

**Anti-TLR8 (RABBIT) Antibody**  
**TLR8 Antibody**  
**Catalog # ASR5368**

**Specification**

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**Anti-TLR8 (RABBIT) Antibody - Product Information**

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human, Mouse
Clonality	Polyclonal
Application	WB, I, LCI
Application Note	Anti-TLR8 antibody has been tested for use in ELISA, immunohistochemistry, Immunocytochemistry, and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 115 kDa in size corresponding to TLR8 protein by western blotting in the appropriate cell lysate or extract.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region of human TLR8 protein.
Preservative	0.02% (w/v) Sodium Azide

**Anti-TLR8 (RABBIT) Antibody - Additional Information**

**Gene ID** 51311

**Other Names**  
51311

**Purity**

This affinity-purified antibody is directed against human TLR8 protein. The product is affinity chromatography purified via peptide column. A BLAST analysis was used to suggest cross reactivity with TLR8 protein from human and mouse sources based on 100% homology with the immunizing sequence. Reactivity against homologues from other sources is not known.

**Storage Condition**

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

### Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

## Anti-TLR8 (RABBIT) 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

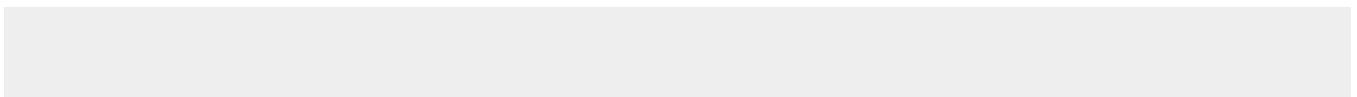
Expressed in myeloid dendritic cells, monocytes, and monocyte-derived dendritic cells.

## Anti-TLR8 (RABBIT) 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 (RABBIT) Antibody - Images





Immunohistochemistry of Rabbit Anti-TLR8 Antibody. Tissue: a Daudi cell. Fixation: paraformaldehyde fixed. Antigen retrieval: not required. Primary antibody: TLR 8 antibody at 1:500 for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: TLR 8 is cytoplasmic. Staining: TLR-8 as precipitated brown signal with hematoxylin purple nuclear counterstain.

#### **Anti-TLR8 (RABBIT) Antibody - Background**

TLR8 (Toll Like Receptor 8). Toll-like receptors (TLRs) are signaling molecules that recognize different microbial products during infection and serve as an important link between the innate and adaptive immune responses (1-3). These proteins act through adaptor molecules such as MyD88 and TIRAP to activate various kinases and transcription factors (4,5). Like TLR7, TLR8 is localized to endosomal or lysosomal compartments (6) and stimulates the innate immune response after activation by guanosine- and uridine-rich single-stranded RNA (7). Human but not murine TLR8 confers responsiveness to the antiviral compound R-848 (8).