

Anti-TLR7 Rabbit Monoclonal Antibody
Catalog # ABO13545**Specification**

Anti-TLR7 Rabbit Monoclonal Antibody - Product Information

Application	WB, IHC
Primary Accession	Q9NYK1
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid

Description

Anti-TLR7 Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human.

Anti-TLR7 Rabbit Monoclonal Antibody - Additional Information

Gene ID 51284

Other Names

Toll-like receptor 7, TLR7 (HGNC:15631)

Calculated MW

120922 MW KDa

Application Details

WB 1:500-1:2000
IHC 1:50-1:200

Subcellular Localization

Endoplasmic reticulum membrane ; Single-pass type I membrane protein. Endosome. Lysosome. Cytoplasmic vesicle, phagosome. Relocalizes from endoplasmic reticulum to endosome and lysosome upon stimulation with agonist..

Tissue Specificity

Detected in brain, placenta, spleen, stomach, small intestine, lung and in plasmacytoid pre-dendritic cells.

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human TLR7

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-TLR7 Rabbit Monoclonal Antibody - Protein Information

Name TLR7 ([HGNC:15631](#))

Function

Endosomal receptor that plays a key role in innate and adaptive immunity (PubMed:14976261, PubMed:32433612). Controls host immune response against pathogens through recognition of uridine- containing single strand RNAs (ssRNAs) of viral origin or guanosine analogs (PubMed:12738885, PubMed:27742543, PubMed:31608988, PubMed:32706371, PubMed:35477763). 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:27742543). 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:27742543, PubMed:32706371). In plasmacytoid dendritic cells, RNASET2 endonuclease cooperates with PLD3 or PLD4 5'->3' exonucleases to process RNA and release 2',3'-cyclic guanosine monophosphate (2',3'-cGMP) and cytidine-rich RNA fragments that occupy TLR7 ligand-binding pockets and trigger a signaling-competent state.

Cellular Location

Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:P58681}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P58681}. Endosome {ECO:0000250|UniProtKB:P58681}. Lysosome {ECO:0000250|UniProtKB:P58681}. Cytoplasmic vesicle, phagosome {ECO:0000250|UniProtKB:P58681}. Note=Relocalizes from endoplasmic reticulum to endosome and lysosome upon stimulation with agonist {ECO:0000250|UniProtKB:P58681}

Tissue Location

Detected in brain, placenta, spleen, stomach, small intestine, lung and in plasmacytoid pre-dendritic cells. Expressed in peripheral mononuclear blood cells (PubMed:32706371)

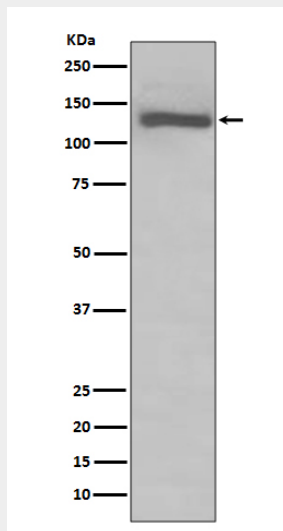
Anti-TLR7 Rabbit Monoclonal Antibody - Protocols

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-TLR7 Rabbit Monoclonal Antibody - Images



Western blot analysis of TLR7 expression in Raji cell lysate.