CD11c antibodies, mouse

For research use only

9 µg equal 60 tests, 30 µg equal 200 tests. One test corresponds to labeling of 10^6 cells.

Product	Content	Order no.
CD11c-FITC	9 µg in 300 µL	130-102-798
CD11c-FITC	30 µg in 1 mL	130-102-466
CD11c-PE	9 µg in 300 µL	130-102-799
CD11c-PE	30 µg in 1 mL	130-102-545
CD11c-APC	9 µg in 300 µL	130-102-800
CD11c-APC	30 µg in 1 mL	130-102-493
CD11c-VioBlue	9 µg in 300 µL	130-102-797
CD11c-VioBlue	30 µg in 1 mL	130-102-413
CD11c-PE-Vio770	9 µg in 300 µL	130-107-194
CD11c-PE-Vio770	30 µg in 1 mL	130-107-139
CD11c-APC-Vio770	9 µg in 300 µL	130-107-514
CD11c-APC-Vio770	30 µg in 1 mL	130-107-461
CD11c-PerCP-Vio700	9 µg in 300 µL	130-103-876
CD11c-PerCP-Vio700	30 µg in 1 mL	130-103-806
CD11c-Biotin	9 µg in 300 µL	130-101-999
CD11c-Biotin	30 µg in 1 mL	130-101-929

Warnings

Reagents contain sodium azide. Under acidic conditions sodium azide yields hydrazoic acid, which is extremely toxic. Azide compounds should be diluted with running water before discarding. These precautions are recommended to avoid deposits in plumbing where explosive conditions may develop.

Technical data and background information

Antigen	CD11c
Clone	N418
Isotype	hamster IgG
Alternative names of antigen	ITGAX, CR4, p150, 95, CR4, integrin αX, N418
Molecular mass of antigen [kDa]	127
Distribution of antigen	B cells, dendritic cells, granulocytes, leukemia cells, lymphocytes, macrophages, monocytes, myeloid cells, NK cells, T cells
Product format	Antibodies are supplied in buffer containing stabilizer and 0.05% sodium azide.
Fixation	Cells should be stained prior to fixation, if formaldehyde is used as a fixative.

Storage	Store protected from light at 2–8 °C. Do not freeze.

The mouse CD11c antigen is present in dendritic cells in lymphoid organs and blood, in Langerhans cells in the epidermis, in dendritic cell progenitors in the bone marrow, and in *in vitro* generated bone marrow–derived dendritic cells. In spleen and lymph node, CD11c is expressed at high levels on conventional $CD11c^{+}CD45R^{-}mPDCA\text{-}1^{-}$ dendritic cells, and at moderate levels on $CD11c^{+}CD45R^{+}$ $mPDCA\text{-}1^{+}$ plasmacytoid dendritic cells. CD11c is reported to be weakly expressed on NK cells, B cells, and T cell subsets. About 1–3% of splenocytes, 2% of bone marrow cells, as well as <1% of lymph node cells and thymocytes express CD11c.

Reagent requirements

- Buffer: Prepare a solution containing phosphate-buffered saline (PBS), pH 7.2, 0.5% bovine serum albumin (BSA), and 2 mM EDTA by diluting MACS® BSA Stock Solution (# 130-091-376) 1:20 with autoMACS® Rinsing Solution (# 130-091-222). Keep buffer cold (2−8 °C).
  Note: EDTA can be replaced by other supplements such as anticoagulant citrate dextrose formula-A (ACD-A) or citrate phosphate dextrose (CPD). Buffers or media containing Ca^{2+} or Mg^{2+} are not recommended for use.
- (Optional) FcR Blocking Reagent, mouse (# 130-092-575) to avoid Fc receptor–mediated antibody labeling.
- (Optional) Fluorochrome-conjugated anti-biotin antibodies, e.g., Anti-Biotin-PE (# 130-090-756) as secondary antibody reagent in combination with biotinylated antibodies.
- (Optional) Propidium Iodide Solution (# 130-093-233) for flow cytometric exclusion of dead cells without fixation.
- (Optional) Fixation and Dead Cell Discrimination Kit (# 130-091-163) for cell fixation and flow cytometric exclusion of dead cells.

