Datasheet for 200-301-I24

TLR3 Antibody

Overview

Description:	Anti-TLR3 (MOUSE) Monoclonal Antibody - 200-301-I24
Item No.:	200-301-I24
Size:	100 µg
Applications:	FC, IF, IHC, IP, WB
Reactivity:	Human
Host Species:	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.
Synonyms:	Toll-like receptor 3, CD283
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	40C1285.6
Format:	IgG1

Target Details

Gene Name:	TLR3

Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	TLR3 Antibody was produced in mice prepared by repeated immunizations with a peptide corresponding to internal amino acid sequences in the human protein TLR3.
Purity/Specificity:	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.
Relevant Links:	• UniProtKB - O15455 • NCBI - NP_003256.1 • GeneID - 7098

Application Details

Tested Applications:	FC, IF, IHC, IP, WB
Application Note:	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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
FC:	2-4 µg/10^6 cells
IHC:	10 ug/mL
IP:	2 µg/10^6 cells
WB:	1-3 µg/mL

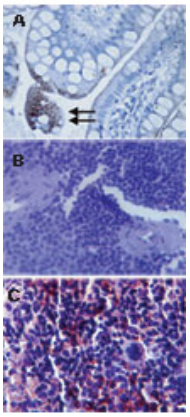
Formulation

Physical State:	Liquid
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.05% (w/v) Sodium Azide
Stabilizer:	0.05% BSA

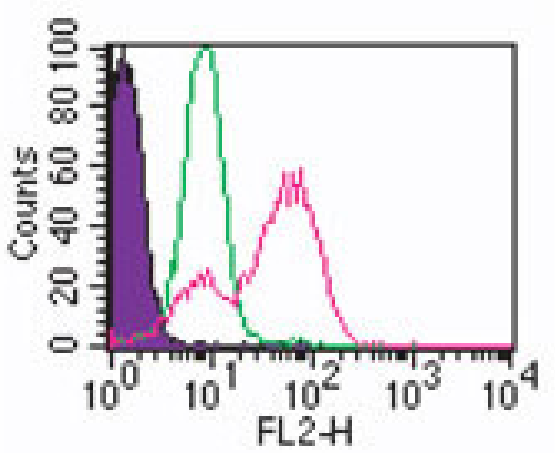
Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	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.
Expiration:	Expiration date is one (1) year from date of receipt.

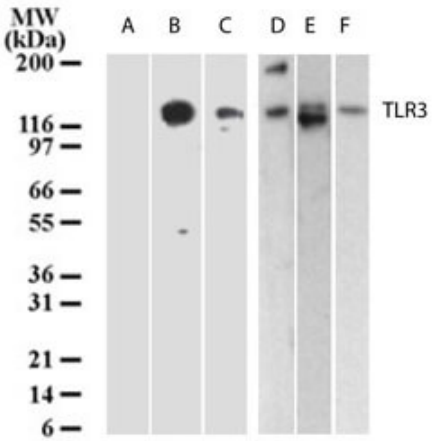
Images



Immunohistochemistry
Immunohistochemistry of mouse Anti-TLR3 antibody. Tissue A: Human gut lumen (longitudinal section, tranverse 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 µg/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.

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