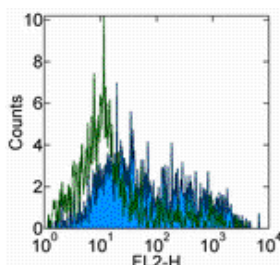


Anti-Mouse CD209b (SIGN-R1) Functional Grade Purified

Catalog Number: 16-2093

Also Known As: C-type lectin, SIGNR1

RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of C57Bl/6 splenocytes with 0.5 ug of Armenian Hamster IgG Isotype Control Purified (cat. 14-4888) (open histogram) or 0.5 ug of Anti-Mouse CD209b (SIGN-R1) Functional Grade Purified (filled histogram) followed by Anti-Armenian Hamster IgG PE (cat. 12-4112). Cells in the lymphocyte and monocyte gates were used for analysis, and events displayed are gated on CD11c+ cells.

Product Information

Contents: Anti-Mouse CD209b (SIGN-R1) Functional Grade Purified

Formulation: aqueous buffer, no sodium azide

REF **Catalog Number:** 16-2093

Clone: eBio22D1 (22D1)

 **Temperature Limitation:** Store at 2-8°C.

Concentration: 1 mg/mL

LOT **Batch Code:** Refer to Vial

Host/Isotype: Armenian Hamster IgG

 **Use By:** Refer to Vial

Handling Conditions: Use in sterile environment.

Endotoxin Level: Less than 0.001 ng/ug antibody, as determined by the LAL assay.

Description

The eBio22D1 monoclonal antibody reacts with mouse SIGNR1 (CD209b). SIGNR1 is a type II transmembrane C-type lectin that was identified in a search for mouse homologues of human DC-SIGN. It is expressed at high levels in splenic marginal zone macrophages and lymph node medullary macrophages, where it functions to uptake dextran polysaccharides, including the capsular polysaccharide of *Streptococcus pneumoniae*. It has also been demonstrated that SIGNR1 physically associates with TLR4/MD2, and it has been suggested that this association plays a role in recognition of LPS. Furthermore, recently it has been shown that SIGNR1 deficient mice have a defect in catabolism of the complement component C3, and that SIGNR1 binds directly to the complement C1 subcomponent, C1q to assemble a non-conventional C3 convertase. The eBio22D1 monoclonal antibody does not cross-react with the closely related SIGNR1, SIGNR2, SIGNR3 or SIGNR4.

Applications Reported

This eBio22D1 (22D1) antibody has been reported for use in flow cytometric analysis, immunoprecipitation, immunohistology staining of frozen tissue sections, and ELISA. *in vivo* injection of 22D1 has been shown to induce temporary knockdown of SIGNR1 expression.

Applications Tested

This eBio22D1 (22D1) antibody has been tested by flow cytometric analysis of mouse splenocytes. 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 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

Kang YS, Kim JY, Bruening SA, Pack M, Charalambous A, Pritsker A, Moran TM, Loeffler JM, Steinman RM, Park CG. The C-type lectin SIGN-R1 mediates uptake of the capsular polysaccharide of *Streptococcus pneumoniae* in the marginal zone of mouse spleen. *Proc Natl Acad Sci U S A*. 2004 Jan 6;101(1):215-20. (**22D1**, FC, FA, IHC, PubMed)

Kang YS, Do Y, Lee HK, Park SH, Cheong C, Lynch RM, Loeffler JM, Steinman RM, Park CG. A dominant complement fixation pathway for pneumococcal polysaccharides initiated by SIGN-R1 interacting with C1q. *Cell*. 2006 Apr 7;125(1):47-58. (**22D1**, IHC frozen, FA, PubMed)

Kang YS, Yamazaki S, Iyoda T, Pack M, Bruening SA, Kim JY, Takahara K, Inaba K, Steinman RM, Park CG. SIGN-R1, a novel C-type lectin expressed by marginal zone macrophages in spleen, mediates uptake of the polysaccharide dextran. *Int Immunol*. 2003 Feb;15(2):177-86.

Nagaoka K, Takahara K, Tanaka K, Yoshida H, Steinman RM, Saitoh S, Akashi-Takamura S, Miyake K, Kang YS, Park CG, Inaba K. Association of SIGNR1 with TLR4-MD-2 enhances signal transduction by recognition of LPS in gram-negative bacteria. Int Immunol. 2005 Jul;17(7):827-36.

Related Products

11-4111 Anti-Armenian Hamster IgG FITC

12-4112 Anti-Armenian Hamster IgG PE (Polyclonal)

13-4113 Anti-Armenian Hamster IgG Biotin (Polyclonal)

14-4888 Armenian Hamster IgG Isotype Control Purified (eBio299Arm)

16-4888 Armenian Hamster IgG Isotype Control Functional Grade Purified (eBio299Arm)

Not for further distribution without written consent.

Copyright © 2000-2010 eBioscience, Inc.

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