CD209a Monoclonal Antibody (LWC06), Biotin, eBioscience™

Product Details	
Size	25 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Biotin, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	LWC06
Conjugate	Biotin
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_657701

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Flow Cytometry (Flow)	1 µg/test	-
Functional Assay (FN)	-	1 Publication

Product Specific Information

Description: The LWC06 antibody was generated by immunization with the recombinant extracellular region of mouse CIRE /DC-SIGN (CD209). CIRE/DC-SIGN was identified by its expression on CD8 alpha- 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 calcium 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 LWC06 monoclonal antibody does not cross-react with the closely related SIGNR1, SIGNR2, SIGNR3 or SIGNR4.

CD209 protein is sensitive to collagenase treatment.

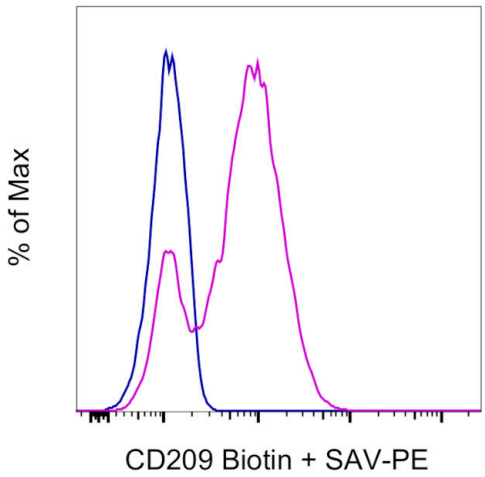
Applications Reported: This LWC06 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This LWC06 antibody has been tested by flow cytometric analysis of mouse CIRE/DC-SIGN-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 10^5 to 10^8

cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD209a Monoclonal Antibody (LWC06), Biotin, eBioscience™



CD209a Antibody (13-2092-80) in Flow
Mouse CIRE/DC-SIGN-transfected CHO cells were stained with 0.5 µg of Rat IgG2a kappa Isotype Control, Biotin (Product # 13-4321-85) (blue histogram) or 0.5 µg of CD209 (DC-SIGN) Monoclonal Antibody, Biotin (purple histogram) followed by Streptavidin PE (Product # 12-4317-87). Total cells were used for analysis.

2 References

Western Blot (1)

International immunology

Functional comparison of mouse CIRE/mouse DC-SIGN and human DC-SIGN.

Authors: Caminschi I,Corbett AJ,Zahra C,Lahoud M,Lucas KM,Sofi M,Vremec D,Gramberg T,Pöhlmann S,Curtis J, Handman E,van Dommelen SL,Fleming P,Degli-Esposti MA,Shortman K,Wright MD

Year
2006

Functional Assay (1)

Mucosal immunology

Induction of protective immunity against Mycobacterium tuberculosis by delivery of ESX antigens into airway dendritic cells.

"13-2092 was used in Functional assays to develop more efficient vaccines against Mycobacterium tuberculosis infection, showing that delivery of ESX antigens into airway dendritic cells can induce protective immunity."

Authors: Dong H,Stanek O,Salvador FR,Länger U,Morillon E,Ung C,Sebo P,Leclerc C,Majlessi L

Year
2013

Species
Mouse