Monoclonal Antibodies Detecting Human Antigens

CD30 (Ber-H83)

Form	Catalog number
FITC	341644
PE	341645

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

RESEARCH APPLICATIONS

Research applications include studies of:

- Hodgkin's disease and Reed-Sternberg cells[1,2]
- Lymphoproliferative disorders[2]
- Embryonal carcinomas[2]
- $CD30^+$ non-Hodgkin's lymphoma (NHL), including anaplastic large-cell lymphoma (ALCL)[2]
- B-cell differentiation (B-NHL)[2]
- Activation and apoptosis[2,3]

DESCRIPTION

Specificity

The CD30 antibody recognizes a 120-kilodalton (kDa) type I transmembrane glycoprotein.[3] The CD30 antigen belongs to the tumor necrosis factor receptor/nerve growth factor receptor (TNFR/NGFR) superfamily.[3]

Antigen distribution

The CD30 antigen is a receptor and an activation marker. It is expressed by a small subset of extrafollicular activated T and B cells, B cells at the rim of germinal centers, lung macrophages, activated natural killer (NK) cells, endothelial cells, and decidual cells. CD30 antigen is present on primary and cultured Hodgkin's and Reed-Sternberg cells and might aid in the differential diagnosis of Hodgkin's disease.[1,2] It is also found on major categories of NHLs, particularly ALCL,[3] adult T-cell leukemia, and embryonic carcinomas.[1,2] CD30 interaction with CD30 ligand (CD30L) can elicit multidirectional signals leading to either activation or apoptosis.[2]

Clone

The CD30 antibody, clone Ber-H83,[4,5] is derived from the hybridization of NS-1 mouse myeloma cells with spleen cells from BALB/c mice immunized with Co cells.

Composition

The CD30 antibody is composed of mouse IgG_1 heavy chains and kappa light chains.

Product configuration

The following are supplied in phosphate buffered saline (PBS) containing a stabilizer and a preservative.

Form	Number of tests	Volume per test (µL)[a]	Amount provided (µg)	Total volume (mL)	Concentration (µg/mL)	Stabilizer	Preservative
FITC	50	20	3	1.0	3	Gelatin	0.1% Sodium azide
PE	50	20	3	1.0	3	Gelatin	0.1% Sodium azide

a. Volume required to stain 10^6 cells.

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

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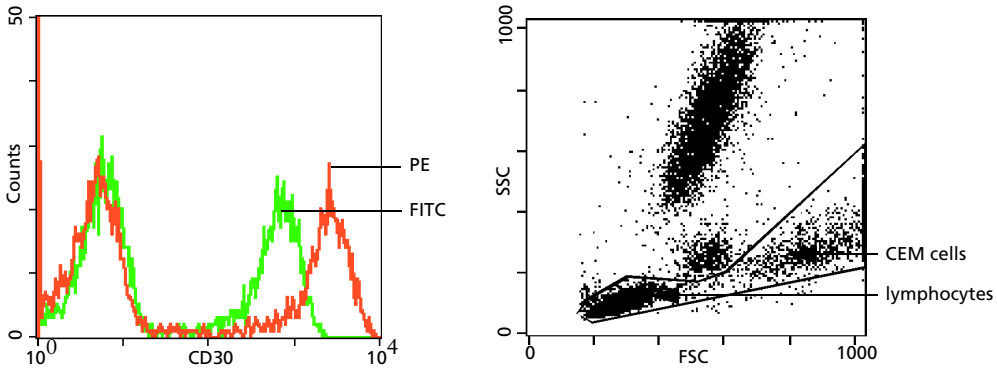
PROCEDURE

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

REPRESENTATIVE DATA

Performed on whole blood mixed with CEM cells and gated on the lymphocyte/CEM fraction. Laser excitation is at 488 nm.

Figure 1 Representative data analyzed with a BD FACS™ brand flow cytometer



HANDLING AND STORAGE

Store vials at 2°C–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[6,7] 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.

CHARACTERIZATION

To ensure consistently high-quality reagents, each lot of antibody is tested for conformance with characteristics of a standard reagent. Representative flow cytometric data is included in this data sheet.

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

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4. Schwarting R, Stein H. Cluster report: CD30. In: Knapp W, Dörken B, Gilks WR, et al, eds. *Leucocyte Typing IV: White Cell Differentiation Antigens*. New York, NY: Oxford University Press; 1989:419-421.
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6. *Protection of Laboratory Workers from Occupationally Acquired Infections; Approved Guideline — Third Edition.* Wayne, PA: Clinical and Laboratory Standards Institute; 2005. CLSI document M29-A3.

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PATENTS AND TRADEMARKS