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Product Information

Contents: Phycoerythrin (PE) conjugated anti-mouse MD-1

Catalog Number: 12-9931

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 Clone: MD113

LIGHT-SENSITIVE MATERIAL Isotype: Rat IgG2b, κ

> Staining of C57BI/6 splenocytes with 0.25 µg of PE rat IgG2b isotype control (cat.12-4331) (open histogram) or 0.25 µg of PE MD113 (colored histogram). Total viable cells were used for analysis.

| Cat. No. | Format | Excite (nm) | | Reported Applications |
|----------|--|-------------|-----|--------------------------|
| 12-9931 | PE anti-mouse MD-1 (MD1; Toll-like Receptor/ TLR Family) | 488 | 575 | FC |
| 13-9931 | Biotin anti-mouse MD-1 (MD1; Toll-like Receptor/ TLR Family) | N/A | N/A | FC |
| 14-9931 | Affinity Purified anti-mouse MD-1 (MD1; Toll-like Receptor/ TLR Family) | N/A | N/A | FC |
| 16-9931 | Functional Grade* Purified anti-mouse MD-1 (MD1; Toll-like Receptor/ TLR Family) | N/A | N/A | FC |

Description

The MD113 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. MD113 has been reported to suppress LPS-induced B cell responses to a higher degree than MD14 (Cat. No. 16-9921).

Usage

For research use only, not for diagnostic or therapeutic use. MD113 has been reported for use in flow cytometric analysis.

Applications Tested

The MD113 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. 12-4031 Phycoerythrin (PE) Rat IgG2b Isotype Control (clone eB149/10H5)

References

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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.