Technical Data Sheet

Alexa Fluor® 647 Mouse Anti-Human CD11c

Product Information

Material Number: 565912
Alternate Name: ITGAX; AlphaX Integrin; Axb2; Integrin alpha-X; CR4; SLEB6; p150,95 alpha
Size: 0.1 mg
Concentration: 0.2 mg/ml
Clone: 3.9
Immunogen: Human monocytes and synovial cells
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Human
Workshop: III 278; IV M66
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 3.9 monoclonal antibody specifically binds to CD11c, which is also known as Integrin alpha X (αX Integrin/ITGAX), or p150,95 Integrin alpha chain. CD11c is a ~150 kDa type I transmembrane glycoprotein. It is expressed on monocytes, macrophages, granulocytes, NK cells, dendritic cells, and subsets of B and T cells. It associates with CD18 (Integrin beta 2/β2 Integrin) to form the CD11c/CD18 complex, which is also known as p150,95 Integrin, or the Type 4 Complement Receptor (CR4). CD11c/CD18 binds fibrinogen and reportedly serves as a receptor for iC3b and ICAM-1/CD54. CD11c/CD18 functions as an adhesion molecule that mediates cellular binding to ligands expressed on stimulated epithelium and endothelium. The 3.9 monoclonal antibody crossreacts with CD11c expressed by Rhesus macaque leucocytes.

Multiparameter flow cytometric analysis of CD11c expression on human peripheral blood leucocyte populations.

Human whole blood (collected with heparin as the preferred anticoagulant rather than EDTA) was stained with either Alexa Fluor® 647 Mouse IgG1, κ Isotype Control (Cat. No. 565571; Left Plot) or Alexa Fluor® 647 Mouse Anti-Human CD11c antibody (Cat. No. 565911/565912; Right Plot) at 1 µg/test. Erythrocytes were lysed with BD FACS Lysing Solution (Cat. No. 349202). Two-parameter pseudocolor dot plots showing the correlated expression of CD11c (or Ig Isotype control staining) versus side light-scatter (SSC-A) signals were derived from gated events with the forward and side light-scatter characteristics of intact leucocyte populations. Flow cytometric analysis was performed using a BD FACS Canto™ Flow Cytometer System. Data shown on this Technical Data Sheet are not lot specific.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated to Alexa Fluor® 647 under optimum conditions, and unreacted Alexa Fluor® 647 was removed.

Application Notes

Application

Flow cytometry Routinely Tested
**Recommended Assay Procedure:**

Note: The binding of the 3.9 antibody to CD11c is divalent cation dependent. Therefore, heparin is recommended for use as the blood anticoagulant rather than the EDTA chelating agent that might adversely affect 3.9 antibody binding and cellular staining.

**Suggested Companion Products**

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<th>Name</th>
<th>Size</th>
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<td>565571</td>
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<td>Lysing Buffer</td>
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**Product Notices**

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
5. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
6. Alexa Fluor® 647 fluorochrome emission is collected at the same instrument settings as for allophycocyanin (APC).
7. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
8. Species testing during development may have been performed with a different format of the same clone. Selected applications have been tested for cross-reactivity.

**References**


