

## Technical Data Sheet

## Purified Rat Anti-Mouse CD11a

## Product Information

<b>Material Number:</b>	<b>553118</b>
<b>Alternate Name:</b>	Integrin $\alpha$ L chain, LFA-1 $\alpha$
<b>Size:</b>	0.5 mg
<b>Concentration:</b>	0.5 mg/ml
<b>Clone:</b>	2D7
<b>Immunogen:</b>	Not Reported
<b>Isotype:</b>	Rat IgG2a, $\kappa$
<b>Reactivity:</b>	QC Testing: Mouse
<b>Storage Buffer:</b>	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

## Description

The 2D7 antibody reacts with the 180-kDa  $\alpha$ L chain of LFA-1 (CD11a/CD18,  $\alpha$ L $\beta$ 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.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.

## Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Store undiluted at 4° C.

## Application Notes

## Application

Flow cytometry	Routinely Tested
Blocking	Reported
Immunohistochemistry-frozen	Reported

## Recommended Assay Procedure:

For IHC, we recommend the use of purified M17/4 mAb in our special formulation for immunohistochemistry, Cat. No. 550528.

## Suggested Companion Products

Catalog Number	Name	Size	Clone
554016	FITC Goat Anti-Rat Igs	0.5 mg	Polyclonal
553927	Purified Rat IgG2a, $\kappa$ Isotype Control	0.5 mg	R35-95
553337	NA/LE Rat Anti-Mouse CD11a	0.5 mg	M17/4
550528	Purified Anti-Mouse CD11a	1.0 ml	M17/4

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.
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.

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4. Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE™ (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.

## References

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- Springer TA. Traffic signals for lymphocyte recirculation and leukocyte emigration: the multistep paradigm. *Cell*. 1994; 76(2):301-314. (Biology)