

Anti-Toll-like Receptor 7 Antibody

Mouse Anti Human Monoclonal Antibody Catalog # AP53404

Specification

Anti-Toll-like Receptor 7 Antibody - Product Information

Application WB
Primary Accession Q9NYK1
Other Accession NM_016562
Reactivity Transfected
Host Mouse
Clonality Monoclonal

Isotype IgG1

Immunogen Purified recombinant human Toll-like

Receptor protein fragments expressed in

E.coli.

Purification Affinity purified

Anti-Toll-like Receptor 7 Antibody - Additional Information

Gene ID 51284

Other Names

PRO285; TLR 7; Tlr7; TLR7 HUMAN; Toll like receptor 7; Toll-like receptor 7; UNQ248.

Dilution WB~~1:1000

Format

PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-Toll-like Receptor 7 Antibody - Protein Information

Name TLR7 (<u>HGNC:15631</u>)

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:<a

 $href="http://www.uniprot.org/citations/31608988" target="_blank">31608988, PubMed:27742543, PubMed:12738885, PubMed:32706371, PubMed:$



href="http://www.uniprot.org/citations/35477763" target="_blank">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" target="_blank">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).

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

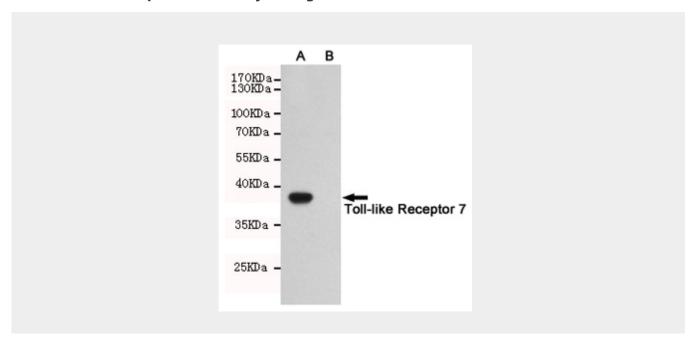
Detected in brain, placenta, spleen, stomach, small intestine, lung and in plasmacytoid pre-dendritic cells. Expressed in peripheral mononuclear blood cells (PubMed:32706371)

Anti-Toll-like Receptor 7 Antibody - Protocols

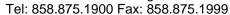
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Toll-like Receptor 7 Antibody - Images









Western blot detection of Toll-like Receptor 7 in CHO-K1 cell lysate ☐B ☐ and CHO-K1 transfected by Toll-like Receptor 7∏A∏cell lysate using Toll-like Receptor 7 mouse mAb (1:1000 diluted). Predicted band size: 40KDa.Observed band size:40KDa.

Anti-Toll-like Receptor 7 Antibody - Background

Key component of innate and adaptive immunity. TLRs (Toll-like receptors) control host immune response against pathogens through recognition of molecular patterns specific of microorganisms. TLR7 is a nucleotide-sensing TLR which is activated by single-st