

Anti-TLR8 Antibody
Catalog # ABO12752**Specification**

Anti-TLR8 Antibody - Product Information

Application	WB
Primary Accession	O9NR97
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Toll-like receptor 8 (TLR8) detection. Tested with WB in Human;Rat.

Reconstitution

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

Anti-TLR8 Antibody - Additional Information

Gene ID 51311

Other Names

Toll-like receptor 8, CD288, TLR8

Calculated MW

119828 MW KDa

Application Details

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

Subcellular Localization

Membrane ; Single-pass type I membrane protein .

Tissue Specificity

Detected in brain, heart, lung, liver, placenta, in monocytes, and at lower levels in CD11c+ immature dendritic cells.

Protein Name

Toll-like receptor 8

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human TLR8 (881-907aa DAYISYDTKDASVTDWVINELRYHLEE), identical to the related mouse sequence.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, 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-TLR8 Antibody - Protein Information

Name TLR8 ([HGNC:15632](#))

Function

Endosomal receptor that plays a key role in innate and adaptive immunity (PubMed:25297876, PubMed:32433612). Controls host immune response against pathogens through recognition of RNA degradation products specific to microorganisms that are initially processed by RNASET2 (PubMed:31778653). Recognizes GU-rich single- stranded RNA (GU-rich RNA) derived from SARS-CoV-2, SARS-CoV-1 and HIV- 1 viruses (PubMed:33718825). Upon binding to agonists, undergoes dimerization that brings TIR domains from the two molecules into direct contact, leading to the recruitment of TIR-containing downstream adapter MYD88 through homotypic interaction (PubMed:23520111, PubMed:25599397, PubMed:26929371, PubMed:33718825). In turn, the Myddosome signaling complex is formed involving IRAK4, IRAK1, TRAF6, TRAF3 leading to activation of downstream transcription factors NF- kappa-B and IRF7 to induce pro-inflammatory cytokines and interferons, respectively (PubMed:16737960, PubMed:17932028, PubMed:29155428).

Cellular Location

Endosome membrane; Single-pass type I membrane protein. Note=Endosomal localization confers distinctive proteolytic processing

Tissue Location

Expressed in myeloid dendritic cells, monocytes, and monocyte-derived dendritic cells.

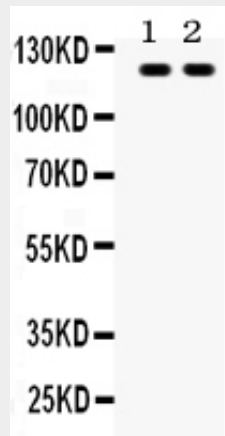
Anti-TLR8 Antibody - Protocols

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-TLR8 Antibody - Images



Anti- TLR8 antibody, ABO12752, Western blotting All lanes: Anti TLR8 (ABO12752) at 0.5ug/ml Lane 1: Rat Liver Tissue Lysate at 50ug Lane 2: HEPG2 Whole Cell Lysate at 40ug Predicted bind size: 120KD Observed bind size: 120KD

Anti-TLR8 Antibody - Background

TLR8 (Toll-like receptor 8) is a protein that in humans is encoded by the TLR8 gene. TLR8 has also been designated as CD288 (cluster of differentiation 288). The TLR8 gene is mapped to Xp22.3-p22.2 by Chuang and Ulevitch (2000) and Du et al. (2000). The protein encoded by this gene is a member of the Toll-like receptor (TLR) family which plays a fundamental role in pathogen recognition and activation of innate immunity. 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 gene is predominantly expressed in lung and peripheral blood leukocytes, and lies in close proximity to another family member, TLR7, on chromosome X. TLR8 recognises G-rich oligonucleotides.