Technical Data Sheet

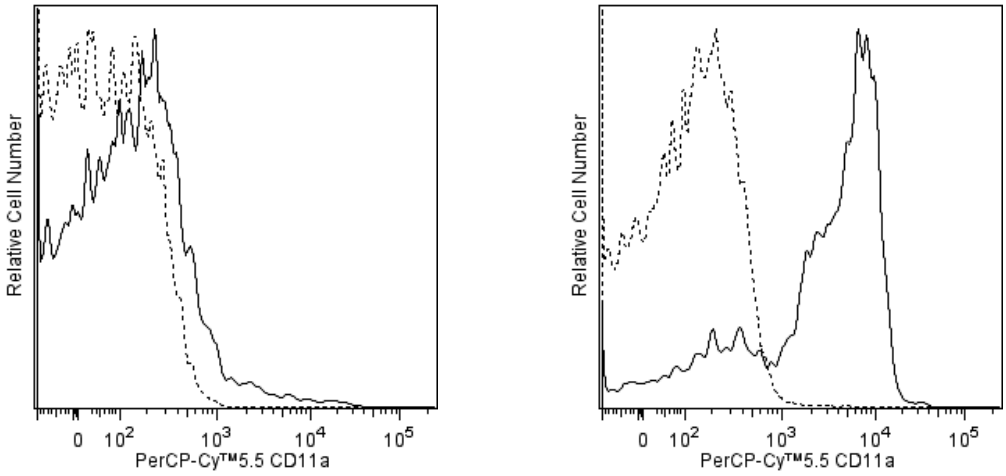
PerCP-Cy™5.5 Rat Anti-Mouse CD11a

Product Information

Material Number:	**562809**
Alternate Name:	Itgal; Integrin alpha-L; Integrin αL; ITAL; LFA-1A; LFA-1α; 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 ≤0.09% sodium azide.

Description

The 2D7 monoclonal antibody specifically binds to the 180-kDa αL chain of LFA-1 (CD11a/CD18, αLβ2 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 PerCP-Cy™5.5 Rat IgG2a, κ Isotype Control (Cat. No. 550765; dashed line histograms) or PerCP-Cy™5.5 Rat Anti-Mouse CD11a antibody (Cat. No. 562809; 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 with PerCP-Cy5.5 under optimum conditions, and unconjugated antibody and free PerCP-Cy5.5 were removed. Storage of PerCP-Cy5.5 conjugates in unoptimized diluent is not recommended and may result in loss of signal intensity.

Application Notes

Application

Flow cytometry	Routinely Tested

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Suggested Companion Products

Catalog Number	Name	Size	Clone
550765	PerCP-Cy™5.5 Rat IgG2a, κ Isotype Control	0.1 mg	R35-95
554656	Stain Buffer (FBS)	500 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. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
4. Cy is a trademark of Amersham Biosciences Limited. This conjugated product is sold under license to the following patents: US Patent Nos. 5,486,616; 5,569,587; 5,569,766; 5,627,027.
5. Please observe the following precautions: Absorption of visible light can significantly alter the energy transfer occurring in any tandem fluorochrome conjugate; therefore, we recommend that special precautions be taken (such as wrapping vials, tubes, or racks in aluminum foil) to prevent exposure of conjugated reagents, including cells stained with those reagents, to room illumination.
6. 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.
7. PerCP-Cy5.5–labelled antibodies can be used with FITC- and R-PE–labelled reagents in single-laser flow cytometers with no significant spectral overlap of PerCP-Cy5.5, FITC, and R-PE fluorescence.
8. PerCP-Cy5.5 is optimized for use with a single argon ion laser emitting 488-nm light. Because of the broad absorption spectrum of the tandem fluorochrome, extra care must be taken when using dual-laser cytometers, which may directly excite both PerCP and Cy5.5™. We recommend the use of cross-beam compensation during data acquisition or software compensation during data analysis.
9. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
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References

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