

Technical Data Sheet

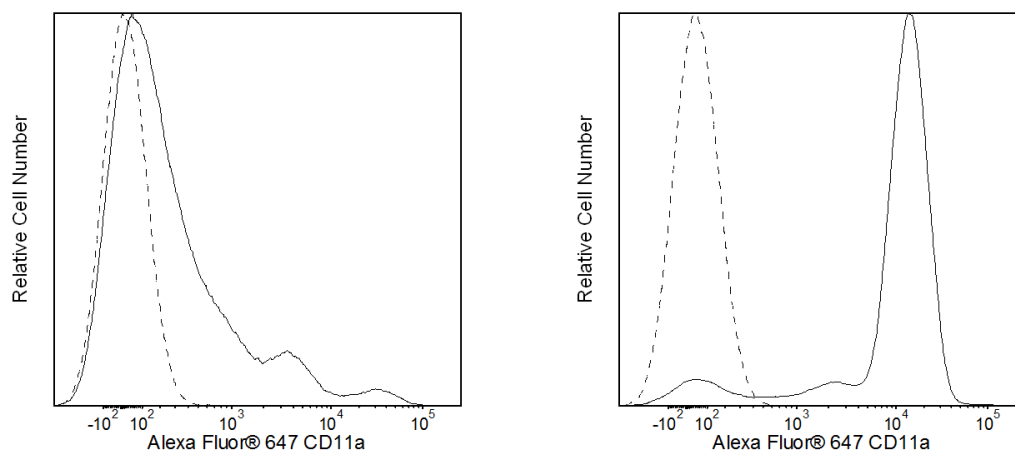
Alexa Fluor® 647 Rat Anti-Mouse CD11a

Product Information

Material Number:	563668
Alternate Name:	Itgal; Integrin α L; Integrin α L; ITAL; LFA-1A; LFA-1 α ; Ly-15
Size:	50 μ g
Concentration:	0.2 mg/ml
Clone:	M17/4
Immunogen:	C57BL/6 Mouse Splenic Secondary Cytotoxic T Lymphocytes
Isotype:	Rat (WF) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The M17/4 antibody reacts with 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 intercellular 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 M17/4 blocks a variety of LFA-1-mediated cells interactions in vitro, and costimulatory effects have also been described. In vivo treatment with M17/4 mAb reduces the severity of graft-versus-host reactions, prolongs allograft survival, inhibits the development of autoimmunity, and blocks substance P-induced leukocyte migration. The M17/4 and 2D7 (Cat. No. 553120) antibodies are reported to recognize different epitopes of the CD11a molecule.



Flow cytometric analysis of CD11a expression on mouse bone marrow cells. Mouse bone marrow cells were preincubated with Purified Rat Anti-Mouse CD16/CD32 antibody (Mouse BD Fc Block™) (Cat. No. 553141/553142). The cells were then stained with either Alexa Fluor® 647 Rat IgG2a, κ Isotype Control (Cat. No. 557690; dashed line histograms) or Alexa Fluor® 647 Rat Anti-Mouse CD11a antibody (Cat. No. 563668; solid line histogram). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable lymphoid (Left Panel) or myeloid (Right Panel) cells. Flow cytometric analysis 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 Alexa Fluor® 647 under optimum conditions, and unreacted Alexa Fluor® 647 was 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)
557690	Alexa Fluor® 647 Rat IgG2a, κ Isotype Control	0.1 mg	R35-95
553141	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.1 mg	2.4G2
553142	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.5 mg	2.4G2

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

References

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