ProSci

prosci-inc.com

ProSci Incorporated
12170 Flint Place
Poway, CA 92064

Toll Free: +1 (888) 513 9525
Local: +1 (858) 513 2638
Fax: +1 (858) 513 2692

techsupport@prosci-inc.com

CD49d Antibody [9F10] (FITC)

CATALOG NUMBER: 76-802

Specifications

SPECIES REACTIVITY:	Human
TESTED APPLICATIONS:	FACS
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
SPECIFICITY:	The 9F10 monoclonal antibody specifically reacts with human CD49d, the 150 kDA alpha 4 integrin chain.
HOST SPECIES:	Mouse

Properties

PURIFICATION:	The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.
PHYSICAL STATE:	liquid
BUFFER:	Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, ph7.2.
CONCENTRATION:	0.5 mg/mL
STORAGE CONDITIONS:	The product should be stored undiluted at 4˚C and should be protected from prolonged exposure to light. Do not freeze.
CLONALITY:	Monoclonal
ISOTYPE:	Mouse IgG1, kappa
CONJUGATE:	FITC

Additional Info

ALTERNATE NAMES:	IA4, CD49D, ITGA4
OFFICIAL SYMBOL:	ITGA4
GENE ID:	3676

Background

BACKGROUND:	The 9F10 monoclonal antibody specifically reacts with human CD49d, the 150 kDA alpha 4 integrin chain. The molecule forms the heterodimer called VLA-4 with integrin beta 1 and another heterodimer with integrin beta 7 that binds fibronectin, VCAM-1, and MadCAM-1. CD49d is expressed on monocytes, lymphocytes, thymocytes, NK cells, B cells, and T cells. It is involved in hematopoietic stem cell differentiation, cell migration, and cell activation. Its absence on Foxp3+ cells make it a useful marker to isolate Treg cell populations.
REFERENCES:	1) Schlossman, S. F. (1995).Leucocyte typing V: White cell differentiation antigens: Proceedings of the Fifth International Workshop and Conference, Held in Boston, USA 3-7 November, 1993. Oxford University Press.
	2) Kleinewietfeld, M., Starke, M., Di Mitri, D., Borsellino, G., Battistini, L., Rtzschke, O., Falk, K. (2009). CD49d provides access to untouched human Foxp3+ Treg free of contaminating effector cells.Blood,113(4), 827-836.
	3) Hemler, M. E. (1990). VLA proteins in the integrin family: structures, functions, and their role on leukocytes.Annual review of immunology,8(1), 365-400.

FOR RESEARCH USE ONLY