

Technical Data Sheet

APC Mouse Anti-Human CD11b

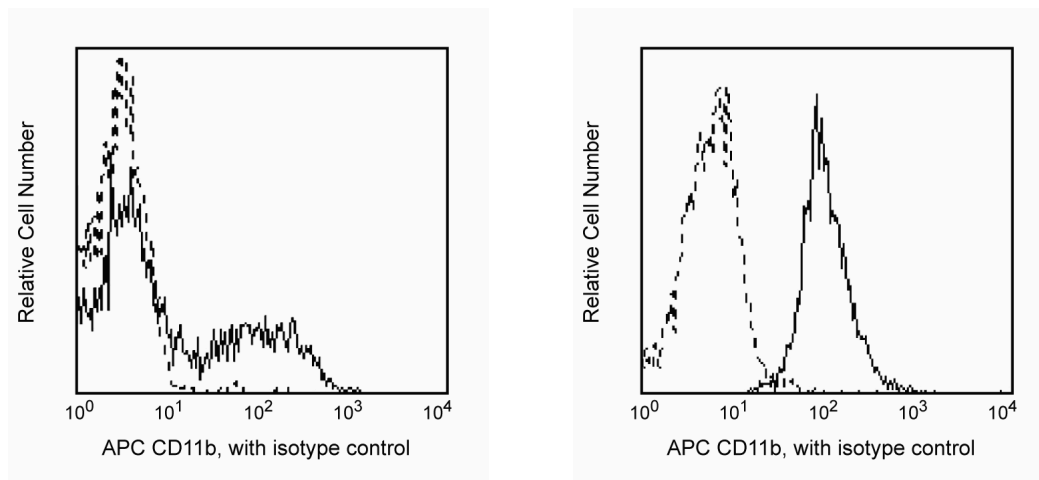
Product Information

Material Number:	561015
Alternate Name:	MAC-1A; Mac-1; ITGAM; Integrin alpha M; CR3A; CR-3 alpha; Mo1; SLEB6
Size:	25 Tests
Vol. per Test:	20 µl
Clone:	ICRF44 (also known as 44)
Immunogen:	Human monocytes
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human Tested in Development: Rhesus, Cynomolgus, Baboon
Workshop:	IV M047
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The ICRF44 monoclonal antibody specifically binds to CD11b, the 165-kDa adhesion glycoprotein that associates with the 95-kDa integrin β2 (CD18) to form the CD11b/CD18 complex, also known as Mac-1 or CR3. CD11b is a type I transmembrane glycoprotein that is encoded by *ITGAM* (Integrin alpha M). It is expressed on activated lymphocytes, monocytes, granulocytes, and a subset of NK cells. CD11b functions in cell-cell and cell-substrate interactions and is a receptor for iC3b, CD54 (ICAM-1), CD102 (ICAM-2) and CD50 (ICAM-3). This antibody significantly inhibits polymorphonuclear leukocyte aggregation in response to fMLP.

This clone also cross-reacts with granulocytes, a subset of peripheral blood lymphocytes and some monocytes of baboon, and both rhesus and cynomolgus macaque monkeys. The distribution on lymphocytes and granulocytes is similar to that observed with peripheral blood from normal human donors. There are fewer CD11b-positive monocytes present in the non-human primate blood than in normal human donor samples.



Flow cytometric analysis of CD11b expression on human lymphocytes (Left Plot) or granulocytes (Right Plot). Human whole blood was stained with either APC Mouse IgG1, κ Isotype Control (Cat. No. 555751; dashed line histogram) or APC Mouse anti-Human CD11b (Cat. No. 561015/550019; bold line histogram). Erythrocytes were lysed with Pharm Lyse™ Lysing Buffer (Cat. No. 555899). Fluorescence histograms depicting CD11b (or Ig isotype control) expression were derived from gated events with the side and forward light-scattering characteristics of viable lymphocytes or granulocytes. Flow cytometry was performed on a BD FACScan™ system.

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 APC under optimum conditions, and unconjugated antibody and free APC were removed.

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561015 Rev. 2



Application Notes

Application

Flow cytometry

Routinely Tested

Recommended Assay Procedure:

BD™ CompBeads can be used as surrogates to assess fluorescence spillover (Compensation). When fluorochrome conjugated antibodies are bound to CompBeads, they have spectral properties very similar to cells. However, for some fluorochromes there can be small differences in spectral emissions compared to cells, resulting in spillover values that differ when compared to biological controls. It is strongly recommended that when using a reagent for the first time, users compare the spillover on cell and CompBead to ensure that BD Comp beads are appropriate for your specific cellular application.

Suggested Companion Products

Catalog Number	Name	Size	Clone
555751	APC Mouse IgG1, κ Isotype Control	100 Tests	MOPC-21
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)
349202	BD FACSTM Lysing Solution	100 mL	(none)
555899	Lysing Buffer	100 mL	(none)
550019	APC Mouse Anti-Human CD11b	100 Tests	ICRF44

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1×10^6 cells in a 100- μ l experimental sample (a test).
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. This APC-conjugated reagent can be used in any flow cytometer equipped with a dye, HeNe, or red diode laser.
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).
8. Species cross-reactivity detected in product development may not have been confirmed on every format and/or application.
9. Please refer to www.bdbiosciences.com/us/s/resources for technical protocols.

References

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