

BD CD43 (1G10)

Monoclonal Antibodies Detecting Human Antigens

Form Catalog number

APC-H7 655407

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

Research Applications

Research applications include:

- Research on T cell-macrophage interactions¹
- Research on neutrophil spreading and movement^{2,3}
- Study of *Streptococcus gordonii* DL1 binding to myeloid cells⁴

Description

Specificity

The CD43 antibody reacts specifically with the major 95–135-kilodalton (kDa) sialoglycoprotein found on most human leucocytes.⁵ The CD43 antigen is also known as leukosialin or sialophorin.

Antigen distribution

The CD43 antigen is expressed on T cells, natural killer (NK) cells, pre-B and activated B cells,⁵ granulocytes,⁶ and neutrophils.³ The CD43 antigen is differentially expressed on subpopulations of mononuclear phagocytic cells.⁷ It is not present on most peripheral blood resting B cells, erythrocytes, and non-hematopoietic cells.⁵ Additionally, expression of the CD43 antigen by committed myeloid, erythroid, and lymphoid progenitors has been reported.

The CD43 antigen may be involved in the regulation of B, T, and NK cell function.^{5,8–10} The CD43 antigen plays a role in cell adhesion, which can be positive or negative, depending on the context.^{2,11} The CD43 antigen serves as a counter-receptor for CD169, the prototypical member of the sialic acid binding Ig-like lectins (Siglec) family expressed on macrophages.¹

Clone

The CD43 antibody, clone 1G10,⁵ is derived from the hybridization of X63 mouse myeloma cells with spleen cells isolated from mice immunized with a lymph node suspension from a patient with Hodgkin lymphoma.

Composition

The CD43 antibody is composed of mouse IgG₁ heavy chains and kappa light chains.

Product configuration

The following is 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
APC-H7	100	5	25	0.5	50	BSA	CMIT/MIT (3:1)

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

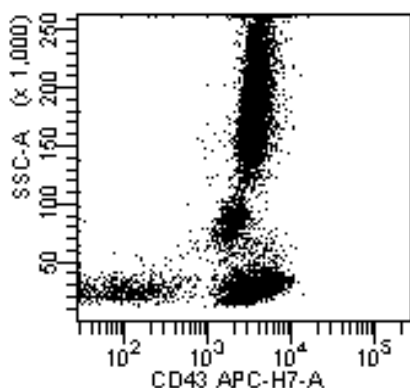
CAUTION Some APC-H7 conjugates show changes in their emission spectra with prolonged exposure to paraformaldehyde or light. For overnight storage of stained cells, wash and resuspend in buffer without paraformaldehyde after 1 hour of fixation.

Procedure

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

Representative Data

Flow cytometric analysis was performed on whole blood stained with the indicated conjugated antibody. Laser excitation was at 635 nm. Representative data analyzed with a BD flow cytometer is shown in the following plot.



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^{12,13} 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.

The APC-H7 conjugate contains a mixture of 0.00236% 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one [CMIT/MIT (3:1)], CAS number 55965-84-9. These reagents are classified as hazardous according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

	Warning
	H317: May cause an allergic skin reaction. H412: Harmful to aquatic life with long lasting effects.
Prevention	P261: Avoid breathing dust/fume/gas/mist/vapors/spray. P272: Contaminated work clothing should not be allowed out of the workplace. P280: Wear protective gloves/protective clothing/eye protection/face protection. P273: Avoid release to the environment.

	Warning
Response	P302+P352: IF ON SKIN: Wash with plenty of water. P333+P313: If skin irritation or rash occurs: Get medical advice/attention. P362+P364: Take off contaminated clothing and wash it before reuse.
Disposal	P501: Dispose of contents/container to an approved facility in accordance with local, regional, national and international regulations.

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. 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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