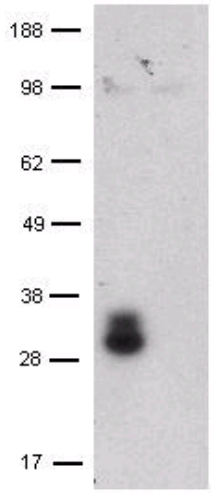
full spectrum cell analysis®
eBioscience®

Anti-Mouse CD209 (DC-SIGN) Purified

Catalog Number: 14-2091
Also Known As:DCSIGN, CIRE
RUO: For Research Use Only



CIRE/DC-SIGN-transfected (left) and untransfected control CHO cell lysates were loaded at $1x10^5$ cells/lane, probed with 1 µg/mL of Anti-Mouse CD209 (DC-SIGN) Purified and revealed with Anti-Rat IgG HRP.

Product Information

Contents: Anti-Mouse CD209 (DC-SIGN) Purified
REF Catalog Number: 14-2091
Clone: 5H10
Concentration: 0.5 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.
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 Ca^{2+} 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

The 5H10 antibody has been reported for use in immunoprecipitation, and immunoblotting (WB).

Applications Tested

This 5H10 antibody has been tested by immunoblotting and immunoprecipitation of CIRE in CIRE-transfected CHO cells. The reactivity of this antibody has been confirmed by immunoprecipitation of CIRE with 5H10 followed by immunoblotting with another CIRE-specific monoclonal antibody, LWC06 (cat. 14-2092) and, immunoprecipitation of CIRE with LWC06 followed by immunoblotting with 5H10.

References

Caminschi I, Lucas KM, O'Keeffe MA, Hochrein H, Laabi Y, Brodnicki TC, Lew AM, Shortman K, and Wright MD. 2001. Molecular cloning of a C-type lectin superfamily protein differentially expressed by $CD8\alpha^-$ splenic dendritic cells. Mol Immunol. 38: 365-373.

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
11-4317 Streptavidin FITC
12-4317 Streptavidin PE
17-4317 Streptavidin APC

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com