

BD CD15 (MMA)

Monoclonal Antibodies Detecting Human Antigens

Form	Catalog number
Pure	347420
FITC	347423
V450	642917

Product availability varies by region. Contact BD Biosciences Customer Support or your local sales representative for information.

Research Applications

Research applications include studies of:

- Research on myeloid leukemias¹
- Myeloid differentiation¹
- Reed-Sternberg cells^{2,3}

Description

Specificity

The CD15 antibody recognizes a human myelomonocytic antigen.⁴ The structure recognized by CD15 antibodies is lacto-N-fucopentose III.⁴

Antigen distribution

The CD15 antigen is present on greater than 95% of mature peripheral blood eosinophils and neutrophils and is present at low density on circulating monocytes.¹ In lymphoid tissue, CD15 reacts with Reed-Sternberg cells of Hodgkin's disease and with granulocytes. CD15 reacts with few tissue macrophages and does not react with dendritic cells.^{2,3}

Clone

The CD15 antibody, clone MMA, is derived from the hybridization of P3-X63-Ag8.653 mouse myeloma cells with spleen cells from BALB/c mice immunized with the U-937 histiocytic cell line.

Composition

The CD15 antibody is composed of mouse IgM heavy chains and kappa light chains.

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

Product configuration

The following are supplied in buffer containing a stabilizer and a preservative.

Form	Number of tests	Volume per test (µL)	Amount provided (µg)	Total volume (mL)	Concentration (µg/mL)	Stabilizer	Preservative
Pure	100	20	100	2.0	50	Gelatin	0.1% Sodium azide
FITC	100	20	200	2.0	100	Gelatin	0.1% Sodium azide
V450 ^a	100	5	50	0.5	100	Gelatin	0.1% Sodium azide

^a BD Horizon™ V450

CAUTION Prolonged exposure of cells to paraformaldehyde can lead to increased autofluorescence in the violet channels. For overnight storage of stained cells, wash and resuspend in buffer without paraformaldehyde after 1 hour of fixation.

CAUTION Do not use ammonium chloride for lysing red cells when staining with a CD15 reagent. Granulocytes are lost when ammonium chloride is used.

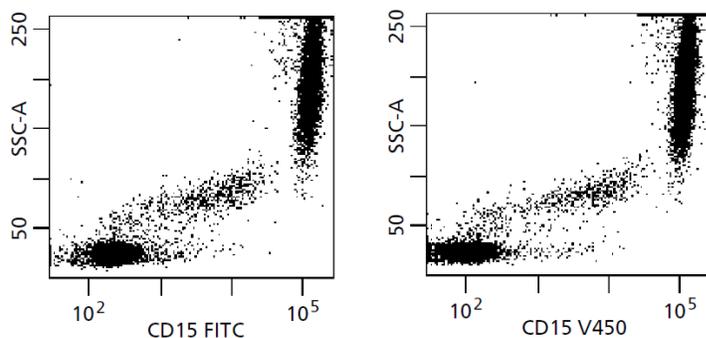
Procedure

Go to our website (bdbiosciences.com) or contact your local BD representative for the lyse/wash protocol for direct immunofluorescence.

Representative Data

Visit our website (bdbiosciences.com) or contact your local BD representative for the lyse/wash method for direct immunofluorescence.

Flow cytometric analysis was performed on whole blood stained with the indicated conjugated antibody. Laser excitation was at 405 nm and 488 nm. Representative data analyzed with a BD flow cytometer is shown in the following figure.



Handling and Storage

Store vials at 2–8 °C. Conjugated forms should not be frozen. Protect from exposure to light. Each reagent is stable until the expiration date shown on the bottle label when stored as directed.

Warning

All biological specimens and materials coming in contact with them are considered biohazards. Handle as if capable of transmitting infection^{5,6} and dispose of with proper precautions in accordance with federal, state, and local regulations. Never pipette by mouth. Wear suitable protective clothing, eyewear, and gloves.

Go to regdocs.bd.com to download the Safety Data Sheet.

Characterization

To ensure consistently high-quality reagents, each lot of antibody is tested for conformance with characteristics of a standard reagent.

Warranty

Unless otherwise indicated in any applicable BD general conditions of sale for non-US customers, the following warranty applies to the purchase of these products.

THE PRODUCTS SOLD HEREUNDER ARE WARRANTED ONLY TO CONFORM TO THE QUANTITY AND CONTENTS STATED ON THE LABEL OR IN THE PRODUCT LABELING AT THE TIME OF DELIVERY TO THE CUSTOMER. BD DISCLAIMS HEREBY ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE AND NONINFRINGEMENT. BD'S SOLE LIABILITY IS LIMITED TO EITHER REPLACEMENT OF THE PRODUCTS OR REFUND OF THE PURCHASE PRICE. BD IS NOT LIABLE FOR PROPERTY DAMAGE OR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING PERSONAL INJURY, OR ECONOMIC LOSS, CAUSED BY THE PRODUCT.

References

1. Hanjan SN, Kearney JF, Cooper MD. A monoclonal antibody (MMA) that identifies a differentiation antigen on human myelomonocytic cells. *Clin Immunol Immunopathol*. 1982;23:172-188.
2. Hsu SM, Jaffe ES. Leu-M1 and peanut agglutinin stain the neoplastic cells of Hodgkin's Disease. *Amer J Clin Path*. 1984;82:29.
3. Pinkus GS, Thomas P, Said JW. Leu-M1—A marker for Reed-Sternberg cells in Hodgkin's disease: an immunoperoxidase study of paraffin-embedded tissues. *Am J Pathol*. 1985;119:244.
4. Skubitz K, Balke J, Ball E, et al. Report on the CD15 cluster workshop. In: Knapp W, Dörken B, Gilks W, et al., eds. *Leucocyte Typing IV: White Cell Differentiation Antigens*. New York, NY: Oxford University Press; 1989:800-805.
5. *Protection of Laboratory Workers from Occupationally Acquired Infections; Approved Guideline—Fourth Edition*. Wayne, PA: Clinical and Laboratory Standards Institute; 2014. CLSI document M29-A4.
6. Centers for Disease Control and Prevention. 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings. <https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html>. Accessed March 12, 2019.

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For US patents that may apply, see bd.com/patents.

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