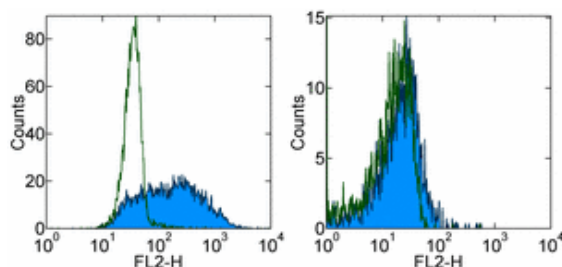


Anti-Mouse CD209 (DC-SIGN) PE

Catalog Number: 12-2091

Also Known As: DCSIGN, CIRE

RUO: For Research Use Only



Staining of CD209-transfected CHO cells (left) and mouse splenocytes (right) with 0.5 µg of Rat IgG2a κ Isotype Control PE (cat. 12-4321) (open histogram) or Anti-Mouse CD209 (DC-SIGN) PE (filled histogram). Total viable CD11C⁺ cells were used for analysis.

Product Information

Contents: Anti-Mouse CD209 (DC-SIGN) PE

REF Catalog Number: 12-2091

Clone: 5H10

Concentration: 0.2 mg/ml

Host/Isotype: Rat IgG2a

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

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

LOT Batch Code: Refer to Vial

 Use By: Refer to Vial

 Caution, contains Azide

Description

The 5H10 antibody was generated by immunization with a peptide derived from the extracellular region of mouse CIRE/DC-SIGN (CD209). CIRE/DC-SIGN was identified by its expression on CD8α⁻ dendritic cells and plasmacytoid predendritic cells, and is the closest homologue of human DC-SIGN. Human DC-SIGN was originally identified in human placenta for its ability to bind the HIV envelope protein gp120 in a CD4-independent manner. CIRE/DC-SIGN is a 33 kDa type II transmembrane C-type lectin protein. It contains a C-terminal, extracellular, Carbohydrate Recognition Domain (CRD) that is predicted to bind mannose and other carbohydrates in a Ca²⁺ dependent manner. It has been postulated that CIRE/DC-SIGN may play a role in T-dendritic cell interactions through binding with members of the ICAM family. CIRE/DC-SIGN is differentially expressed by sub-populations of dendritic cells and preliminary data suggest that its expression varies depending on the activation state of the host. CIRE/DC-SIGN is down-regulated in spleen-derived dendritic cell cultures supplemented with GM-CSF. While human DC-SIGN is predominantly expressed in dendritic cells, CIRE/DC-SIGN mRNA has also been detected in B cells. The 5H10 monoclonal antibody does not cross-react with the closely related SIGNR1, SIGNR2, SIGNR3 or SIGNR4.

Applications Reported

This 5H10 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This 5H10 antibody has been tested by flow cytometric analysis of mouse splenocytes and CIRE-transfected CHO cells. 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

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O'Keeffe M, Hochrein H, Vremec D, Caminschi I, Miller JL, Anders EM, Wu L, Lahoud MH, Henri S, Scott B, Hertzog P, Tatarczuch L, and Shortman K. 2002. Mouse plasmacytoid cells: long-lived cells, heterogeneous in surface phenotype and function, that differentiate into CD8⁺ dendritic cells only after microbial stimulus. *J Exp Med.* 196(10): 1307-1319. (5H10, FC, PubMed)

Park CG, Takahara K, Umemoto E, Yashima Y, Matsubara K, Matsuda Y, Clausen BE, Inaba K, and Steinman RM. 2001. Five mouse homologues of the human dendritic cell C-type lectin, DC-SIGN. *International Immunology.* 13(10): 1283-1290.

Caminschi I, Corbett AJ, Zahra C, Lahoud M, Lucas KM, Sofi M, Vremec D, Gramberg T, Pohlmann S, Curtis J, Handman E, van Dommelen SL,

Fleming P, Degli-Esposti MA, Shortman K, Wright MD. Functional comparison of mouse CIRE/mouse DC-SIGN and human DC-SIGN. Int Immunol. 2006 May;18(5):741-53. (5H10, FC, PubMed)

Related Products

12-2092 Anti-Mouse CD209 (DC-SIGN) PE (LWC06)

12-4321 Rat IgG2a K Isotype Control PE

13-2092 Anti-Mouse CD209 (DC-SIGN) Biotin (LWC06)

14-2092 Anti-Mouse CD209 (DC-SIGN) Purified (LWC06)

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