

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

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**Anti-TLR8 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q9NR97</a>
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<br>

**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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**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 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-TLR8 Antibody - Protein Information

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

#### Function

Endosomal receptor that plays a key role in innate and adaptive immunity (PubMed: [25297876](http://www.uniprot.org/citations/25297876), PubMed: [32433612](http://www.uniprot.org/citations/32433612)). Controls host immune response against pathogens through recognition of RNA degradation products specific to microorganisms that are initially processed by RNASET2 (PubMed: [31778653](http://www.uniprot.org/citations/31778653)). Recognizes GU-rich single-stranded RNA (GU-rich RNA) derived from SARS-CoV-2, SARS-CoV-1 and HIV-1 viruses (PubMed: [33718825](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/23520111), PubMed: [25599397](http://www.uniprot.org/citations/25599397), PubMed: [26929371](http://www.uniprot.org/citations/26929371), PubMed: [33718825](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/16737960), PubMed: [17932028](http://www.uniprot.org/citations/17932028), PubMed: [29155428](http://www.uniprot.org/citations/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.

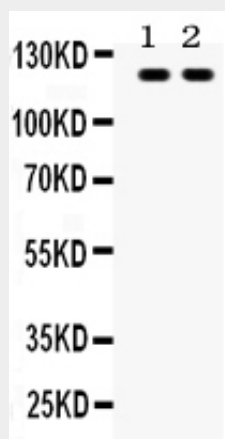
### Anti-TLR8 Antibody - Protocols

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 blottingAll lanes: Anti TLR8 (ABO12752) at 0.5ug/mlLane 1: Rat Liver Tissue Lysate at 50ugLane 2: HEPG2 Whole Cell Lysate at 40ugPredicted bind size: 120KDObserved 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.