

TLR8 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14012C

Specification

TLR8 Antibody (Center) - Product Information

WB, IHC-P,E 09NR97
<u>NP 619542.1</u>
Human
Rabbit
Polyclonal
Rabbit Ig
119828
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

Format

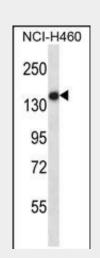
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

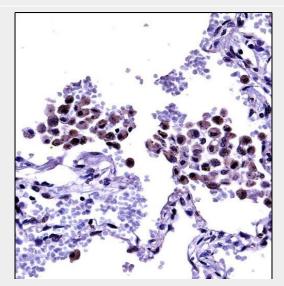
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

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



TLR8 Antibody (Center) (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) - Protein Information

Name TLR8 (<u>HGNC:15632</u>)

Function

Endosomal receptor that plays a key role in innate and adaptive immunity (PubMed:25297876, PubMed:<a href="http://www.uniprot.org/ci tations/32433612"

target="_blank">32433612). Controls host immune response against pathogens through recognition of RNA degradation products specific to microorganisms that are initially processed by RNASET2 (PubMed:<a href="http://www.uniprot.org/c itations/31778653"

target="_blank">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:<a href="http://www.uniprot.org/ci tations/25599397"

target=" blank">25599397,

PubMed:<a href="http://www.uniprot.org/ci tations/26929371"

target=" blank">26929371,

PubMed: <a href="http://www.uniprot.org/ci tations/33718825"

target="_blank">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 proinflammatory cytokines and interferons, respectively (PubMed:16737960,

PubMed: <a href="http://www.uniprot.org/citations/17932028"

target=" blank">17932028,

PubMed:<a href="http://www.uniprot.org/ci tations/29155428"

target=" blank">29155428).

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)



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.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>