

Technical Data Sheet

APC-R700 Mouse Anti-Human CD11c

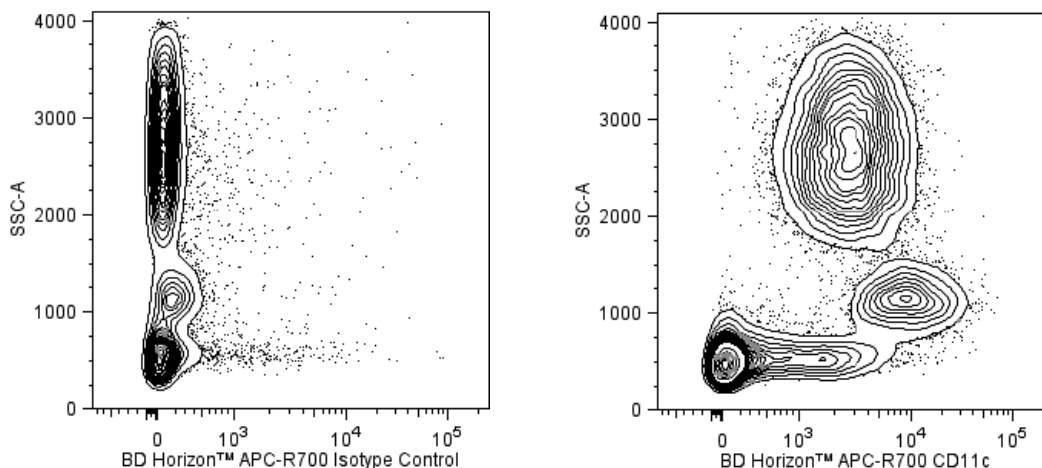
Product Information

Material Number:	566610
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 Tested in Development: Rhesus
Workshop:	III 278; IV M66
Storage Buffer:	Aqueous buffered solution containing BSA, protein stabilizer, glycerol and $\leq 0.09\%$ sodium azide.

Description

The 3.9 monoclonal antibody specifically binds to CD11c, which is also known as Integrin alpha X (α X 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/ β 2 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.

This antibody was conjugated to BD Horizon APC-R700, which has been developed exclusively by BD Biosciences as a better alternative to Alexa Fluor® 700. APC-R700 excites and emits at similar wavelengths to Alexa Fluor® 700 yet exhibits significantly improved brightness. This dye can be excited by the red laser and detected with the same filter set as Alexa Fluor® (eg, 730/45-nm filter).



Flow cytometric analysis of CD11c expression on human peripheral blood leucocytes. Human whole blood (collected with heparin as the preferred anticoagulant rather than EDTA) was stained with either BD Horizon™ APC-R700 Mouse IgG1, κ Isotype Control (Cat. No. 564974; Left Plot) or BD Horizon APC-R700 Mouse Anti-Human CD11c antibody (Cat. No. 566609/566610; Right Plot) at 1 μ g/test. Erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). Two-parameter flow cytometric contour 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 viable leucocyte populations. Flow cytometric analysis was performed using a BD LSRFortessa™ Cell Analyzer System. Routine flow cytometric analysis is performed on human peripheral blood leucocytes. Data shown on this Technical Data Sheet are not lot specific.

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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 with BD Horizon APC-R700 under optimum conditions, and unconjugated antibody and free BD Horizon APC-R700 were 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

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)
555899	Lysing Buffer	100 mL	(none)
349202	BD FACS™ Lysing Solution	100 mL	(none)
564974	APC-R700 Mouse IgG1, κ Isotype Control	0.1 mg	X40
566609	APC-R700 Mouse Anti-Human CD11c	25 µg	3.9

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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. 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.
5. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
7. Species testing during development may have been performed with a different format of the same clone. Selected applications have been tested for cross-reactivity.
8. Please refer to www.bdbiosciences.com/pharming/protocols for technical protocols.

References

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