

Technical Data Sheet

Purified Mouse Anti-Human CD49d

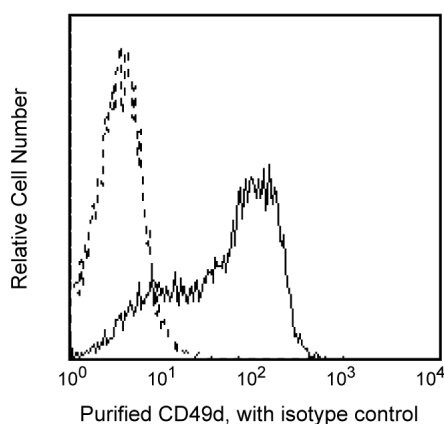
Product Information

Material Number:	556634
Alternate Name:	Integrin $\alpha 4$ chain; Integrin alpha 4; ITGA4; IA4; alpha 4 subunit of VLA-4
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	9F10
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human Tested in Development: Rhesus, Cynomolgus, Baboon, Dog, Cow, Sheep, Cat, Horse
Workshop:	V S215
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The 9F10 monoclonal antibody specifically reacts with the integrin $\alpha 4$ chain, that is expressed as a heterodimer with either of two β integrin 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, MAAdCAM-1. This antibody is useful for studies of the expression by and function of cells that express $\alpha 4$ 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.

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

Preparation and Storage

Store undiluted at 4°C.

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

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
556648	Purified Mouse IgG1 κ Isotype Control	0.1 mg	MOPC-21
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)
555816	Cell Viability Solution	100 Tests	(none)
555988	FITC Goat Anti-Mouse IgG/IgM	0.5 mg	Polyclonal

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. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
4. An isotype control should be used at the same concentration as the antibody of interest.

References

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