

**Monoclonal
Antibodies
Detecting
Human
Antigens**

CD14 (MφP9)

Form	Catalog number	Form	Catalog number
Pure	347490	APC	340436
FITC	347493	APC-Cy7	333945
PE	347497	APC-H7	641394
PerCP	340585	V500-C	647459

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

**RESEARCH
APPLICATIONS**

Research applications include:

- Identification and enumeration of mature monocytes in peripheral blood
- Study of monocyte-derived dendritic cells¹⁻³
- Study of inflammatory disease⁴

DESCRIPTION

Specificity

The CD14 antibody recognizes a human monocyte/macrophage antigen with a molecular weight of 55 kilodaltons (kDa).⁵

Antigen distribution

The CD14 antigen is present on the majority of normal peripheral blood monocytes.⁶ CD14 has weak reactivity with peripheral blood granulocytes.⁷

Clone

The CD14 antibody, clone MφP9,^{8,9} is derived from hybridization of Sp2/0 mouse myeloma cells with spleen cells from BALB/c mice immunized with peripheral blood monocytes from a patient with rheumatoid arthritis.

Composition

The CD14 antibody is composed of mouse IgG_{2b} 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
Pure	100	20	50.0	2.0	25	Gelatin	0.1% Sodium azide
FITC	100	20	50.0	2.0	25	Gelatin	0.1% Sodium azide
PE	100	20	100.0	2.0	50	Gelatin	0.1% Sodium azide
PerCP	50	20	25.0	1.0	25	Gelatin	0.1% Sodium azide
APC	100	5	25.0	0.5	50	Gelatin	0.1% Sodium azide
APC-Cy TM 7	100	5	25.0	0.5	50	Gelatin	0.1% Sodium azide
APC-H7	100	5	12.5	0.5	25	BSA	ProClin® 300
V500-C ^b	100	5	50.0	0.5	100	BSA	ProClin® 950

a. Volume required to stain 10⁶ cells.

b. BD Horizon™ V500-C.

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

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CAUTION Some APC-Cy7 conjugates, and to a lesser extent 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.

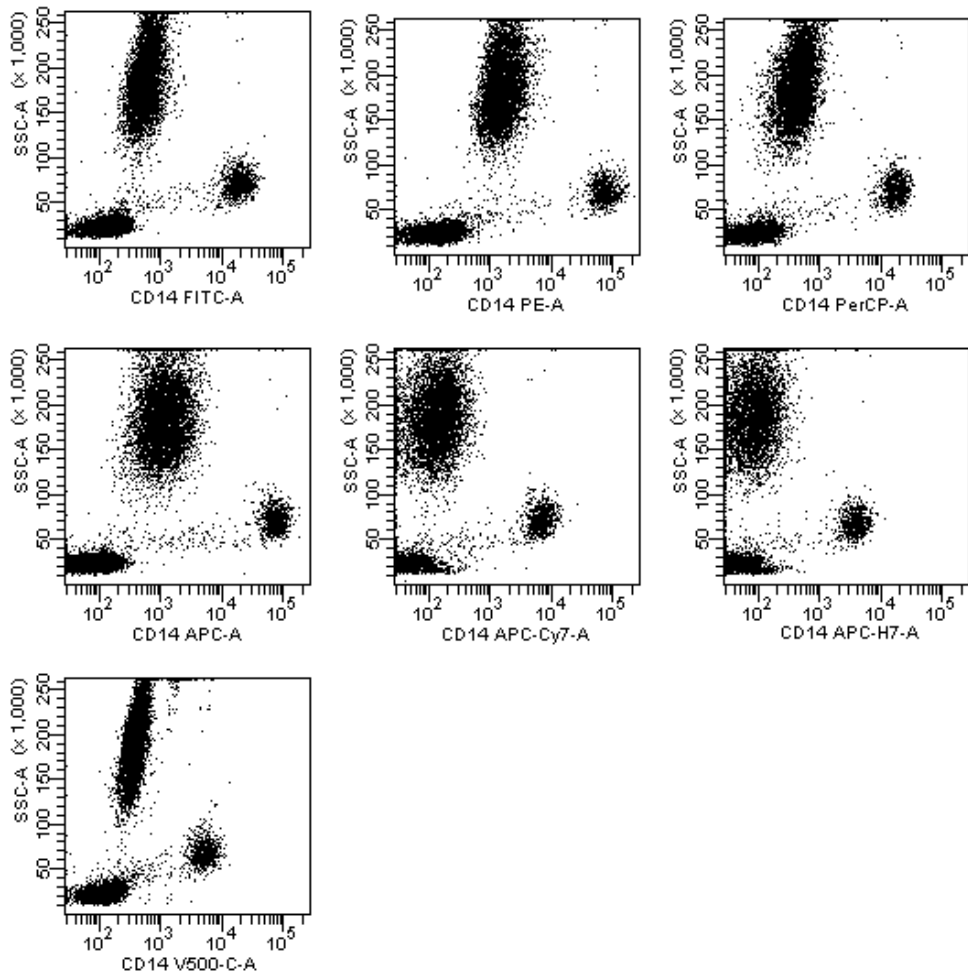
CAUTION Prolonged exposure of cells to paraformaldehyde can lead to increased autofluorescence in the violet channels. For overnight storage of stained cells, wash and resuspend in buffer without paraformaldehyde after 1 hour of fixation.

PROCEDURE

Visit 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 405 nm, 488 nm, or 635 nm. Representative data analyzed with a BD FACS™ brand flow cytometer is shown in the following plots.



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^{10,11} 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.

Some reagents are bottled with ProClin 300, and contain 0.003% of a mixture of CMIT/MIT (3:1), CAS number 55965-84-9.



Warning

H317 May cause an allergic skin reaction.

Wear protective gloves/eye protection. Wear protective clothing. Avoid breathing mist/vapours/spray. If skin irritation or rash occurs: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. Dispose of contents/container in accordance with local/regional/national/international regulations.

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.

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**PATENTS AND
TRADEMARKS**

APC-Cy7: US Patent 5,714,386

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