

## Technical Data Sheet

## PE Mouse Anti-Human CD49d

## Product Information

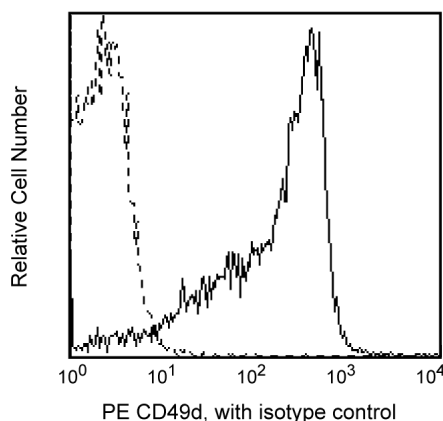
<b>Material Number:</b>	556635
<b>Alternate Name:</b>	Integrin $\alpha 4$ chain
<b>Size:</b>	50 tests
<b>Vol. per Test:</b>	20 $\mu$ l
<b>Clone:</b>	9F10
<b>Isotype:</b>	Mouse IgG1 $\kappa$
<b>Reactivity:</b>	Human QC Testing: Baboon or Rhesus or Cynomolgus Tested in Development: Sheep, Horse, Bovine, Dog, Cat.
<b>Workshop:</b>	V S215
<b>Storage Buffer:</b>	Aqueous buffered solution containing BSA and $\leq 0.09\%$ sodium azide.

## Description

Reacts with the integrin  $\alpha 4$  chain, which is expressed as a heterodimer with either of two  $\beta$  subunits,  $\beta 1$  (CD29) or  $\beta 7$ . The  $\alpha 4\beta 1$  integrin (VLA-4) is expressed on lymphocytes, monocytes, thymocytes, NK cells, and several B- and T-cell lines, and mediates binding to VCAM-1 (CD106) and the CS-1 region of fibronectin. The  $\alpha 4\beta 7$  integrin has a similar tissue distribution, except it is found on only a small subpopulation of thymocytes. Integrin  $\alpha 4\beta 7$  also binds fibronectin and VCAM-1, and has been shown in the mouse to preferentially bind the mucosal vascular addressin molecule, MAdCAM-1. This antibody is useful for studies of the expression and function of  $\alpha 4$  chain-containing integrins.

This clone cross-reacts with a subset of peripheral blood lymphocytes, monocytes, and some granulocytes of baboon and both rhesus and cynomolgus macaque monkeys. The distribution on leukocytes is similar to that observed with human peripheral blood leukocytes.

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.



*Profile of anti-CD49d reactivity on peripheral blood lymphocytes of Rhesus macaque (Macaca mulatta) analyzed by flow cytometry.*

## Preparation and Storage

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

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed by gel filtration chromatography.

Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

## BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit [bdbiosciences.com/how\\_to\\_order/](http://bdbiosciences.com/how_to_order/)

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2006 BD



**BD**

**BD Biosciences**

## Application Notes

### Application

Flow cytometry	Routinely Tested
----------------	------------------

## Suggested Companion Products

Catalog Number	Name	Size	Clone
556650	PE Mouse IgG1 Kappa Isotype Control	50 tests	MOPC-21

## Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 X 10<sup>6</sup> cells in a 100-μl experimental sample (a test).
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Please refer to [www.bdbiosciences.com/pharming/protocols](http://www.bdbiosciences.com/pharming/protocols) for technical protocols.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at [www.bdbiosciences.com/pharming/colors](http://www.bdbiosciences.com/pharming/colors).
5. 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.
6. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

## References

Schlossman SF, Boumsell L, Gilks W, et al, ed. *Leukocyte Typing V: White Cell Differentiation Antigens*. New York: Oxford University Press; 1995.(Clone-specific)  
Knapp W, Dorken B, et al, ed. *Leukocyte Typing IV*. New York: Oxford University Press; 1989.(Biology)  
Sopper S, Stahl-Hennig C, Demuth M, Johnston IC, Dorries R, ter Meulen V. Lymphocyte subsets and expression of differentiation markers in blood and lymphoid organs of rhesus monkeys. *Cytometry*. 1997; 29(4):351-362.(Biology)