buffer	100 mL	(none)
555482	FITC Mouse Anti-Human CD45	100 Tests	HI30
560976	FITC Mouse Anti-Human CD45	25 Tests	HI30

BD Biosciences

bdbiosciences.com

United States 877.232.8995 Canada 866.979.9408 Europe 32.2.400.98.95 Japan 0120.8555.90 Asia Pacific 65.6861.0633 Latin America/Caribbean 55.11.5185.9995

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

© 2016 BD. BD, the BD Logo and all other trademarks are property of Becton, Dickinson and Company.

561865 Rev. 2



Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1×10^6 cells in a 100- μ l experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
6. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.

References

- Bradstock KF, Janossy G, Pizzolo G, et al. Subpopulations of normal and leukemic human thymocytes: an analysis with the use of monoclonal antibodies. *J Natl Cancer Inst.* 1980; 65(1):33-42. (Biology)
- Hermiston ML, Xu Z, Weiss A. CD45: a critical regulator of signaling thresholds in immune cells. *Annu Rev Immunol.* 2003; 21:107-137. (Biology)
- Knapp W, W. Knapp .. et al., ed. *Leucocyte typing IV : white cell differentiation antigens*. Oxford New York: Oxford University Press; 1989:1-1182. (Clone-specific)
- Loken MR, Brosnan JM, Bach BA, Ault KA. Establishing optimal lymphocyte gates for immunophenotyping by flow cytometry. *Cytometry.* 1990; 11(4):453-459. (Biology)
- Terry LA, Brown MH, Beverley PC. The monoclonal antibody, UCHL1, recognizes a 180,000 MW component of the human leucocyte-common antigen, CD45. *Immunology.* 1988; 64(2):331-336. (Biology)
- Terstappen LW, Levin J. Bone marrow cell differential counts obtained by multidimensional flow cytometry. *Blood Cells.* 1992; 18(2):311-330. (Biology)
- Trowbridge IS, Thomas ML. CD45: an emerging role as a protein tyrosine phosphatase required for lymphocyte activation and development. *Annu Rev Immunol.* 1994; 12:85-116. (Biology)
- Zola H. *Leukocyte and stromal cell molecules : the CD markers*. Hoboken, N.J.: Wiley-Liss; 2007(Biology)