

Technical Data Sheet

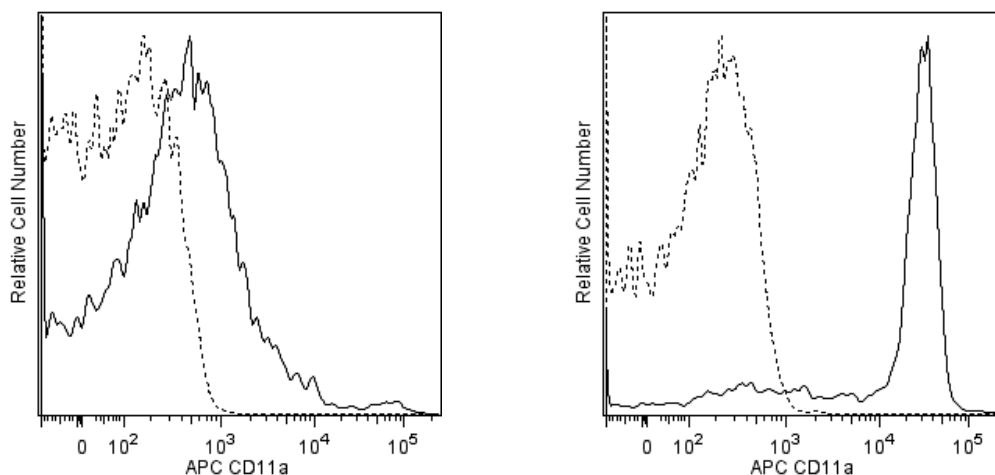
APC Rat Anti-Mouse CD11a

Product Information

Material Number:	562810
Alternate Name:	Itgal; Integrin α L; Integrin α L; ITAL; LFA-1A; LFA-1 α ; Ly-15
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	2D7
Immunogen:	Not Reported
Isotype:	Rat IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The 2D7 monoclonal antibody specifically binds to the 180-kDa α L chain of LFA-1 (CD11a/CD18, α L β 2 integrin), a heterodimeric surface glycoprotein expressed on almost all leukocytes. CD8a+CD8b- intestinal intraepithelial T lymphocytes, which are believed to be thymus independent, do not express CD11a. LFA-1 mediates a variety of heterotypic and homotypic intracellular adhesions through interaction with ICAM-1 (CD54) and ICAM-2 (CD102), including participation in the immunological synapses between CD8+ T lymphocytes and antigen-presenting cells. mAb 2D7 has been reported to block an in vitro allogeneic mixed-leukocyte reaction. The 2D7 and M17/4 (Cat. No. 553337, for the NA/LE™ format) antibodies are reported to recognize different epitopes of the CD11a molecule.



Multiparameter flow cytometric analysis of CD11a expression on mouse bone-marrow cells. BALB/c mouse bone-marrow cells were stained with either APC Rat IgG2a, κ Isotype Control (Cat. No. 553932; dashed line histograms) or APC Rat Anti-Mouse CD11a antibody (Cat. No. 562810; solid line histogram). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of lymphoid (Left Panel) or myeloid (Right Panel) cells. Flow cytometry was performed using a BD™ LSR II Flow Cytometer 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.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 ml	(none)
553932	APC Rat IgG2a κ Isotype Control	0.1 mg	R35-95

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. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
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.

References

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- Masten BJ, Yates JL, Pollard Koga AM, Lipscomb MF. Characterization of accessory molecules in murine lung dendritic cell function: roles for CD80, CD86, CD54, and CD40L. *Am J Respir Cell Mol Biol*. 1997; 16(3):335-342. (Clone-specific)
- Potter TA, Grebe K, Freiberg B, Kupfer A. Formation of supramolecular activation clusters on fresh ex vivo CD8+ T cells after engagement of the T cell antigen receptor and CD8 by antigen-presenting cells. *Proc Natl Acad Sci U S A*. 2001; 98(22):12624-12629. (Biology)
- Springer TA. Traffic signals for lymphocyte recirculation and leukocyte emigration: the multistep paradigm. *Cell*. 1994; 76(2):301-314. (Biology)

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