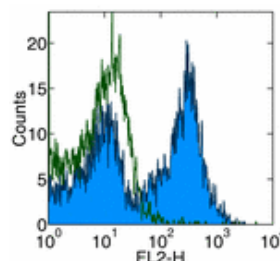


## Product Information

Contents: Functional Grade Purified anti-mouse MD-1  
Catalog Number: 16-9931  
Sizes: 50 ug, 100 ug  
Formulation: Phosphate buffer pH 7.2,  
150 mM NaCl, no NaN<sub>3</sub>  
Storage Conditions: Store at 4°C.  
Avoid repeated freeze/thaw cycles.  
KEEP CONTENT STERILE.  
Endotoxin Level: Less than 0.001 ng/ug antibody, as determined  
by the LAL assay.  
Clone: MD113  
Isotype: Rat IgG2b, κ



Surface staining of mouse splenocytes with anti-mouse MD-1 (MD113) PE. Appropriate isotype controls were used (open histogram). Total viable cells were used for analysis.

Available Formats of This Product				
Cat. No.	Format	Excite (nm)	Emit (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

\*Functional Grade™ (FG™): Azide-free, sterile-filtered, and endotoxin < 0.001 ng/μg.  
Purified: Contains azide, not sterile-filtered, and not endotoxin tested.

## 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. MD-113 is not useful for immunoprecipitation and immunoblotting (WB). Applicability of MD113 for use in immunohistochemistry has not been evaluated.

## 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 0.5 μg per million cells. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

## Related Products

Cat. 16-4031 Functional Grade Purified Rat IgG2b Isotype Control (clone eB149/10H5)  
Cat. 11-4317 Streptavidin-FITC (Fluorescein isothiocyanate)  
Cat. 12-4317 Streptavidin-PE (Phycoerythrin)  
Cat. 17-4317 Streptavidin Allophycocyanin (SA-APC)  
Cat. 11-4811 FITC Anti-Rat IgG  
Cat. 13-4813 Biotin Anti-Rat IgG (clone Polyclonal)

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## 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.
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