

## Datasheet for 200-301-CS5

**MD-2 Antibody [9F1B1]****Overview**

<b>Description:</b>	Anti-MD-2 (MOUSE) Antibody - 200-301-CS5
<b>Item No.:</b>	200-301-CS5
<b>Size:</b>	100 µg
<b>Applications:</b>	ELISA, IF, IHC, WB
<b>Reactivity:</b>	Human, Mouse
<b>Host Species:</b>	Mouse

**Product Details**

<b>Background:</b>	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 transfected into mouse cells can cause mouse TLR4 to react to LPS analogs that are normally antagonistic to human but not mouse TLR4.
<b>Synonyms:</b>	MD-2 Antibody [9F1B1] , MD2, MD-2, ly-96, ESOP-1
<b>Host Species:</b>	Mouse
<b>Clonality:</b>	Monoclonal
<b>Clone ID:</b>	[9F1B1]
<b>Format:</b>	IgG1

**Target Details**

<b>Gene Name:</b>	LY96
<b>Reactivity:</b>	Human, Mouse
<b>Immunogen Type:</b>	Recombinant Protein

<b>Immunogen:</b>	Anti-MD-2 antibody was produced in mice by repeated immunizations with a recombinant protein corresponding to amino acids 2 to 160 of human MD-2
<b>Purity/Specificity:</b>	Anti-MD-2 Monoclonal Antibody is Protein A purified. Cross reactivity with MD-2 [9F1B1] from other sources has not been determined.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">UniProtKB - Q9Y6Y9</a></li><li>• <a href="#">GeneID - 23643</a></li><li>• <a href="#">NCBI - NP_056179</a></li></ul>

## Application Details

<b>Tested Applications:</b>	ELISA, IF, IHC, WB
<b>Application Note:</b>	Anti-MD-2 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry-P 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. Validated in human samples. All other applications and species not yet tested.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>ELISA:</b>	1:10,000
<b>IF:</b>	20 µg/mL
<b>IHC:</b>	2.5 µg/mL
<b>WB:</b>	1 µg/mL

## Formulation

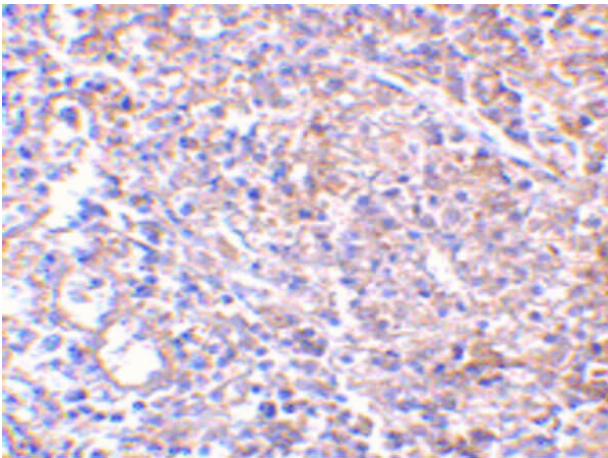
<b>Physical State:</b>	Liquid (sterile filtered)
<b>Concentration:</b>	1.0 mg/ml by UV absorbance at 280 nm
<b>Buffer:</b>	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
<b>Preservative:</b>	0.02% (w/v) Sodium Azide
<b>Stabilizer:</b>	None

## Shipping & Handling

<b>Shipping Condition:</b>	Dry Ice
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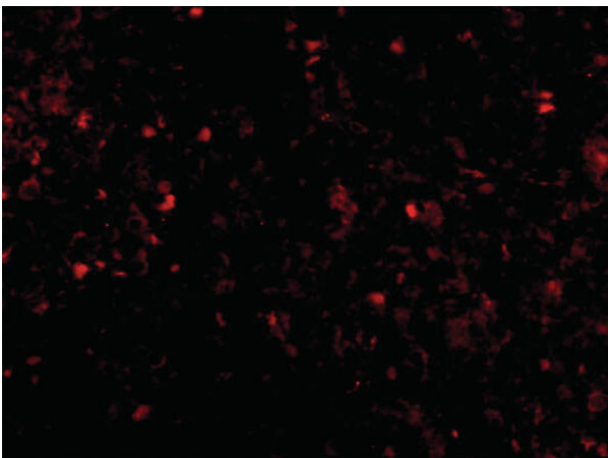
<b>Storage Condition:</b>	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
<b>Expiration:</b>	Expiration date is one (1) year from date of receipt.

## Images



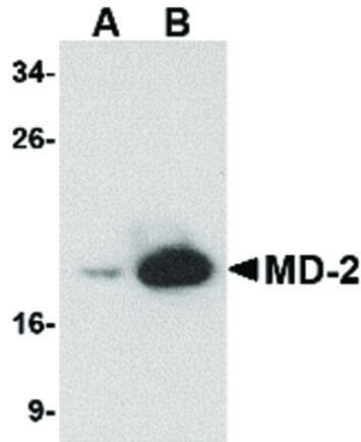
### Immunohistochemistry

Immunohistochemistry of Mouse anti-MD-2 antibody. Tissue: human spleen. Primary antibody: MD-2 antibody at 2.5 µg/mL. Secondary antibody: Peroxidase mouse secondary antibody at 1:2,500. Localization: MD-2 is secreted.



### Immunofluorescence Microscopy

Immunofluorescence Microscopy of Mouse anti-MD2 antibody. Tissue: human spleen. Primary antibody: Bim antibody at 20 µg/mL. Secondary antibody: Peroxidase mouse secondary antibody at 1:20,000. Localization: Bim is secreted. Staining: MD2 as red fluorescent signal.

**Western Blot**

Western Blot of Mouse anti-MD-2 antibody. Lane A: 5 ng of MD-2 recombinant protein. Lane B: 125 ng of MD-2 recombinant protein. Primary antibody: MD-2 antibody at 1  $\mu\text{g}/\text{mL}$  overnight at 4C. Secondary antibody: Mouse HRP secondary antibody. Block: 5% BLOTTO. Predicted/Observed size: 14/18 kDa, 18 kDa for MD-2.

**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.