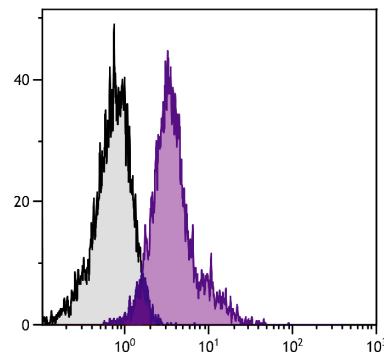




Rat Anti-Mouse CD49e

Cat. No.	Format	Size
1695-01	Purified (UNLB)	0.5 mg
1695-02	Fluorescein (FITC)	0.5 mg
1695-02S	Fluorescein (FITC)	0.1 mg
1695-08	Biotin (BIOT)	0.5 mg
1695-09	R-phycoerythrin (PE)	0.1 mg
1695-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg
1695-30	Alexa Fluor® 488 (AF488)	0.1 mg
1695-31	Alexa Fluor® 647 (AF647)	0.1 mg



C57BL/6 mouse bone marrow cells were stained with Rat Anti-Mouse CD49e-AF647 (SB Cat. No. 1695-31).

Overview

Clone	5H10.27 (MRF5)
Isotype	Rat (Lewis) IgG _{2a} κ
Immunogen	C57BL/6 x A/J F ₁ mouse mast cell line MC/9
Specificity	Mouse CD49e; Mr 135 kDa
Alternate Name(s)	Integrin α ₅ , VLA-5α

Description

The monoclonal antibody 5H10.27 reacts with the α₅ chain (VLA-5) of the CD49e/CD29 heterodimeric fibronectin receptor. It is expressed on thymocytes, activated T cells, mast cells, and a variety of mouse cell lines. Soluble 5H10.27 antibody inhibits VLA-5-mediated functions *in vitro*. Immobilized 5H10.27 has also been demonstrated to costimulate the proliferative response of CD8⁺ T cells to plate-bound anti-CD3 monoclonal antibody.

Applications

FC – Quality tested ^{1,2}
 IHC-FS – Reported in literature ³
 Block – Reported in literature ^{1,2}
 Costim – Reported in literature ²
 Adhesion – Reported in literature ^{1,2}

Working Dilutions

Flow Cytometry	Purified (UNLB) antibody	≤ 1 μg/10 ⁶ cells
	FITC conjugate	≤ 2 μg/10 ⁶ cells
	BIOT, AF488, and AF647 conjugates	≤ 1 μg/10 ⁶ cells
	PE conjugate	≤ 0.3 μg/10 ⁶ cells
	For flow cytometry, the suggested use of these reagents is in a final volume of 100 μL	

Other Applications Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.

For Research Use Only. Not for Diagnostic or Therapeutic Use.

Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg or 0.1 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of PBS. **Aliquot and store at or below -20°C.**
- The Alexa Fluor[®] 488 (AF488) and Alexa Fluor[®] 647 (AF647) conjugates are supplied as 0.1 mg in 0.2 mL PBS/NaN₃. Store at 2-8°C.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific (M)SDS.

References

1. Kinashi T, Springer TA. Adhesion molecules in hematopoietic cells. *Blood Cells*. 1994;20:25-44. (Immunogen, FC, Block, Adhesion)
2. Rich S, Van Nood N, Lee H. Role of $\alpha_5\beta_1$ integrin in TGF- β 1-costimulated CD8⁺ T cell growth and apoptosis. *J Immunol*. 1996;157:2916-23. (Costim, Block, Adhesion, FC)
3. Schmieder AH, Caruthers SD, Zhang H, Williams TA, Robertson JD, Wickline SA, et al. Three-dimensional MR mapping of angiogenesis with $\alpha_5\beta_1(\alpha_v\beta_3)$ -targeted theranostic nanoparticles in the MDA-MB-435 xenograft mouse model. *FASEB J*. 2008;22:4179-89. (IHC-FS)

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