

# CD11c (B-Ly6)

Form	Catalog number
PerCP-Cy™5.5	658330
PE-Cy™7	652358
BV605	663807

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

## RESEARCH APPLICATIONS

Research applications include:

- Enumeration of monocytes and macrophages<sup>1</sup>
- Studies of complement receptors<sup>2</sup>
- Investigation into dendritic cell subsets in peripheral blood and lymphoid tissues<sup>3-6</sup>
- Immunophenotyping of leukemias and lymphomas<sup>7</sup>

## DESCRIPTION

### Specificity

The CD11c antibody specifically binds to a 150-kilodalton (kDa) type I integral membrane glycoprotein. The CD11c antigen is also known as p150, integrin alpha X (integrin  $\alpha$ X), and CR4.<sup>8</sup>

### Antigen distribution

The CD11c antigen is expressed on monocytes, macrophages, dendritic cells, granulocytes, neutrophils, NK cells, and certain subsets of T and B lymphocytes.<sup>2</sup> It is also expressed on hairy cell leukemias and on some acute myeloid leukemias.<sup>9,10</sup>

The CD11c antigen associates with CD18 (p95) to form the CD11c/CD18 heterodimer that binds to fibrinogen<sup>11</sup> and has been reported to be a receptor for iC3b, ICAM-1, and VCAM-1.<sup>2,12,13</sup> Reports indicate that CD11c/CD18 plays a role as an adhesion molecule that mediates cellular binding to ligands expressed on stimulated endothelium.<sup>14</sup>

### Clone

The CD11c antibody, clone B-Ly6,<sup>15</sup> is derived from the hybridization of X63 mouse myeloma cells with spleen cells isolated from BALB/c mice immunized with a cell suspension isolated from the spleen of a patient with hairy cell leukemia.<sup>10</sup>

### Composition

The CD11c antibody is composed of mouse IgG<sub>1</sub> heavy chains and kappa light chains.

### Product configuration

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

Form	Number of tests	Volume per test (μL) <sup>a</sup>	Amount provided (μg)	Total volume (mL)	Concentration (μg/mL)	Stabilizer	Preservative
PerCP-Cy5.5	50	20	13	1	13	Gelatin	0.1% Sodium azide
PE-Cy7	100	5	25	0.5	50	BSA	0.1% Sodium azide
BV605 <sup>b</sup>	100	5	100	0.5	200	BSA	0.09% Sodium azide

a. Volume required to stain 10<sup>6</sup> cells.

b. BD Horizon Brilliant™ Violet 605

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

## PROCEDURE

Visit our website ([bdbiosciences.com](http://bdbiosciences.com)) or contact your local BD representative for the lyse/wash protocol for direct immunofluorescence.

**CAUTION** Some PE-Cy7 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.

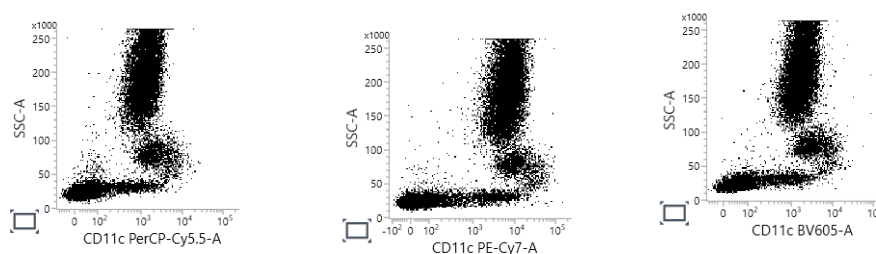
**CAUTION** Prolonged exposure of cells to paraformaldehyde can lead to increased autofluorescence in the violet channels. For overnight storage of stained cells, wash and resuspend in buffer without paraformaldehyde after 1 hour of fixation.

**CAUTION** For optimal results, use BD Horizon™ Brilliant Stain Buffer any time two or more BD Horizon Brilliant™ reagents are used in the same multicolor staining cocktail.

## REPRESENTATIVE DATA

Flow cytometric analysis was performed on whole blood stained with the indicated conjugated antibody. Laser excitation was at 405 nm or 488 nm.

The BV605 conjugates are read off the violet laser using a 606/36 filter. Representative data analyzed with a BD FACST™ brand flow cytometer is shown in the following plots. The BV605 conjugate in the new formulation is shown in the second CD11c BV605-A vs SSC-A dot plot.



## 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<sup>16,17</sup> 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.

Visit [regdocs.bd.com](http://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.

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## REFERENCES

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## PATENTS AND TRADEMARKS

BV605 is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,227,187; 8,455,613; 8,575,303; or 8,354,239.

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