

**Datasheet for 200-301-I24****TLR3 Antibody****Overview**

|                      |                                                     |
|----------------------|-----------------------------------------------------|
| <b>Description:</b>  | Anti-TLR3 (MOUSE) Monoclonal Antibody - 200-301-I24 |
| <b>Item No.:</b>     | 200-301-I24                                         |
| <b>Size:</b>         | 100 µg                                              |
| <b>Applications:</b> | FC, IF, IHC, IP, WB                                 |
| <b>Reactivity:</b>   | Human                                               |
| <b>Host Species:</b> | Mouse                                               |

**Product Details****Background:**

Anti-TLR3 Antibody detects human TLR3. The Toll-like receptor (TLR) family in mammal comprises a family of transmembrane proteins characterized by multiple copies of leucine rich repeats in the extracellular domain and IL-1 receptor motif in the cytoplasmic domain. Like its counterparts in *Drosophila*, TLRs signal through adaptor molecules and could constitute an important and unrecognized component of innate immunity in humans. The TLR family is a phylogenetically conserved mediator of innate immunity that is essential for microbial recognition. TLRs characterized so far activate the MyD88/interleukin-1 receptor-associated kinase (IRAK) signaling pathway. Ten human homologs of TLRs (TLR1-10) have been described. TLR3 cDNA codes for a protein with approximate molecular weight of 120 kDa. TLR3 has a restricted expression pattern being expressed in dendritic cells (DC). TLR3 mRNA expression was detected by in situ hybridization in DC and lymph nodes. The expression of TLR3 in a single cell type may indicate a specific role for this molecule in a restricted setting. Anti-TLR3 Antibody is ideal for investigators involved in cytokines and growth factor research.

|                      |                             |
|----------------------|-----------------------------|
| <b>Synonyms:</b>     | Toll-like receptor 3, CD283 |
| <b>Host Species:</b> | Mouse                       |
| <b>Clonality:</b>    | Monoclonal                  |
| <b>Clone ID:</b>     | 40C1285.6                   |
| <b>Format:</b>       | IgG1                        |

**Target Details**

|                   |      |
|-------------------|------|
| <b>Gene Name:</b> | TLR3 |
|-------------------|------|

|                            |                                                                                                                                                                                                                                                                                              |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reactivity:</b>         | Human                                                                                                                                                                                                                                                                                        |
| <b>Immunogen Type:</b>     | Conjugated Peptide                                                                                                                                                                                                                                                                           |
| <b>Immunogen:</b>          | TLR3 Antibody was produced in mice prepared by repeated immunizations with a peptide corresponding to internal amino acid sequences in the human protein TLR3.                                                                                                                               |
| <b>Purity/Specificity:</b> | Anti-TLR3 Antibody was purified by Protein G chromatography. A BLAST analysis was used to suggest cross-reactivity with Anti-TLR3 from dog, human and mouse based on 100% homology with the immunizing sequence. Cross-reactivity with Anti-TLR3 from other sources has not been determined. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - O15455</a></li><li>• <a href="#">NCBI - NP_003256.1</a></li><li>• <a href="#">GeneID - 7098</a></li></ul>                                                                                                                    |

## Application Details

|                             |                                                                                                                                                                                                                                     |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b> | FC, IF, IHC, IP, WB                                                                                                                                                                                                                 |
| <b>Application Note:</b>    | Anti-TLR3 Antibody is tested for use in WB, Flow, Flow-IC, ICC/IF, IHC, IHC-P, IP, and Bioactivity. Expect a band approximately 120kDa on specific lysates. Specific conditions for reactivity should be optimized by the end user. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                     |
| <b>FC:</b>                  | 2-4 µg/10 <sup>6</sup> cells                                                                                                                                                                                                        |
| <b>IHC:</b>                 | 10 µg/mL                                                                                                                                                                                                                            |
| <b>IP:</b>                  | 2 µg/10 <sup>6</sup> cells                                                                                                                                                                                                          |
| <b>WB:</b>                  | 1-3 µg/mL                                                                                                                                                                                                                           |

## Formulation

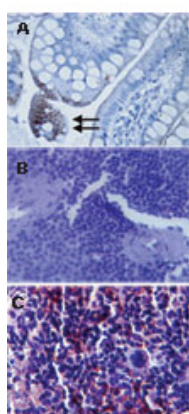
|                        |                                                            |
|------------------------|------------------------------------------------------------|
| <b>Physical State:</b> | Liquid                                                     |
| <b>Concentration:</b>  | 1.0 mg/ml 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>   | 0.05% (w/v) Sodium Azide                                   |

## 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



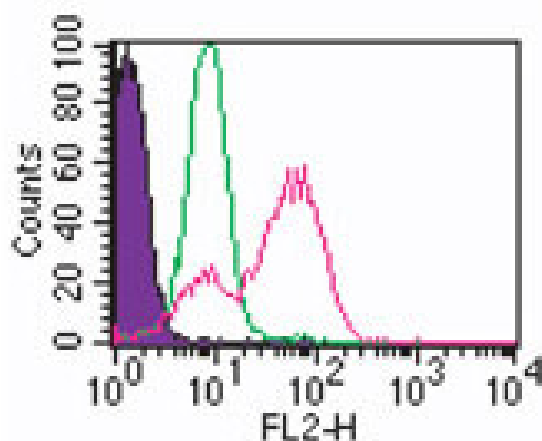
### Immunohistochemistry

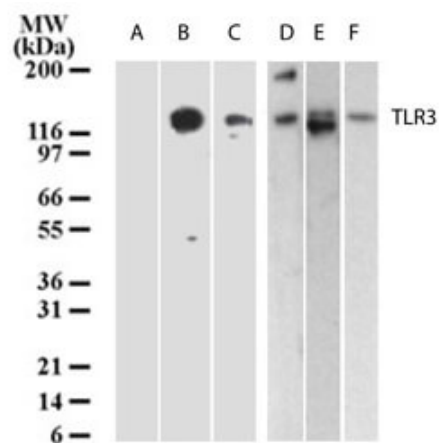
Immunohistochemistry of mouse Anti-TLR3 antibody.

Tissue A: Human gut lumen (longitudinal section, transverse region) using TLR3. Tissue B: Mouse spleen tissue using isotype control. Tissue C: Mouse spleen tissue using TLR3. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: TLR3 antibody at tissue A at 10 µg/mL and at tissue C at 5 mg/ml for 1 h at RT. Secondary antibody: Peroxidase mouse secondary antibody at 1:10,000 for 45 min at RT. Localization: TLR3 is an endoplasmic reticulum membrane and a single-pass type 1 membrane protein. Staining: TLR3 is precipitated as a red signal with hematoxylin purple nuclear counterstain.

### Flow Cytometry

Flow Cytometry of Mouse Anti-TLR3 antibody. Cells: Human monocytes. Stimulation: none. Primary Antibody: Anti-TLR3 antibody at 0.5 ug (red) and isotype control (green). Secondary Antibody: Goat anti-mouse IgG1 PE conjugate (BD).





#### Western Blot

Western Blot of Mouse Anti-TLR3 antibody. Lane A: untransfected 293. Lane B: 293 cells with human TLR3 cDNA. Lane C: human intestine. Lane D: placenta. Lane E: heart. Lane F: ovary. Primary antibody: TLR3 antibody at 3  $\mu\text{g/mL}$  for overnight at 4°C. Secondary antibody: Goat anti-mouse HRP conjugate at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 80 kDa for TLR3. Other band(s): none.

## Disclaimer

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