

Technical Data Sheet

APC-R700 Mouse Anti-Human CD11c

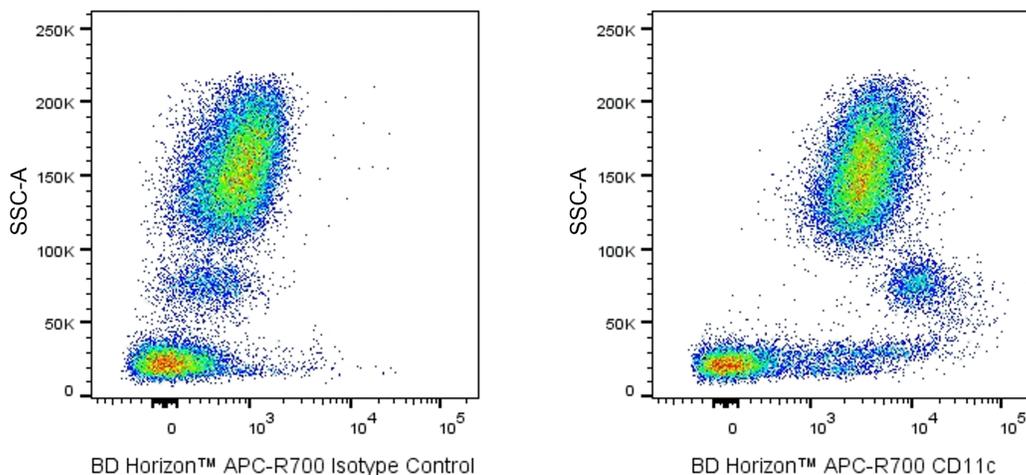
Product Information

Material Number:	566875
Alternate Name:	ITGAX; integrin alpha X; CD11C; p150 95 integrin alpha chain; SLEB6
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	BU15 (also known as BU-15; Bu-15)
Immunogen:	Human Synovial Fluid Dendritic Cells
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	III 256; V S143
Storage Buffer:	Aqueous buffered solution containing BSA, protein stabilizer, glycerol and $\leq 0.09\%$ sodium azide.

Description

The BU15 monoclonal antibody specifically binds to CD11c, which is also known as Integrin alpha X (α X Integrin) or p150,95 Integrin alpha chain. CD11c is a ~150 kDa type I transmembrane glycoprotein that is encoded by *ITGAX* (Integrin subunit alpha X) which belongs to the integrin alpha chain family. It is variably expressed on monocytes, macrophages, granulocytes, NK cells, dendritic cells, and subsets of B and T cells. CD11c associates with CD18 (Integrin beta 2/ β 2 Integrin) to form the heterodimeric CD11c:CD18 complex, which is also known as p150,95 Integrin, or the Type 4 Complement Receptor (CR4). CD11c:CD18 binds to fibrinogen, iC3b, ICAM-1 (CD54), or lipopolysaccharide (LPS). CD11c:CD18 functions as an adhesion molecule that mediates cellular binding to ligands expressed on stimulated cells including epithelium and endothelium found during inflammation.

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).



Multiparameter flow cytometric analysis of CD11c expression on human peripheral blood leucocytes. Whole blood was stained with either BD Horizon™ APC-R700 Isotype Control (Cat. No. 564974; Left Plot) or BD Horizon APC-R700 Mouse Anti-Human CD11c antibody (Cat. No. 566875; Right Plot) at 0.25 μ g/test. Erythrocytes were lysed with BD FACS Lysing Solution (Cat. No. 349202). The bivariate pseudocolor density plot showing the correlated expression of CD11c (or Ig Isotype control staining) versus side-light scatter (SSC-A) signals was derived from gated events with the forward and side-light scatter characteristics of intact leucocyte populations. Flow cytometry and data analysis were performed using a BD LSRFortessa™ Cell Analyzer System and FlowJo™ software. 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 the dye under optimum conditions and unconjugated antibody and free dye were removed.

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Application Notes

Application

Flow cytometry

Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)
564974	APC-R700 Mouse IgG1, κ Isotype Control	0.1 mg	X40
555899	Lysing Buffer	100 mL	(none)
349202	BD FACSTM Lysing Solution	100 mL	(none)

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. Please refer to <http://regdocs.bd.com> to access safety data sheets (SDS).
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10. Please refer to www.bdbiosciences.com/us/s/resources for technical protocols.

References

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