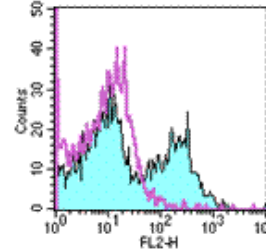


Product Information

Contents: Phycoerythrin (PE) conjugated anti-mouse MD-1
Catalog Number: 12-9921
Sizes: 50 ug, 100 ug
Formulation: Phosphate buffer pH 7.2,
150 mM NaCl, 0.09% NaN₃
Storage Conditions: Store at 4°C.
DO NOT FREEZE
LIGHT-SENSITIVE MATERIAL
Clone: MD14
Isotype: Rat IgG2a, κ



Staining of C57Bl/6 splenocytes with 0.25 µg of PE rat IgG2a isotype control (cat. 12-4321) (open histogram) or 0.25 µg of PE MD14 (colored histogram). Total viable cells were used for analysis.

Available Formats of This Product				
Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications
12-9921	PE anti-mouse MD-1 (MD1; Toll-like Receptor/ TLR Family)	488	575	FC
13-9921	Biotin anti-mouse MD-1 (MD1; Toll-like Receptor/ TLR Family)	N/A	N/A	FC
14-9921	Affinity Purified anti-mouse MD-1 (MD1; Toll-like Receptor/ TLR Family)	N/A	N/A	FC

Description

The MD14 monoclonal antibody reacts with mouse MD-1, a 28 kDa molecule, which physically associates with the extracellular portion of RP105 (CD180). MD-1 is expressed by mature B cells, monocytes/macrophages and dendritic cells. The coexpression of MD-1 is indispensable for cell surface expression of RP105 and LPS recognition and signaling. Several monoclonal antibodies to mouse MD-1, including MD14 and MD113, have been reported to be antagonistic for LPS-induced B cell proliferation and CD86 upregulation, while the anti-mouse CD180 (clone RP/14, Cat. No. 16-1801) is reported to exert potent mitogenic effect. The mAb MD113 (Cat. No. 16-9931) is reported to suppress LPS-induced B cell responses to a higher degree than MD14.

Usage

For research use only, not for diagnostic or therapeutic use. MD14 has been reported for use in flow cytometric analysis.

Applications Tested

The MD14 antibody has been tested by flow cytometric analysis of mouse spleen cell suspensions and can be used at less than or equal to 1 µg per million cells. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Related Products

Cat. 12-4321 PE Rat IgG2a Isotype Control

References

- Nagai, Y., R. Shimazu, et al. 2002. Requirement for MD-1 in cell surface expression of RP105/CD180 and B-cell responsiveness to lipopolysaccharide. *Blood* 99(5):1699-705.
- Miyake, K., R. Shimazu, et al. 1998. Mouse MD-1, a molecule that is physically associated with RP105 and positively regulates its expression. *J Immunol* 161(3): 1348-53.
- Miyake, K., H. Ogata, et al. 2000. Innate recognition of lipopolysaccharide by Toll-like receptor 4/MD-2 and RP105/MD-1. *J Endotoxin Res* 6(5):389-91.

Miura, Y., R. Shimazu, et al. 1998. RP105 is associated with MD-1 and transmits an activation signal in human B cells. *Blood* 92(8):2815-22.

Gorczynski, R. M., Z. Chen, et al. 2000. Regulation of gene expression of murine MD-1 regulates subsequent T cell activation and cytokine production. *J Immunol* 165(4):1925-32.

Ogata, H., I. Su, et al. 2000. The toll-like receptor protein RP105 regulates lipopolysaccharide signaling in B cells. *J Exp Med* 192(1):23-9.

Copyright © 2000-2005 eBioscience, Inc.
Product For Research Use Only: Not for further distribution without written consent.

