

Technical Data Sheet

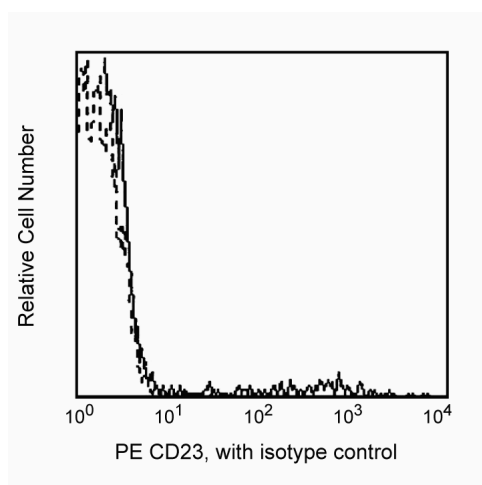
PE Mouse Anti-Human CD23

Product Information

Material Number:	561774
Alternate Name:	FCER2; FcεRII; Low affinity immunoglobulin epsilon Fc receptor; BLAST-2
Size:	25 tests
Vol. per Test:	20 µl
Clone:	M-L233
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	V CD23.15
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The M-L233 antibody specifically binds to the low affinity receptor for human IgE, FcεRII/CD23. CD23 is a type II membrane protein which can be expressed by B cells, monocytes, macrophages, eosinophils, platelets, and dendritic cells. CD23 can mediate IgE-dependent cytotoxicity and phagocytosis by macrophages and eosinophils. Soluble CD23 (sCD23) can be released by CD23-positive cells as a result of proteolytic cleavage of membrane CD23. Larger fragments of sCD23 (e.g., 25-37 kDa) retain their IgE-binding capacity whereas smaller fragments (i.e., ≤ 12 kDa) do not. Soluble CD23 may have immunoregulatory effects on the growth and differentiation of B cells and other cell types.



Profile of peripheral blood lymphocytes analyzed on a BD FACScan™ (BDIS, San Jose, CA)

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 R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes

Application

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

Recommended Assay Procedure:

The biotinylated M-L233 antibody is useful as a detector antibody in ELISA for measuring soluble CD23 (sCD23) protein levels in combination with clone M-L234 as the capture antibody.

Suggested Companion Products

Catalog Number	Name	Size	Clone
555749	PE Mouse IgG1, κ Isotype Control	100 tests	MOPC-21
554656	Stain Buffer (FBS)	500 ml	(none)

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.268.5430	32.53.720.550	0120.8555.90	65.6861.0633	0800.771.7157

For country-specific contact information, visit bdbiosciences.com/how_to_order/

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.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2011 BD



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. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
5. 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.
6. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
7. An isotype control should be used at the same concentration as the antibody of interest.

References

- Barclay NA, Brown MH, Birkeland ML, et al, ed. *The Leukocyte Antigen FactsBook*. San Diego, CA: Academic Press; 1997. (Biology)
- Delespesse G, Hofstetter H, Sarfati M. Low-affinity receptor for IgE (FcERII, CD23) and its soluble fragments. *Int Arch Allergy Immunol*. 1989; 90(1):41-44. (Biology)
- Gordon J, Millsum MJ, Flores-Romo L, Gillis S. Regulation of resting and cycling human B lymphocytes via surface IgM and the accessory molecules interleukin-4, CD23 and CD40. *Immunology*. 1989; 68(4):526-531. (Biology)
- Saeland S, Duvert V, Moreau I, Banchereau J. Human B cell precursors proliferate and express CD23 after CD40 ligation. *J Exp Med*. 1993; 178(1):113-120. (Biology)
- Schlossman S, Boumell L, et al, ed. *Leucocyte Typing V*. New York: Oxford University Press; 1995. (Clone-specific)