abcam

Product datasheet

Anti-TLR3 antibody ab62566

★★★★ 11 Abreviews 41 References 5 Images

Overview

Product name Anti-TLR3 antibody

Description Rabbit polyclonal to TLR3

Host species Rabbit

Tested applications Suitable for: IHC-P, ICC, WB Species reactivity

Immunogen Synthetic peptide within Human TLR3 aa 780-830 (C terminal). The exact sequence is

> proprietary. 15 aa long. Database link: O15455

Reacts with: Mouse, Human

(Peptide available as ab125950)

Positive control IHC-P: Human and mouse spleen tissue. WB: Daudi cell lysate and mouse speen tissue. ICC:

Human spleen tissue.

General notes The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

> Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at +4°C.

Storage buffer pH: 7.2

Preservative: 0.02% Sodium azide

Constituent: PBS

Purity Affinity purified

Clonality Polyclonal

Isotype ΙgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab62566 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	**** <u>(2)</u>	Use a concentration of 2 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. Also see abreview 35252.
ICC		Use a concentration of 1 µg/ml.
WB	★★★★☆ (6)	Use a concentration of 0.5 - 2 µg/ml. Detects a band of approximately 104 kDa (predicted molecular weight: 104 kDa).

T	a	rg	et

Function

Key component of innate and adaptive immunity. TLRs (Toll-like receptors) control host immune response against pathogens through recognition of molecular patterns specific of microorganisms. TLR3 is a nucleotide-sensing TLR which is activated by double-stranded RNA, a sign of viral infection. Acts via MYD88 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response.

Tissue specificity

Expressed at high level in placenta and pancreas. Also detected in CD11c+ immature dendritic cells. Only expressed in dendritic cells and not in other leukocytes, including monocyte precursors. TLR3 is the TLR that is expressed most strongly in the brain, especially in astrocytes, glia, and neurons.

Involvement in disease

Defects in TLR3 are associated with herpes simplex encephalitis type 2 (HSE2) [MIM:613002]. HSE is a rare complication of human herpesvirus 1 (HHV-1) infection, occurring in only a small minority of HHV-1 infected individuals. HSE is characterized by hemorrhagic necrosis of parts of the temporal and frontal lobes. Onset is over several days and involves fever, headache, seizures, stupor, and often coma, frequently with a fatal outcome. Note=TLR3 mutations predispose otherwise healthy individuals to isolated herpes simplex encephalitis through a mechanism that involves impaired IFNs production and reduced immune defense against viral infection in the central nervous system.

Sequence similarities

Belongs to the Toll-like receptor family.
Contains 22 LRR (leucine-rich) repeats.
Contains 1 LRRCT domain.
Contains 1 LRRNT domain.
Contains 1 TIR domain.

Domain

ds-RNA binding is mediated by LRR 1 to 3, and LRR 17 to 18.

Post-translational modifications

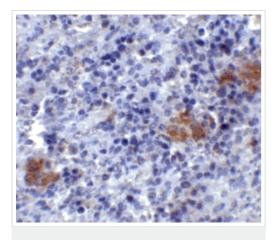
 $\label{thm:leavily N-glycosylated} \ \text{Heavily N-glycosylated}, \ \text{except on that part of the surface of the ectodomain that is involved in the surface of the ectodomain that is involved in the surface of the ectodomain that is involved in the surface of the ectodomain that is involved in the surface of the ectodomain that is involved in the surface of the ectodomain that is involved in the surface of the ectodomain that is involved in the surface of the ectodomain that is involved in the surface of the ectodomain that is involved in the surface of the ectodomain that is involved in the surface of the ectodomain that is involved in the surface of the ectodomain that is involved in the surface of the ectodomain that is involved in the surface of the ectodomain that is involved in the surface of the ectodomain that is involved in the surface of the ectodomain that is involved in the surface of the ectodomain that is involved in the ectodomain that is involved in the ectodomain that it is involved in the$

ligand binding.

Cellular localization

 ${\bf Endoplasmic\ reticulum\ membrane.\ Endosome\ membrane.}$

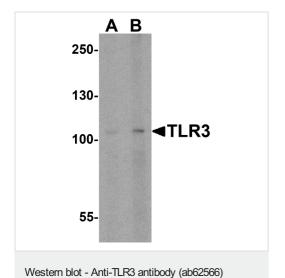
Images



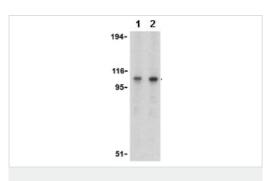
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TLR3 antibody (ab62566)

Paraffin-embedded mouse spleen tissue stained for TLR3 using ab62566 at 2 μ g/ml in immunohistochemical analysis. DAB detection. Counterstained with hematoxylin.

Antigen Retrieval (Microwave Method).



Western blot analysis of TLR3 expression in mouse spleen tissue lysate with ab62566 at (A) 0.5 and (B) $1\mu g/ml$.



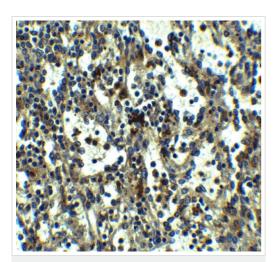
Western blot - Anti-TLR3 antibody (ab62566)

Lane 1: Anti-TLR3 antibody (ab62566) at 1 μg/ml **Lane 2**: Anti-TLR3 antibody (ab62566) at 2 μg/ml

All lanes: Daudi (Human Burkitt's lymphoma cell line) cell lysate

Lysates/proteins at 15 µg per lane.

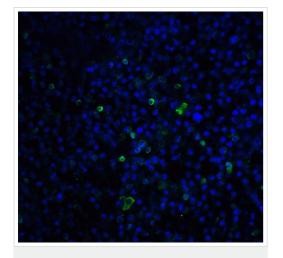
Predicted band size: 104 kDa **Observed band size:** 104 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TLR3 antibody (ab62566)

Paraffin-embedded human spleen tissue stained for TLR3 using ab62566 at 5 μ g/ml in immunohistochemical analysis. DAB detection. Counterstained with hematoxylin.

Antigen Retrieval (Microwave Method).



Immunocytochemistry - Anti-TLR3 antibody (ab62566)

Immunocytochemical analysis of human spleen tissue labeling TLR3 using ab62566 at 20 μ g/ml (green).

Antigen Retrieval (Microwave Method).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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