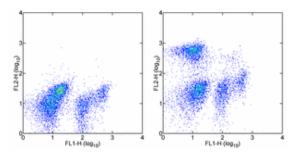


# Anti-Mouse/Rat CD49e (Integrin alpha 5) PE

Catalog Number: 12-0493

Also Known As:Integrin a5, ITGA5, VLA5A

RUO: For Research Use Only



Staining of C57BL/6 bone marrow cells with Anti-Human/Mouse CD45R (B220) FITC (cat. 11-0452) and 0.25 µg of Armenian Hamster IgG Isotype Control PE (cat. 12-4888) (left) or 0.25 µg of Anti-Mouse/Rat CD49e (Integrin α5) PE (right). Cells in the large scatter population were used for analysis.

### **Product Information**

Contents: Anti-Mouse/Rat CD49e (Integrin alpha 5) PE

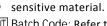
REF Catalog Number: 12-0493 Clone: eBioHMa5-1 (HMa5-1) Concentration: 0.2 mg/ml

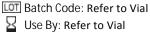
Host/Isotype: Armenian Hamster IgG

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer



Temperature Limitation: Store at 2-8°C. Do not freeze. Light







Caution, contains Azide

#### Description

The eBioHM $\alpha$ 5-1 monoclonal antibody reacts with mouse and rat CD49e, also known as integrin  $\alpha$ 5 or VLA-5A. CD49e is a member of the integrin  $\alpha$  chain family, and binds with CD29 (integrin  $\beta$ 1) to form the receptor VLA-5, which binds the ligands fibronectin and fibrinogen. CD49e is a type I, single-pass membrane protein, with a molecular weight of 135 kDa, and is expressed on multiple cell types including thymocytes, mast cells, activated T cells and splenic B cells. In addition to its role in adhesion, VLA-5 contributes to T-cell co-stimulation. The eBioHMα5-1 monoclonal antibody has been demonstrated to interfere with VLA-5-mediated cell adhesion, and with the degranulation of IgEsensitized rat RBL cells stimulated on fibronectin-coated plates. Furthermore, HMα5-1 injected into mice subcutaneously, along with anti-CD49d and anti-CD61, is able to inhibit passive cutaneous anaphylaxis.

#### Applications Reported

This eBioHMa5-1 (HMa5-1, HMa5-1) antibody has been reported for use in flow cytometric analysis.

## **Applications Tested**

This eBioHMa5-1 (HMa5-1, HMa5-1) antibody has been tested by flow cytometric analysis of mouse bone marrow cell suspensions. This can be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from  $10^5$  to  $10^8$  cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

#### References

Noto K, Kato K, Okumura K, Yagita H. Identification and functional characterization of mouse CD29 with a mAb. Int Immunol. 1995 May;7

Argraves WS, Suzuki S, Arai H, Thompson K, Pierschbacher MD, Ruoslahti E. Amino acid sequence of the human fibronectin receptor. J Cell Biol. 1987 Sep;105(3):1183-90.

Birkenmeier TM, McQuillan JJ, Boedeker ED, Argraves WS, Ruoslahti E, Dean DC. The alpha 5 beta 1 fibronectin receptor. Characterization of the alpha 5 gene promoter. J Biol Chem. 1991 Oct 25;266(30):20544-9.

# Related Products

12-4888 Armenian Hamster IgG Isotype Control PE (eBio299Arm)

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