

**Datasheet for 200-301-I25****TLR4 Antibody****Overview**

<b>Description:</b>	Anti-TLR4 (MOUSE) Monoclonal Antibody - 200-301-I25
<b>Item No.:</b>	200-301-I25
<b>Size:</b>	100 µg
<b>Applications:</b>	ChIP, Dot Blot, ELISA, FC, IF, IHC, WB
<b>Reactivity:</b>	Human, Mouse, Rat
<b>Host Species:</b>	Mouse

**Product Details**

**Background:** Anti-TLR4 CD284 antibody detects human TLR4 CD284. 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. The TLR family is a phylogenetically conserved mediator of innate immunity that is essential for microbial recognition. Ten human homologs of TLRs (TLR1-10) have been described. Among this family of receptors, TLR2 and TLR4 have been most studied. These studies have suggested that TLR2 and TLR4 may serve as potential main mediators of LPS signaling. The TLR4 cDNA codes for a protein consisting of 799 amino acids with approximate molecular weight of 88 kDa. Anti-TLR4 CD284 antibody is ideal for investigators involved in cytokines and growth factor research.

<b>Synonyms:</b>	hToll, Toll-like receptor 4, CD284
<b>Host Species:</b>	Mouse
<b>Clonality:</b>	Monoclonal
<b>Clone ID:</b>	76B357.1
<b>Format:</b>	IgG2b

**Target Details**

<b>Gene Name:</b>	TLR4
<b>Reactivity:</b>	Human, Mouse, Rat

<b>Immunogen Type:</b>	Conjugated Peptide
<b>Immunogen:</b>	TLR4 Antibody was produced in mice prepared by repeated immunizations with amino acids corresponding to an internal sequence in human TLR4.
<b>Purity/Specificity:</b>	Anti-TLR4 Antibody was purified by Protein G chromatography. A BLAST analysis was used to suggest cross-reactivity with Anti-TLR4 from human and mouse based on 100% homology with the immunizing sequence. Cross-reactivity with Anti-TLR4 from other sources has not been determined.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">UniProtKB - O00206</a></li><li>• <a href="#">NCBI - NP_003257.1</a></li><li>• <a href="#">GeneID - 7099</a></li></ul>

## Application Details

<b>Tested Applications:</b>	ChIP, Dot Blot, ELISA, FC, IF, IHC, WB
<b>Application Note:</b>	Anti-TLR4 Antibody has been tested in WB, ChIP, DB, ELISA, Flow, Flow-CS, Flow-IC, ICC/IF, IHC, IHC-Fr, IHC-P, In vitro, CyTOF-ready, Dual ISH-IHC, ELISA (Capture), and Knockdown/Knockout. Expect a band approximately 95kDa 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>ChIP:</b>	1:10-1:500
<b>ELISA:</b>	0.5 ug
<b>FC:</b>	0.5-2.0 µg/10 <sup>6</sup> cells
<b>IF:</b>	1:10-1:500
<b>IHC:</b>	5 µg/mL
<b>WB:</b>	1-3 µg/mL

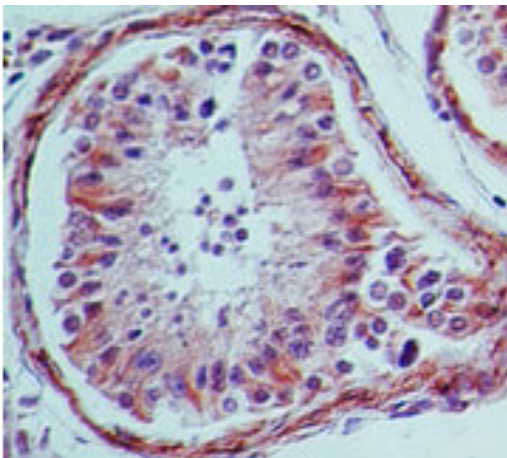
## Formulation

<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

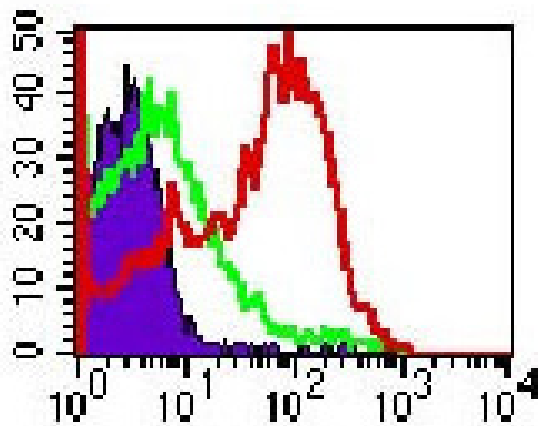
<b>Shipping Condition:</b>	Dry Ice
<b>Storage Condition:</b>	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is 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



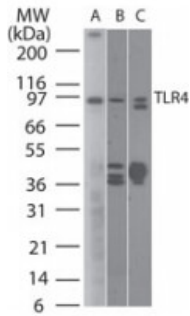
### Immunohistochemistry

Immunohistochemistry of mouse Anti-TLR4 antibody.  
Tissue: human testis. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: TLR4 antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase mouse secondary antibody at 1:10,000 for 45 min at RT. Localization: TLR4 is a single-pass type 1 membrane protein. Staining: TLR4 is stained purple.



### Flow Cytometry

Flow Cytometry of Mouse Anti-TLR4 CD284 antibody. Cells: Mouse splenocytes. Stimulation: none. Primary Antibody: Anti-TLR3 antibody at 0.5 µg/10<sup>6</sup> cells of antibody (red) and the isotype control (green). Secondary Antibody: Goat anti-mouse IgG1 PE conjugate (BD).



### Western Blot

Western Blot of Mouse Anti-TLR4 CD284 antibody. Lane A: human intestine. Lane B: mouse intestine. Lane C: rat intestine lysate. Primary antibody: TLR4 antibody at 2  $\mu\text{g}/\text{mL}$  for tissue Lane A and at 6  $\mu\text{g}/\text{mL}$  for Lanes B and C overnight at 4°C. Secondary antibody: IRDye800™ mouse secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 80 kDa for TLR4 CD284. Other band(s): none.

### 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.