Technical Data Sheet

Purified NA/LE Rat Anti-Mouse CD49e

Product Information

Material Number:	**553318**
Alternate Name:	Integrin α5 chain
Size:	0.5 mg
Concentration:	1.0 mg/ml
Clone:	5H10-27 (MFR5)
Immunogen:	Mouse mast cell line MC/9
Isotype:	Rat (LEW) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	No azide/low endotoxin: Aqueous buffered solution containing no preservative, 0.2µm sterile filtered. Endotoxin level is ≤0.01 EU/µg (≤0.001 ng/µg) of protein as determined by the LAL assay.

Description

The 5H10-27 (MFR5) antibody reacts with the α5 chain of the integrin α5β1 fibronectin receptor (CD49e/CD29, VLA-5) on thymocytes, activated T lymphocytes, mast cells, and a variety of mouse cell lines, but not splenocytes. Soluble 5H10-27 (MFR5) antibody has been reported to inhibit VLA-5-mediated functions in vitro. In addition, immobilized mAb 5H10-27 (MFR5) has been demonstrated to costimulate the proliferative response of CD8+ T cells to plate-bound anti-CD3e antibody.

Preparation and Storage

Store undiluted at 4°C.

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

This preparation contains no preservatives, thus it should be handled under aseptic conditions.

Application Notes

Application

Flow cytometry	Routinely Tested
(Co)-stimulation	Reported
Blocking	Reported
Immunohistochemistry-frozen	Reported
Immunofluorescence	Reported
Immunohistochemistry-formalin (antigen retrieval required)	Not Recommended

Suggested Companion Products

Catalog Number	Name	Size	Clone
553926	Purified NA/LE Rat IgG2a κ Isotype Control	0.5 mg	R35-95
554016	FITC Goat Anti-Rat Ig	0.5 mg	Polyclonal

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 for technical protocols.

References

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Rich S, Van Nood N, Lee HM. Role of alpha 5 beta 1 integrin in TGF-beta 1-costimulated CD8+ T cell growth and apoptosis. *J Immunol.* 1996; 157(7):2916-2923. (Clone-specific: Blocking, (Co)-stimulation)

Ruppert M, Aigner S, Hubbe M, Yagita H, Altevogt P. The L1 adhesion molecule is a cellular ligand for VLA-5. *J Cell Biol.* 1995; 131(6):1881-1891. (Clone-specific: Blocking)

Schultz JF, Armant DR. Beta 1- and beta 3-class integrins mediate fibronectin binding activity at the surface of developing mouse peri-implantation blastocysts. Regulation by ligand-induced mobilization of stored receptor. *J Biol Chem.* 1995; 270(19):11522-11531. (Clone-specific: Blocking)

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Yang JT, Hynes RO. Fibronectin receptor functions in embryonic cells deficient in alpha 5 beta 1 integrin can be replaced by alpha V integrins. *Mol Biol Cell.* 1996; 7(11):1737-1748. (Clone-specific: Immunofluorescence, Immunohistochemistry)