# abcam

### Product datasheet

# Anti-TLR3 antibody ab137722

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#### Overview

Product name Anti-TLR3 antibody

**Description** Rabbit polyclonal to TLR3

Host species Rabbit

Tested applications Suitable for: IHC-P, WB, ICC/IF

**Species reactivity** Reacts with: Mouse, Rat, Human

Predicted to work with: Cow, Cat

**Immunogen** Recombinant fragment, corresponding to a region within amino acids 464-647 of Human TLR3.

Positive control WB: K562 and THP-1 whole cell lysates; IHC-P: Human TOV-112D xenograft, mouse liver, rat

pancreas tissue; IF: HeLa cells.

**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. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.00

Preservative: 0.025% Proclin 300

Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)

**Purity** Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

#### **Applications**

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#### The Abpromise guarantee

Our Abpromise guarantee covers the use of ab137722 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	**** (1)	1/100 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/1000 - 1/10000. Predicted molecular weight: 104 kDa.
ICC/IF		1/100 - 1/1000.

<b>Target</b>
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**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

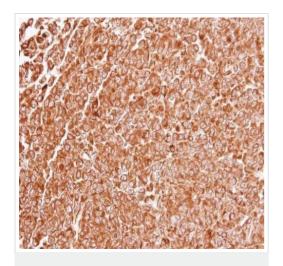
Heavily N-glycosylated, except on that part of the surface of the ectodomain that is involved in

ligand binding.

**Cellular localization** Endoplasmic reticulum membrane. Endosome membrane.

#### **Images**

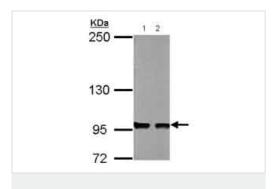
modifications



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TLR3 antibody (ab137722)

Immunohistochemical analysis of paraffin-embedded TOV-112D xenograft labelling TLR3 with ab137722 at 1/100 dilution.

Antigen Retrieval: Citrate buffer, pH 6.0, 15 min.



Western blot - Anti-TLR3 antibody (ab137722)

All lanes: Anti-TLR3 antibody (ab137722) at 1/5000 dilution

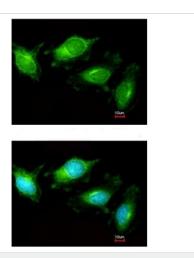
Lane 1 : K562 whole cell lysate

Lane 2: THP-1 whole cell lysate

Lysates/proteins at 30 µg per lane.

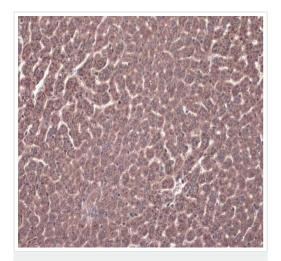
Predicted band size: 104 kDa

5% SDS PAGE



Immunocytochemistry/ Immunofluorescence - Anti-TLR3 antibody (ab137722)

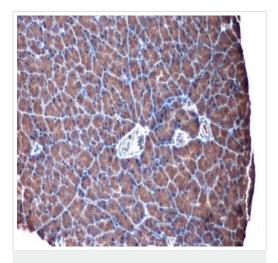
Immunofluorescenct analysis of methanol-fixed HeLa cells labelling TLR3 with ab137722 at 1/200 dilution. Lower image is co-stained with Hoechst 33342.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TLR3 antibody (ab137722)

Immunohistochemical analysis of paraffin-embedded mouse liver tissue labelling TLR3 at cytoplasm with ab137722 at 1/1000 dilution.

Antigen Retrieval: Citrate buffer, pH 6.0, 15 min.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TLR3 antibody (ab137722)

Immunohistochemical analysis of paraffin-embedded rat pancreas tissue labelling TLR3 at cytoplasm with ab137722 at 1/1000 dilution.

Antigen Retrieval: Citrate buffer, pH 6.0, 15 min.

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

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