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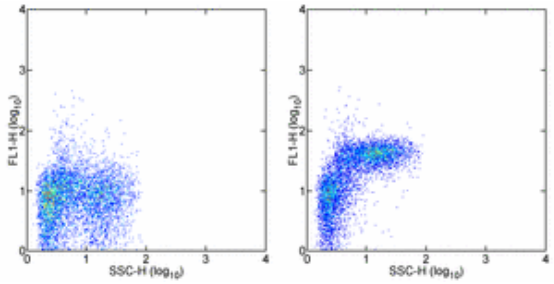
Anti-Mouse/Rat CD49e (Integrin alpha 5) Purified

Catalog Number: 14-0493
Also Known As:Integrin a5, ITGA5, VLA5A
RUO: For Research Use Only



Staining of C57Bl/6 bone marrow cells with 0.5 µg of Armenian Hamster IgG Isotype Control Purified (cat. 14-4888) (left) or 0.5 µg of Anti-Mouse/Rat CD49e (Integrin α5) Purified (right) followed by Anti-Armenian Hamster IgG FITC (cat. 11-4111). Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse/Rat CD49e (Integrin alpha 5) Purified
REF Catalog Number: 14-0493
Clone: eBioHMa5-1 (HMa5-1)
Concentration: 0.5 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.
LOT Batch Code: Refer to Vial
Use By: Refer to Vial
Caution, contains Azide

Description

The eBioHMα5-1 monoclonal antibody reacts with mouse and rat CD49e, also known as integrin α5 or VLA-5A. CD49e is a member of the integrin α chain family, and binds with CD29 (integrin β1) 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 IgE-sensitized 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) antibody has been reported for use in flow cytometric analysis, and immunoprecipitation. (Please use Functional Grade purified eBioHMa5-1 (HMa5-1), cat. 16-0493, in functional assays.)

Applications Tested

This eBioHMa5-1 (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 1 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 µL. 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 (5):835-42.

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

11-4111 Anti-Armenian Hamster IgG FITC
11-4317 Streptavidin FITC
12-4317 Streptavidin PE
13-4113 Anti-Armenian Hamster IgG Biotin (Polyclonal)

14-4888 Armenian Hamster IgG Isotype Control Purified (eBio299Arm)
17-4317 Streptavidin APC

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