

**Datasheet for 600-401-MK3****TLR4 Antibody****Overview**

|                      |                                           |
|----------------------|-------------------------------------------|
| <b>Description:</b>  | Anti-TLR4 (RABBIT) Antibody - 600-401-MK3 |
| <b>Item No.:</b>     | 600-401-MK3                               |
| <b>Size:</b>         | 100 µg                                    |
| <b>Applications:</b> | ELISA, IHC, WB                            |
| <b>Reactivity:</b>   | Human                                     |
| <b>Host Species:</b> | Rabbit                                    |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| <b>Background:</b>   | TLR4 (Toll-Like Receptor 4). Toll-like receptors (TLRs) are signaling molecules that recognize different microbial products during infection and serve as an important link between the innate and adaptive immune responses. These proteins act through adaptor molecules such as MyD88 and TIRAP to activate various kinases and transcription factors such as Protein Kinase C (PKC) alpha/beta and NF-kB. Studies with TLR4-deficient mice indicate that the main ligand for TLR is lipopolysaccharide. Consequently, these mice also showed increased susceptibility to Gram-negative sepsis. Mutations in this gene have been associated with differences in LPS responsiveness, macular degeneration, and pertussis. Anti-TLR4 Antibody is useful for researchers interested in transcription factor research, cytokine research, MIF action through Endocytic Pathway, and rheumatoid arthritis. |
| <b>Synonyms:</b>     | Rabbit Anti-TLR4 Antibody, ARMD10 antibody, CD284 antibody, Toll (Drosophila) homolog antibody, HToll, Homolog of Drosophila Toll, TLR-4 Antibody, TOLL antibody, Toll Endotoxin Hyporesponsiveness antibody, Toll like receptor 4 antibody, Toll like receptor 4 precursor antibody                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

**Target Details**

|                    |       |
|--------------------|-------|
| <b>Gene Name:</b>  | TLR4  |
| <b>Reactivity:</b> | Human |

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|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen Type:</b>     | Conjugated Peptide                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Immunogen:</b>          | This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a region near the n-terminus of human TLR4 protein.                                                                                                                                                                                       |
| <b>Purity/Specificity:</b> | This affinity purified antibody is directed against human TLR4 protein. The product was purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest reactivity with TLR4 protein from human based on 100% homology with the immunizing sequence. The analysis also shows 100% cross-reactivity with gorilla and bonobo, and canine species. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">GenelD - 7099</a></li><li>• <a href="#">NCBI - 19924149</a></li><li>• <a href="#">UniProtKB - O00206</a></li></ul>                                                                                                                                                                                                                      |

## Application Details

|                             |                                                                                                                                                                                                                                                                                                                                                        |
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| <b>Tested Applications:</b> | ELISA, IHC, WB                                                                                                                                                                                                                                                                                                                                         |
| <b>Application Note:</b>    | Anti-TLR4 affinity purified antibody has been tested for use in ELISA, Immunohistochemistry, and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 96 kDa in size corresponding to TLR4 protein in overexpressed lysate by western blotting in the appropriate cell lysate or extract. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                                                        |
| <b>ELISA:</b>               | 5 ug/ml                                                                                                                                                                                                                                                                                                                                                |
| <b>IHC:</b>                 | 1:100 - 1:200                                                                                                                                                                                                                                                                                                                                          |
| <b>WB:</b>                  | 1:1000                                                                                                                                                                                                                                                                                                                                                 |

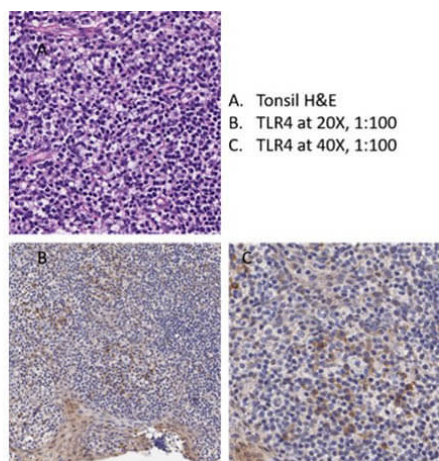
## Formulation

|                        |                                                            |
|------------------------|------------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                                  |
| <b>Concentration:</b>  | 1.0 mg/ml by UV absorbance at 280 nm                       |
| <b>Buffer:</b>         | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>   | 0.01% (w/v) Sodium Azide                                   |
| <b>Stabilizer:</b>     | None                                                       |

## Shipping & Handling

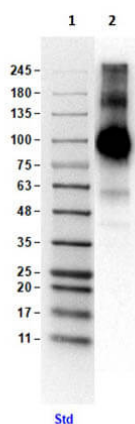
|                            |                                                                                                                                                                                                                                                                                                                                               |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Shipping Condition:</b> | Dry Ice                                                                                                                                                                                                                                                                                                                                       |
| <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 Rabbit Anti-TLR4 Antibody.  
 Tissue: Human Tonsil. Antigen retrieval: HIER using Citrate Buffer for 20min. Primary Antibody: Anti-TLR4 at 1:100 at RT for 30mins. Secondary Antibody: Ready-to-Use Anti-Rabbit Poly-HRP-IgG at RT for 8mins. Stain: DAB. Counterstain: Hematoxylin. Light cytoplasmic staining in random cells near blood vessels is consistent with what is expected of TLR staining in the tonsil.



### Western Blot

Western Blot of Rabbit Anti-TLR4 Antibody. Lane 1: Opal Pre-Stained Molecular Weight Ladder (p/n MB-210-0500). Lane 2: Recombinant TLR4 (Myc/DDK tag). Blocking: BlockOut buffer (p/n MB-073). Primary Antibody: Anti-TLR4 at 1:1000 overnight at 4°C. Secondary Antibody: Goat Anti-Rabbit IgG HRP conjugated (p/n 611-103-122) at 1:70,000 for 30 min RT. Expect: ~50kDa endogenous, ~93kDa overexpressed. Notes: Highly glycosylated protein.

## 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.