

# Product Datasheet

## MD-2 Antibody - BSA Free NB100-56655

Unit Size: 0.1 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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### Publications: 8

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/NB100-56655](http://www.novusbio.com/NB100-56655)

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**NB100-56655**

MD-2 Antibody - BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Protein G purified
Buffer	PBS

Product Description	
Description	Novus Biologicals Rabbit MD-2 Antibody - BSA Free (NB100-56655) is a polyclonal antibody validated for use in IHC and WB. Anti-MD-2 Antibody: Cited in 8 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	23643
Gene Symbol	LY96
Species	Human, Mouse, Rat
Immunogen	A full length recombinant protein was used as the immunogen.

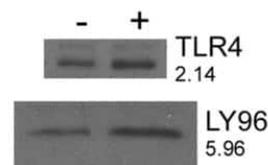
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Immunohistochemistry
Recommended Dilutions	Western Blot 0.5-2 ug/ml, Immunohistochemistry 1:10-1:500, Immunohistochemistry-Paraffin 5-10 ug/ml



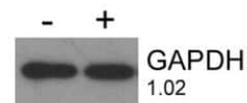
## Images

Western Blot: MD-2 Antibody [NB100-56655] - Lanes containing cell lysate from untreated cell are on the left (-) and lysates from IFNG treated cells are on the right (+). The proteins are identified by the corresponding gene names. The housekeeping enzyme glyceraldehyde 3-phosphate dehydrogenase (GAPDH) was blotted as a control that is not altered by IFNG treatment. Except for GAPDH, the numbers under each gene name are the fold changes in mRNAs. Image collected and cropped by CiteAb from the following publication ([//doi.org/10.1371/journal.pone.0185956](https://doi.org/10.1371/journal.pone.0185956)) licensed under a CC-BY license. anti-TLR4 (Novus Biological NBP2-24538).

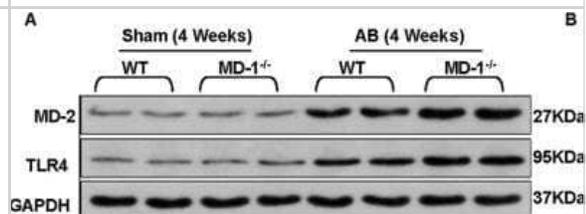
### Innate Immune Receptors



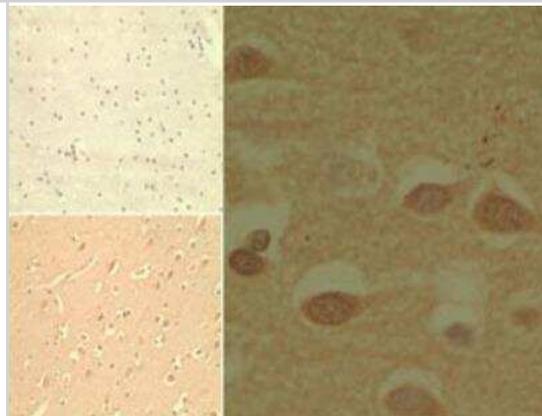
### Housekeeping Gene Control



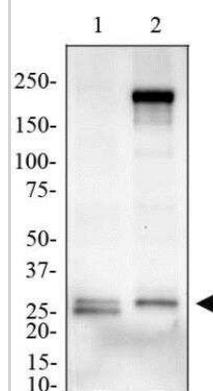
Western Blot: MD-2 Antibody [NB100-56655] - Inactivation of MEK-ERK1/2 and NF-kappaB signalling rescues the adverse effects of MD-1 deficiency on Ang II-induced myocyte hypertrophy. Representative western blot of quantitative analysis of the TLR4 and MD-2 protein levels in WT and MD-1<sup>-/-</sup> mice at 4 weeks after sham or AB surgery (n = 4). \*P < 0.05 vs. WT/shams; #P < 0.05 vs. WT/AB. Image collected and cropped by CiteAb from the following publication (<https://www.nature.com/articles/srep41857>) licensed under a CC-BY license.



Immunohistochemistry-Paraffin: MD-2 Antibody [NB100-56655] - Analysis of MD2 in human brain tissue using an isotype control antibody (top left) and MD2 antibody (bottom left, right) at 10 ug/ml.



Western Blot: MD-2 Antibody [NB100-56655] - Image of anti-MD2. Total protein from human colon (lane 1) and human spleen (lane 2) was separated on a 4-15% gel by SDS-PAGE, transferred to 0.2 um PVDF membrane and blocked in 5% non-fat milk in TBST. The membrane was probed with 2 ug/ml anti-MD2 in 1% milk and detected with an anti-rabbit HRP secondary antibody using chemiluminescence.



## Publications

Jung F, Staltner R, Baumann A et al. A Xanthohumol-Rich Hop Extract Diminishes Endotoxin-Induced Activation of TLR4 Signaling in Human Peripheral Blood Mononuclear Cells: A Study in Healthy Women International journal of molecular sciences 2022-10-21 [PMID: 36293555] (WB, Human)

Rychkov D, Neely J, Oskotsky T et al. Cross-Tissue Transcriptomic Analysis Leveraging Machine Learning Approaches Identifies New Biomarkers for Rheumatoid Arthritis Frontiers in immunology 2021-06-08 [PMID: 34177888] (WB, Human)

Harada Y, Zhang J, Imari K et al. Cathepsin E in neutrophils contributes to the generation of neuropathic pain in experimental autoimmune encephalomyelitis Pain 2019-09-01 [PMID: 31095099] (WB, Mouse)

Ellison MA, Gearheart CM, Porter CC, Ambruso DR. IFN-g alters the expression of diverse immunity related genes in a cell culture model designed to represent maturing neutrophils. PLoS ONE. 2017-10-05 [PMID: 28982143] (WB, Human)

Xiong X, Liu Y, Mei Y et al. Novel Protective Role of Myeloid Differentiation 1 in Pathological Cardiac Remodelling. Sci Rep. 2017-02-06 [PMID: 28165494] (WB, Mouse)

Martin I, Caban-Hernandez K, Figueroa-Santiago O, Espino AM. Fasciola hepatica Fatty Acid Binding Protein Inhibits TLR4 Activation and Suppresses the Inflammatory Cytokines Induced by Lipopolysaccharide In Vitro and In Vivo J. Immunol. 2015-03-16 [PMID: 25780044] (WB, Human)

Yang H, Wang H, Ju Z et al. MD-2 is required for disulfide HMGB1-dependent TLR4 signaling J. Exp. Med. 2015-01-12 [PMID: 25559892] (WB, Human)

### Details:

MD-2 antibody used for WB analysis on mixture of CBP-tagged HMGB1 or CBP alone with supernatant of yeast Sf9 cells expressing human MD-2 immunoprecipitated with calmodulin beads (Figure 1C). Antibody also used for WB on lysate of RAW 264.7 cells that were subjected or not to the knockdown of MD-2 / with siRNA-MD2 (Figure 2A).

Kunda PE, Cavicchia JC, Acosta CG. Lipopolysaccharides and trophic factors regulate the LPS receptor complex in nodose and trigeminal neurons. Neuroscience. 2014-09-11 [PMID: 25218806] (WB, Mouse)

### Details:

MD1/LY86 antibody used for WB on lysates of neurons from trigeminal and nodose ganglia of CD-1 mice /postnatal day 5. Spleen lysate was used as positive control and the WB Images are shown in Fig. 1A.



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### **Products Related to NB100-56655**

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NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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