

Datasheet for 200-401-CS3**MD-2 Antibody****Overview**

Description:	Anti-MD-2 (RABBIT) Antibody - 200-401-CS3
Item No.:	200-401-CS3
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	MD-2 is a member of the Toll/interleukin-1 receptor (TIR) family, a group of proteins that include the Toll-like receptors (TLRs). TLRs are signaling molecules that recognize different pathogen-associated molecular patterns (PAMPs) and serve as an important link between the innate and adaptive immune responses. TLR4, the major signaling receptor for lipopolysaccharide (LPS), requires the binding of MD-2 to its extracellular region for maximal response to LPS. The specificity of this response is determined by the species of MD-2; e.g., human MD-2 can cause mouse TLR4 to react to LPS analogs that are normally antagonistic to human but not mouse TLR4.
Synonyms:	MD-2 Antibody, MD2, MD-2, ly-96, ESOP-1, ESOP1, MD2, Lymphocyte antigen 96, Ly-96
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	LY96
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-MD-2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a peptide corresponding to amino acids near the internal region of human MD-2.

Purity/Specificity: Anti-MD-2 Antibody is affinity chromatography purified via peptide column. Cross reactivity with MD-2 from other sources has not been determined.

Relevant Links:

- [UniProtKB - Q9Y6Y9](#)
- [GeneID - 23643](#)
- [NCBI - NP_056179](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: Anti-MD-2 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry, and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 19 kDa in Western Blots of specific cell lysates and tissues.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:5000 - 1:20,000

IF: 10 µg/mL

IHC: 2 µg/mL

WB: 0.5 - 2 µg/ml

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1 mg/mL by UV absorbance at 280 nm

Buffer: 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

Preservative: 0.02% (w/v) Sodium Azide

Stabilizer: None

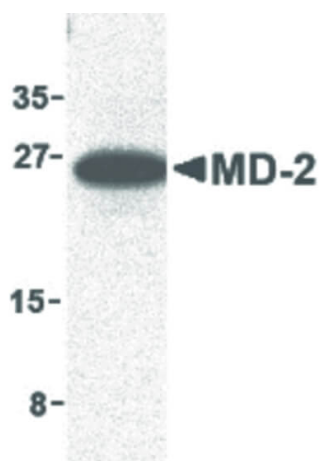
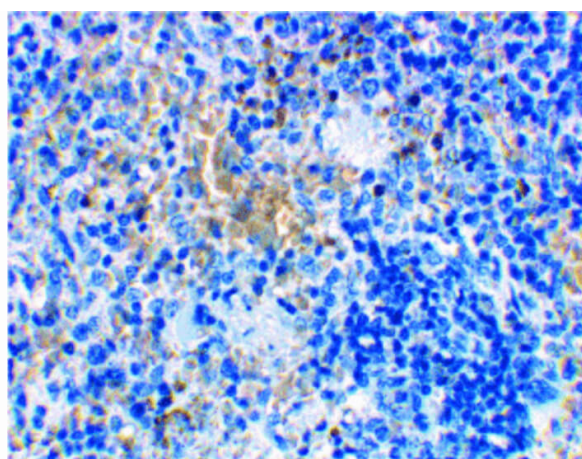
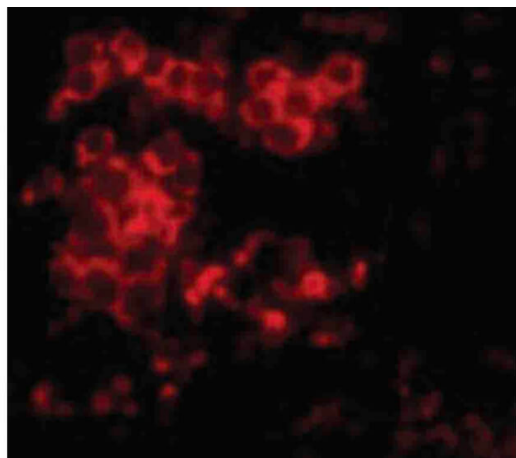
Shipping & Handling

Shipping Condition: Wet Ice

Storage Condition: Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunofluorescence Microscopy

Immunofluorescence Microscopy of MD-2 antibody. Tissue: rat spleen cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: MD-2 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: MD-2 is located in the endosome membrane and extracellular space. Staining: MD-2 as red fluorescent signal.

Immunohistochemistry

Immunohistochemistry of MD-2 antibody. Tissue: rat spleen cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: MD-2 antibody at 2 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: MD-2 is located in the endosome membrane and extracellular space. Staining: MD-2 is stained with toluidine blue.

Western Blot

Western Blot of MD-2 antibody. Lane 1: mouse spleen cell lysate. Load: 35 µg per lane. Primary antibody: MD-2 antibody at 1 µg/mL for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 19 kDa, 25 kDa for MD-2. Other band(s): MD-2 splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.