

Technical Data Sheet

Biotin Rat Anti-Mouse CD11a

Product Information

Material Number:	557365
Alternate Name:	Integrin α L chain, LFA-1 α
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	2D7
Isotype:	Rat IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The 2D7 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+CD8- 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.

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 biotin under optimum conditions, and unreacted biotin was removed.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
553928	Biotin Rat IgG2a κ Isotype Control	0.25 mg	R35-95
554061	PE Streptavidin	0.5 mg	(none)
554656	Stain Buffer (FBS)	500 ml	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. 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.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Huleatt JW, Lefrançois L. Beta2 integrins and ICAM-1 are involved in establishment of the intestinal mucosal T cell compartment. *Immunity*. 1996; 5(3):263-273. (Biology)

Kootstra CJ, Van Der Giezen DM, Van Krieken JH, De Heer E, Bruijn JA. Effective treatment of experimental lupus nephritis by combined administration of anti-CD11a and anti-CD54 antibodies. *Clin Exp Immunol*. 1997; 108(2):324-332. (Biology)

Larson RS, Springer TA. Structure and function of leukocyte integrins. *Immunol Rev*. 1990; 114:181-217. (Biology)

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: Blocking, Flow cytometry)

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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