

Technical Data Sheet

Purified Mouse Anti-Human CD49d

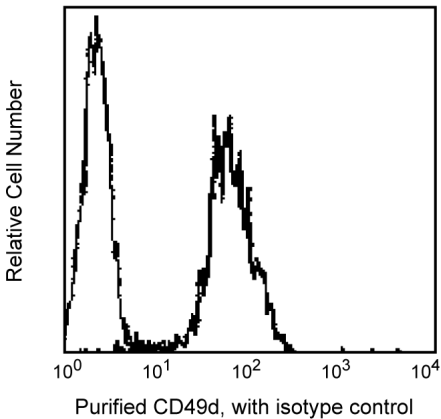
Product Information

Material Number:	555502
Alternate Name:	Integrin $\alpha 4$ chain
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	9F10
Isotype:	Mouse IgG1 κ
Reactivity:	QC Testing: Human Tested in Development: Baboon, Rhesus, Cynomolgus, Sheep, Horse, Bovine, Dog, Cat
Workshop:	V S215
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

Reacts with the integrin $\alpha 4$ chain, which is expressed as a heterodimer with either of two β 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 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
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Suggested Companion Products

Catalog Number	Name	Size	Clone
555746	Purified Mouse IgG1 Kappa Isotype Control	0.1 mg	MOPC-21

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/en/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.

References

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Hemler ME. VLA proteins in the integrin family: structures, functions, and their role on leukocytes. *Annu Rev Immunol*. 1990; 8:365-400.(Biology)
Hemler ME, Huang C, Takada Y, Schwarz L, Strominger JL, Clabby ML. Characterization of the cell surface heterodimer VLA-4 and related peptides. *J Biol Chem*. 1987; 262(24):11478-11485.(Biology)
Parker CM, Cepek KL, Russell GJ, et al. A family of beta 7 integrins on human mucosal lymphocytes. *Proc Natl Acad Sci U S A*. 1992; 89(5):1924-1928.(Biology)