

**Anti-TLR7 Reference Antibody (U.Tokyo patent anti-TLR7)  
Recombinant Antibody  
Catalog # APR11047****Specification**

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**Anti-TLR7 Reference Antibody (U.Tokyo patent anti-TLR7) - Product Information**

Application	FC, Kinetics, Animal Model
Primary Accession	<a href="#">Q9NYK1</a>
Reactivity	Human, Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	145 KDa

**Anti-TLR7 Reference Antibody (U.Tokyo patent anti-TLR7) - Additional Information****Target/Specificity**  
TLR7**Endotoxin**  
< 0.001EU/ µg,determined by LAL method.**Conjugation**  
Unconjugated**Expression system**  
CHO Cell**Format**  
Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.**Anti-TLR7 Reference Antibody (U.Tokyo patent anti-TLR7) - Protein Information****Name** TLR7 ([HGNC:15631](#))**Function**  
Endosomal receptor that plays a key role in innate and adaptive immunity (PubMed:<a href="http://www.uniprot.org/citations/14976261" target="\_blank">14976261</a>, PubMed:<a href="http://www.uniprot.org/citations/32433612" target="\_blank">32433612</a>). Controls host immune response against pathogens through recognition of uridine- containing single strand RNAs (ssRNAs) of viral origin or guanosine analogs (PubMed:<a href="http://www.uniprot.org/citations/12738885" target="\_blank">12738885</a>, PubMed:<a href="http://www.uniprot.org/citations/27742543" target="\_blank">27742543</a>, PubMed:<a href="http://www.uniprot.org/citations/31608988" target="\_blank">31608988</a>, PubMed:<a href="http://www.uniprot.org/citations/32706371" target="\_blank">32706371</a>, PubMed:<a href="http://www.uniprot.org/citations/35477763" target="\_blank">35477763</a>). 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:<a href="http://www.uniprot.org/citations/27742543" target="\_blank">27742543</a>). 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:<a href="http://www.uniprot.org/citations/27742543" target="\_blank">27742543</a>, PubMed:<a href="http://www.uniprot.org/citations/32706371" target="\_blank">32706371</a>). 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

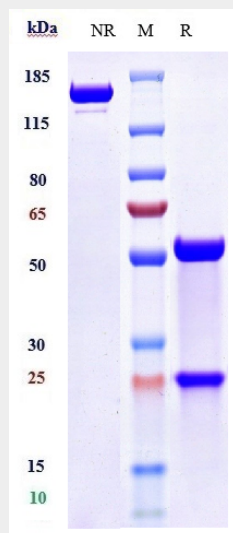
Detected in brain, placenta, spleen, stomach, small intestine, lung and in plasmacytoid pre-dendritic cells. Expressed in peripheral mononuclear blood cells (PubMed:32706371)

### Anti-TLR7 Reference Antibody (U.Tokyo patent anti-TLR7) - Protocols

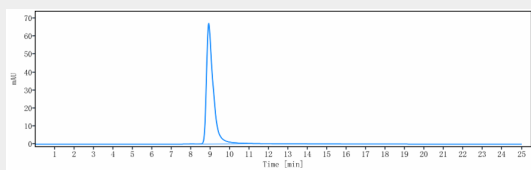
Provided below are standard protocols that you may find useful for product applications.

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

### Anti-TLR7 Reference Antibody (U.Tokyo patent anti-TLR7) - Images



Anti-TLR7 Reference Antibody (U.Tokyo patent anti-TLR7) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%



The purity of Anti-TLR7 Reference Antibody (U.Tokyo patent anti-TLR7) is more than 95%, determined by SEC-HPLC.