Technical Data Sheet

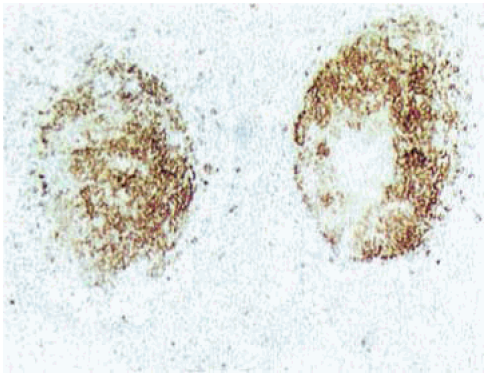
Purified Mouse Anti-Human CD23

Product Information

Material Number:	**550386**
Alternate Name:	FCER2; FcεRII; Low affinity immunoglobulin epsilon Fc receptor; BLAST-2
Size:	1.0 ml
Concentration:	62.5 µg/ml
Clone:	M-L233
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	V CD23.15
Storage Buffer:	Aqueous buffered solution containing BSA, goat serum, and ≤0.09% sodium azide.

Description

The M-L233 antibody specifically binds to human CD23, the low affinity receptor for human IgE (FcεRII). CD23 is a type II membrane glycoprotein that 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.



Immunohistochemical staining of B lymphocytes. *Frozen sections of normal human spleen was reacted with Purified Mouse Anti-Human CD23 (Cat. No. 550386) antibody. B lymphocytes can be identified by the intense brown labeling of their cell surface membranes. Amplification 20X.*

Preparation and Storage

Store undiluted at 4°C.

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

Application Notes

Application

Flow cytometry	Routinely Tested
Immunohistochemistry-frozen	Tested During Development
Immunohistochemistry-zinc-fixed	Tested During Development

Recommended Assay Procedure:

Immunohistochemistry: The M-L233 antibody is recommended to test for immunohistochemical staining of acetone-fixed frozen sections. Tissue tested was human spleen and tonsil. The antibody stains B cells and follicular dendritic cells. The isotype control recommended for use with this antibody is purified mouse IgG1 (Cat. No. 550878). For optimal indirect immunohistochemical staining, the M-L233 antibody should be titrated (1:10 to 1:50 dilution) and visualized via a three-step staining procedure in combination with polyclonal, biotin conjugated anti-mouse Igs (multiple adsorbed) (Cat. No. 550337) as the secondary antibody and Streptavidin-HRP (Cat. No. 550946) together with the DAB detection system (Cat. No. 550880). The clone M-L233 is not recommended for formalin-fixed paraffin embedded sections.

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.268.5430	32.2.400.98.95	0120.8555.90	65.6861.0633	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 stictly prohibited.

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

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2014 BD

Suggested Companion Products

Catalog Number	Name	Size	Clone
550337	Biotin Goat Anti-Mouse Ig (Multiple Adsorption)	1.0 ml	Polyclonal
551011	Anti-Mouse Ig HRP Detection Kit	200 tests	(none)
550880	DAB Substrate Kit	500 tests	(none)
550946	Streptavidin HRP	50 ml	(none)
559148	Antibody Diluent for IHC	125 ml	(none)
550878	Purified Mouse IgG1 κ Isotype Control	1.0 ml	MOPC-31C

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
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. Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.
6. This antibody has been developed for the immunohistochemistry application. However, a routine immunohistochemistry test is not performed on every lot. Researchers are encouraged to titrate the reagent for optimal performance.
7. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

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 SF, Boumsell L, Gilks W, et al, ed. *Leucocyte Typing V.* New York: Oxford University Press; 1995. (Clone-specific)

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.268.5430	32.2.400.98.95	0120.8555.90	65.6861.0633	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 stictly prohibited.

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

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2014 BD