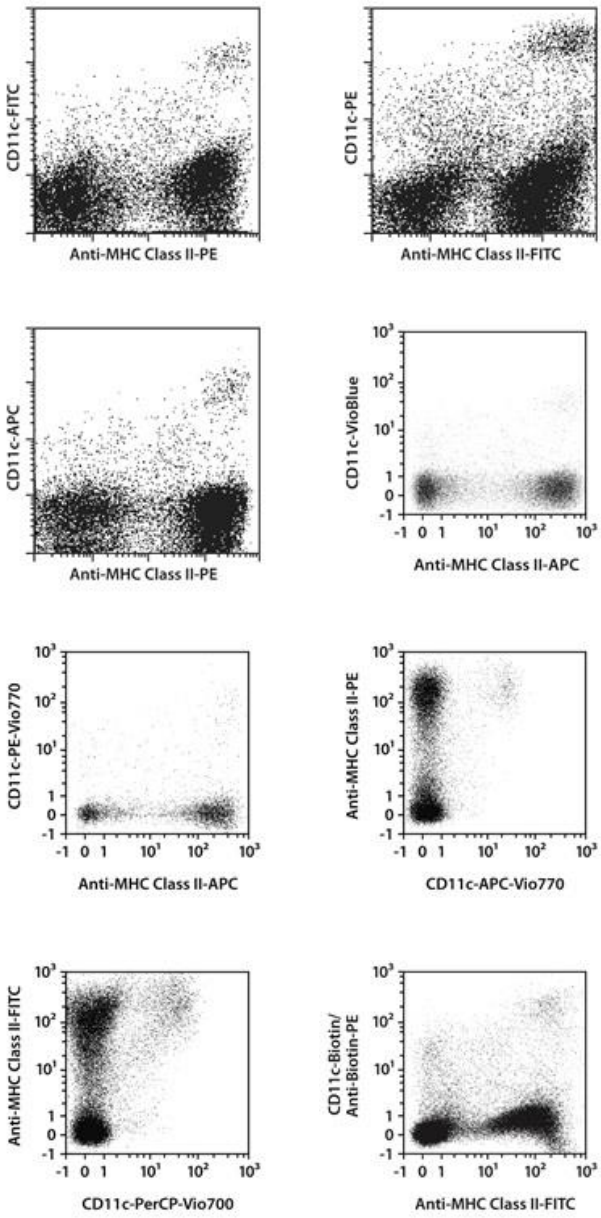
Protocol for cell surface staining

- The recommended antibody dilution for labeling of cells and subsequent analysis by flow cytometry is 1:10 for up to 10^6 cells/50 µL of buffer.
- Volumes given below are for up to 10^6 nucleated cells. When working with fewer than 10^6 cells, use the same volumes as indicated. When working with higher cell numbers, scale up all reagent volumes and total volumes accordingly (e.g. for 2×10^6 nucleated cells, use twice the volume of all indicated reagent volumes and total volumes).

1. Determine cell number.
2. Centrifuge cell suspension at 300×g for 10 minutes. Aspirate supernatant completely.
3. Resuspend up to 10^6 nucleated cells per 45 µL of buffer.
4. Add 5 µL of the antibody.
5. Mix well and incubate for 10 minutes in the dark in the refrigerator (2−8 °C).
   Note: Higher temperatures and/or longer incubation times may lead to non-specific cell labeling. Working on ice requires increased incubation times.
6. Wash cells by adding 1−2 mL of buffer and centrifuge at 300×g for 10 minutes. Aspirate supernatant completely.
7. (Optional) If biotinylated antibody was used, resuspend the cell pellet in 100 µL of buffer, add 10 µL of fluorochrome-conjugated anti-biotin antibody, and continue as described in steps 5 and 6.
8. Resuspend cell pellet in a suitable amount of buffer for analysis by flow cytometry or fluorescence microscopy.

Examples of immunofluorescent staining

Mouse splenocytes were stained with CD11c antibodies as well was with Anti-MHC Class II antibodies and analyzed by flow cytometry using the MACSQuant® Analyzer. Cell debris and dead cells were excluded from the analysis based on scatter signals and propidium iodide fluorescence.



Warranty

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Miltenyi Biotec GmbH | Friedrich-Ebert-Straße 68 | 51429 Bergisch Gladbach | Germany | Phone +49 2204 8306-0 | Fax +49 2204 85197 | macs@miltenyibiotec.de | **www.miltenyibiotec.com**
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