Datasheet for 600-401-FG3

TLR6 Antibody

Overview

Description:	Anti-TLR6 (RABBIT) Antibody - 600-401-FG3
Item No.:	600-401-FG3
Size:	100 µg
Applications:	ELISA, IHC, WB, IF
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Toll-like receptors (TLRs) are evolutionarily conserved pattern-recognition molecules resembling the toll proteins that mediate antimicrobial responses in Drosophila. These proteins recognize different microbial products during infection and serve as an important link between the innate and adaptive immune responses. The TLRs act through adaptor molecules such as MyD88 and TIRAP to activate various kinases and transcription factors so the organism can respond to potential infection. TLR6 was first identified as a close homolog of TLR1, sharing 69% sequence identify. Like TLR1, TLR6 can form heterodimers with TLR2, and these TLR6:TLR2 dimers coordinate macrophage activation by Gram-positive bacteria and the yeast cell wall particle zymosan. Activation of these complexes not only initiates pro-inflammatory cascades, but also can lead to apoptotic responses.
Synonyms:	TLR6 Antibody, CD286, Toll-like receptor 6
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TLR6
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-TLR6 antibody was prepared from whole rabbit serum produced by repeated immunizations with a peptide corresponding to 13 amino acids near the internal region of human TLR6.
Purity/Specificity:	Anti-TLR6 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with TLR6 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q9Y2C9 • GeneID - 10333 • NCBI - NP_006059.2

Application Details

Tested Applications:	ELISA, IHC, WB
Suggested Applications:	IF (Based on references)
Application Note:	Anti-TLR6 Antibody has been tested for use in ELISA, Western Blotting, and Immunohistochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 92 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5000-1:20,000
IHC:	2 µg/mL
WB:	0.5-2 µg/mL

Formulation

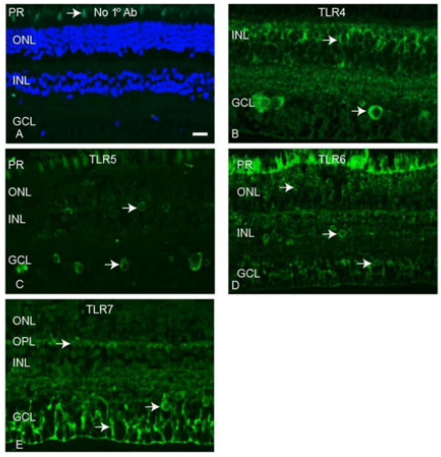
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

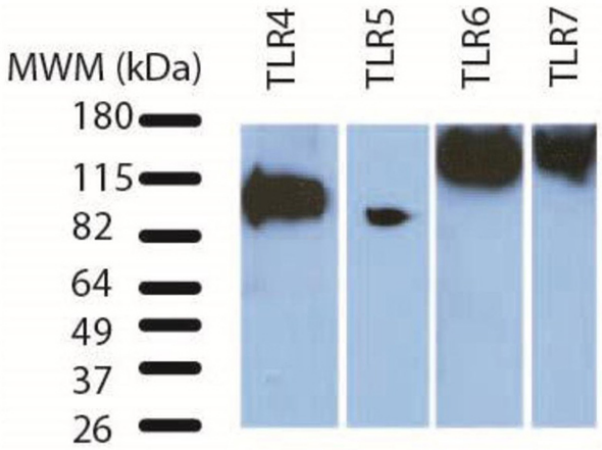
Shipping Condition:	Dry Ice

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.

