

**TLR8 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP14012C****Specification**

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**TLR8 Antibody (Center) - Product Information**

Application	WB, IHC-P,E
Primary Accession	<a href="#">Q9NR97</a>
Other Accession	<a href="#">NP_619542.1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	119828
Antigen Region	434-463

**TLR8 Antibody (Center) - Additional Information****Gene ID** 51311**Other Names**

Toll-like receptor 8, CD288, TLR8

**Target/Specificity**

This TLR8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 434-463 amino acids from the Central region of human TLR8.

**Dilution**

WB~~1:1000

IHC-P~~1:10~50

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

TLR8 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**TLR8 Antibody (Center) - 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

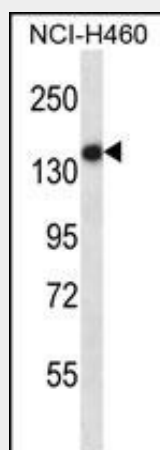
Expressed in myeloid dendritic cells, monocytes, and monocyte-derived dendritic cells.

### TLR8 Antibody (Center) - Protocols

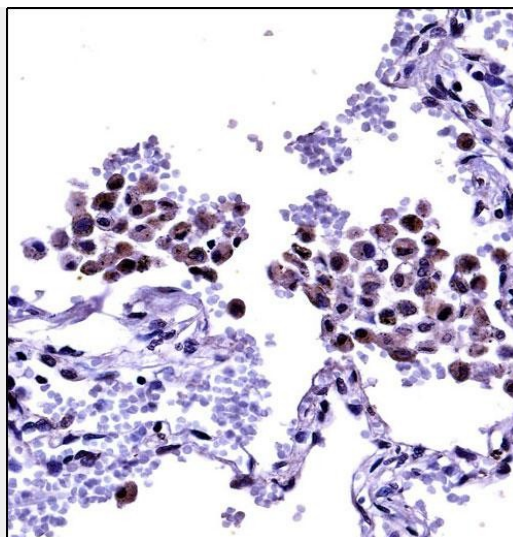
Provided below are standard protocols that you may find useful for product applications.

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

### TLR8 Antibody (Center) - Images



TLR8 Antibody (Center) (Cat. #AP14012c) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the TLR8 antibody detected the TLR8 protein (arrow).



TLR8 Antibody (Center) (AP14012c) immunohistochemistry analysis in formalin fixed and paraffin embedded human lung tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of TLR8 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

#### **TLR8 Antibody (Center) - Background**

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 Antibody (Center) - References**

Zannetti, C., et al. *J. Biol. Chem.* 285(45):34773-34780(2010)  
Silva, L.K., et al. *Eur. J. Hum. Genet.* 18(11):1221-1227(2010)  
Bailey, S.D., et al. *Diabetes Care* 33(10):2250-2253(2010)  
Cros, J., et al. *Immunity* 33(3):375-386(2010)  
Enevold, C., et al. *Mult. Scler.* 16(8):942-949(2010)