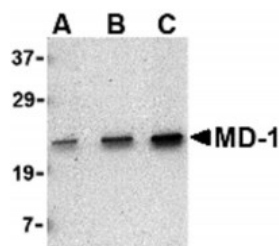


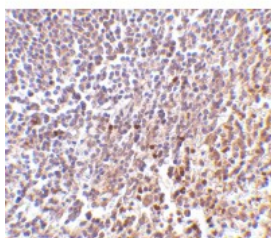


MD-1 Antibody

CATALOG NUMBER: 3847



Western blot analysis of MD-1 in Daudi cell lysate with MD-1 antibody at (A) 0.5, (B) 1 and (C) 2 ug/mL.



Immunohistochemistry of MD-1 in human spleen tissue with MD-1 antibody at 2 ug/mL.

Specifications

SPECIES REACTIVITY:	Human
HOMOLOGY:	Predicted species reactivity based on immunogen sequence: Mouse: (75%)
TESTED APPLICATIONS:	ELISA, IHC-P, WB
APPLICATIONS:	MD-1 antibody can be used for the detection of MD-1 by Western blot at 0.5 - 2 ug/mL. Antibody can also be used for immunohistochemistry starting at 2 ug/mL.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
POSITIVE CONTROL:	1) Cat. No. 1224 - Daudi Cell Lysate
IMMUNOGEN:	MD-1 antibody was raised against a 14 amino acid synthetic peptide from near the carboxy terminus of human MD-1. The immunogen is located within the last 50 amino acids of MD-1.
HOST SPECIES:	Rabbit

Properties

PURIFICATION:	MD-1 Antibody is affinity chromatography purified via peptide column.
PHYSICAL STATE:	Liquid
BUFFER:	MD-1 Antibody is supplied in PBS containing 0.02% sodium azide.
CONCENTRATION:	1 mg/mL
STORAGE CONDITIONS:	MD-1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
CLONALITY:	Polyclonal
ISOTYPE:	IgG
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	MD-1 Antibody: MD-1, MMD-1, dJ80N2.1, MD1, Lymphocyte antigen 86, Protein MD-1, Ly-86
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ACCESSION NO.:	NP_004262
PROTEIN GI NO.:	4758708
OFFICIAL SYMBOL:	LY86
GENE ID:	9450

Background

BACKGROUND: MD-1 Antibody: Toll-like receptors (TLRs) are evolutionarily conserved pattern-recognition molecules that recognize different microbial products during infection and serve as an important link between the innate and adaptive immune responses. The signaling of these TLRs is kept under tight control by the expression of endogenous inhibiting proteins such as RP105, a recently identified homolog of TLR4. This protein, in association with MD-1, interacts with and inhibits the TLR4/MD-2 signaling pathway. While MD-2 can directly bind to LPS, one of the activating molecules of TLR4, the function of MD-1 is less well-known. It has been suggested however, that the RP105/MD-1 complex influences antibody production mediated by both TLR4/MD-2 and TLR2 receptor complexes.

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- 1) Takeda K, Kaisho T, and Akira S. Toll-like receptors. *Annu. Rev. Immunol.* 2003; 21:335-76.
- 2) Divanovic S, Trompette A, Atabani SF, et al. Inhibition of TLR-4/MD-2 signaling by RP105/MD-1. *J. Endotoxin Res.* 2005; 11:363-8.
- 3) Tsuneyoshi N, Fukudome K, Kohara J, et al. The functional and structural properties of MD-2 required for liposaccharide binding are absent in MD-1. *J. Immunol.* 2005; 174:340-4.
- 4) Nagai Y, Kobayashi T, Motoi Y, et al. The radioprotective 105/MD-1 complex links TLR2 and TLR4/MD-2 in antibody response to microbial membranes. *J. Immunol.* 2005; 174:7043-9.

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December 12, 2016