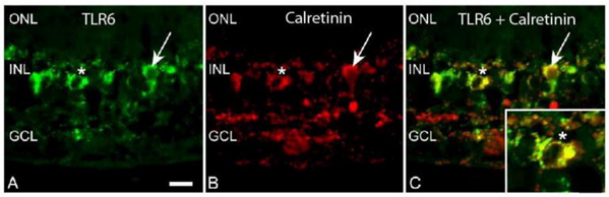
Images



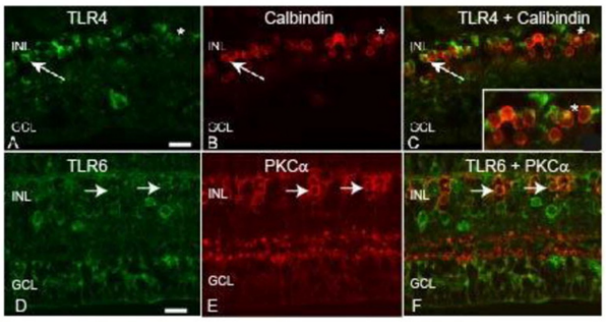
Immunofluorescence Microscopy
TLR 4-7 proteins were detected by immunofluorescence of macaque retina tissue. Arrow in panel A identifies autofluorescence in photoreceptor layer. Arrows in panels B–D identify TLR positive cells. Photoreceptor layer (PR), Outer nuclear layer (ONL), outer plexiform layer (OPL), inner nuclear layer (INL), ganglion cell layer (GCL). Scale bar= 20 µm. (TLR7 p/n 200-401-A64 and TLR6 p/n 600-401-FG3 at 1:100). Fig 3. PMID: 29954626.



Western Blot
Immunoblots of macaque retina tissue lysates demonstrate expression of TLR 4-7 proteins. Table 2 lists amount of retina lysate loaded and immunoblotting conditions for each antibody. This figure is a composite of 4 separate immunoblots. The bands in the MWM lane represent the migration of BenchMark Pre-Stained Protein Standard on a 4–15% Mini-PROTEAN TGX precast gel. (TLR7 p/n 200-401-A64 and TLR6 p/n 600-401-FG3 at 1:500) Fig 1.
PMID: 29954626.



Immunofluorescence Microscopy
A) The arrow and asterisk indicate TLR6 staining of round cells in INL of macaque retina tissue. B) The arrow and asterisk indicate staining of calretinin positive cells. C) Merged image with arrow and asterisk indicating co-localization of TLR6 and calretinin positive cells. Outer nuclear layer (ONL), inner nuclear layer (INL), ganglion cell layer (GCL). Scale bar= 20 µm. Fig 7. PMID: 29954626



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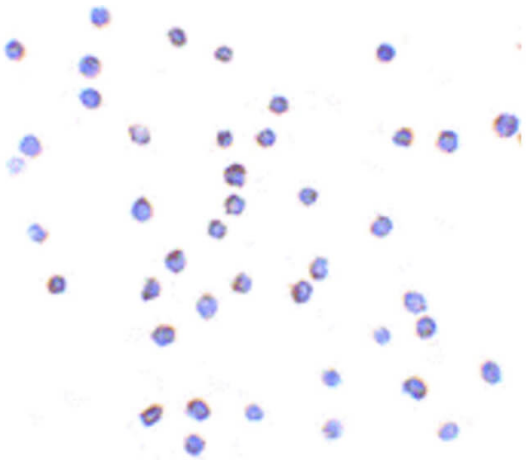
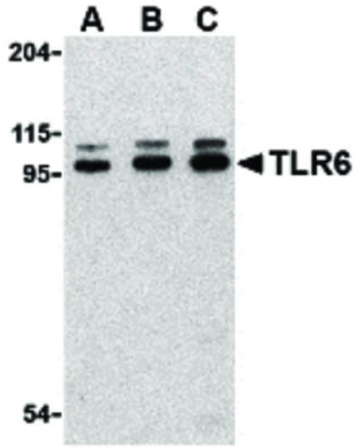


Immunohistochemistry
Immunocytochemistry of TLR6 antibody. Cell Type: Jurkat cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: TLR6 antibody at 2 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: TLR6 is located in the membrane and is secreted. Staining: TLR6 is stained with toluidine blue.



Western Blot
Western Blot of TLR6 antibody in Jurkat cell lysate. Lane A: TLR6 antibody at 0.5 µg/mL. Lane B: TLR6 antibody at 1 µg/mL. Lane C: TLR6 antibody at 2 µg/mL. Load: 35 µg per lane. Primary antibody: TLR6 antibody at designated concentrations for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C.
Predicted/Observed size: 28 kDa, 96 kDa for TLR6. Other band(s): TLR6 splice variants and isoforms.

References

- Sauter MM et al. Toll-like receptors 4, 5, 6 and 7 are constitutively expressed in non-human primate retinal neurons. *J Neuroimmunol.* (2018)

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