

Anti-TLR3 Antibody
Catalog # ABO11048**Specification**

Anti-TLR3 Antibody - Product Information

| | |
|-------------------|------------------------|
| Application | WB |
| Primary Accession | O15455 |
| Host | Rabbit |
| Reactivity | Human, Mouse, Rat |
| Clonality | Polyclonal |
| Format | Lyophilized |

Description

Rabbit IgG polyclonal antibody for Toll-like receptor 3(TLR3) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-TLR3 Antibody - Additional Information

Gene ID 7098

Other Names

Toll-like receptor 3, CD283, TLR3

Calculated MW

103829 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Endoplasmic reticulum membrane; Single-pass type I membrane protein. Endosome membrane.

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. .

Protein Name

Toll-like receptor 3

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human TLR3(827-845aa CKRFKVVHHAQQAEQNLD), different from the related rat and mouse sequences by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the Toll-like receptor family.

Anti-TLR3 Antibody - Protein Information

Name TLR3 ([HGNC:11849](#))

Function

Key component of innate and adaptive immunity. TLRs (Toll-like receptors) control host immune response against pathogens through recognition of molecular patterns specific to microorganisms. TLR3 is a nucleotide-sensing TLR which is activated by double-stranded RNA, a sign of viral infection. Acts via the adapter TRIF/TICAM1, leading to NF-kappa-B activation, IRF3 nuclear translocation, cytokine secretion and the inflammatory response.

Cellular Location

Endoplasmic reticulum membrane; Single-pass type I membrane protein. Endosome membrane. Early endosome

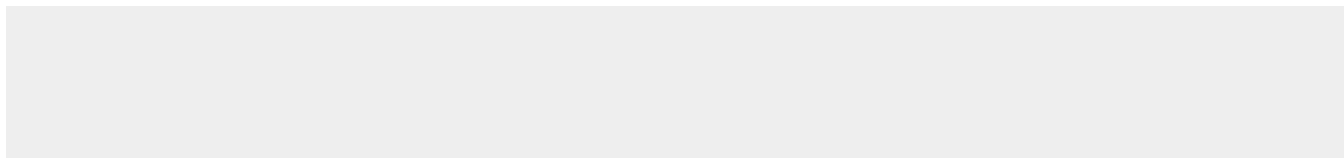
Tissue Location

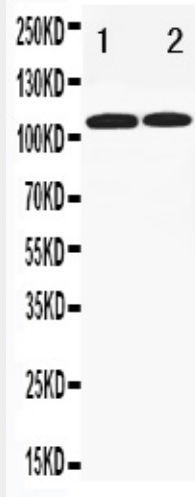
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Anti-TLR3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-TLR3 Antibody - Images



Anti-TLR3 antibody, ABO11048, Western blotting
Lane 1: PANC Cell Lysate
Lane 2: A549 Cell Lysate

Anti-TLR3 Antibody - Background

TLR3(Toll-like receptor 3) also known as CD283(cluster of differentiation 283) is a protein that in humans is encoded by the TLR3 gene. TLR3 gene is mapped to chromosome 4q35 by fluorescence in situ hybridization. TLR3 is a member of the Toll-like receptor family of pattern recognition receptors of the innate immune system. TLRs are highly conserved from *Drosophila* to humans and share structural and functional similarities. They recognize pathogen-associated molecular patterns(PAMPs) that are expressed on infectious agents, and mediate the production of cytokines necessary for the development of effective immunity. The various TLRs exhibit different patterns of expression. This receptor is most abundantly expressed in placenta and pancreas, and is restricted to the dendritic subpopulation of the leukocytes. It recognizes dsRNA associated with viral infection, and induces the activation of NF-kappa B and the production of type I interferons. It may thus play a role in host defense against viruses. TLR3 recognizes double-stranded RNA, a form of genetic information carried by some viruses such as retroviruses. Upon recognition, TLR 3 induces the activation of NF-kappa B to increase production of type I interferons which signal other cells to increase their antiviral defenses. Double-stranded RNA is also recognised by the cytoplasmic receptors RIG-I and MDA-5. TLR3 displays a protective role in mouse models of atherosclerosis. In addition, TLR3 activators show effects on human vascular cells.