

**Anti-TLR4 Reference Antibody (Paridiprubart)  
Recombinant Antibody  
Catalog # APR10584****Specification**

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**Anti-TLR4 Reference Antibody (Paridiprubart) - Product Information**

Application	FC, E, FTA
Primary Accession	<a href="#">O00206</a>
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG
Calculated MW	145 KDa

**Anti-TLR4 Reference Antibody (Paridiprubart) - Additional Information****Target/Specificity**  
TLR4**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-TLR4 Reference Antibody (Paridiprubart) - Protein Information****Name** TLR4**Function**  
Transmembrane receptor that functions as a pattern recognition receptor recognizing pathogen- and damage-associated molecular patterns (PAMPs and DAMPs) to induce innate immune responses via downstream signaling pathways (PubMed:<a href="http://www.uniprot.org/citations/10835634" target="\_blank">10835634</a>, PubMed:<a href="http://www.uniprot.org/citations/15809303" target="\_blank">15809303</a>, PubMed:<a href="http://www.uniprot.org/citations/16622205" target="\_blank">16622205</a>, PubMed:<a href="http://www.uniprot.org/citations/17292937" target="\_blank">17292937</a>, PubMed:<a href="http://www.uniprot.org/citations/17478729" target="\_blank">17478729</a>, PubMed:<a href="http://www.uniprot.org/citations/20037584" target="\_blank">20037584</a>, PubMed:<a href="http://www.uniprot.org/citations/20711192" target="\_blank">20711192</a>, PubMed:<a href="http://www.uniprot.org/citations/23880187" target="\_blank">23880187</a>, PubMed:<a href="http://www.uniprot.org/citations/27022195" target="\_blank">27022195</a>, PubMed:<a

<http://www.uniprot.org/citations/29038465> target="\_blank">29038465</a>). At the plasma membrane, cooperates with LY96 to mediate the innate immune response to bacterial lipopolysaccharide (LPS) (PubMed:<a href="http://www.uniprot.org/citations/27022195" target="\_blank">27022195</a>). Also involved in LPS-independent inflammatory responses triggered by free fatty acids, such as palmitate, and Ni(2+) (PubMed:<a href="http://www.uniprot.org/citations/20711192" target="\_blank">20711192</a>). Mechanistically, acts via MYD88, TIRAP and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (PubMed:<a href="http://www.uniprot.org/citations/10835634" target="\_blank">10835634</a>, PubMed:<a href="http://www.uniprot.org/citations/21393102" target="\_blank">21393102</a>, PubMed:<a href="http://www.uniprot.org/citations/27022195" target="\_blank">27022195</a>, PubMed:<a href="http://www.uniprot.org/citations/36945827" target="\_blank">36945827</a>, PubMed:<a href="http://www.uniprot.org/citations/9237759" target="\_blank">9237759</a>). Alternatively, CD14-mediated TLR4 internalization via endocytosis is associated with the initiation of a MYD88-independent signaling via the TICAM1-TBK1-IRF3 axis leading to type I interferon production (PubMed:<a href="http://www.uniprot.org/citations/14517278" target="\_blank">14517278</a>). In addition to the secretion of proinflammatory cytokines, initiates the activation of NLRP3 inflammasome and formation of a positive feedback loop between autophagy and NF-kappa-B signaling cascade (PubMed:<a href="http://www.uniprot.org/citations/32894580" target="\_blank">32894580</a>). In complex with TLR6, promotes inflammation in monocytes/macrophages by associating with TLR6 and the receptor CD86 (PubMed:<a href="http://www.uniprot.org/citations/23880187" target="\_blank">23880187</a>). Upon ligand binding, such as oxLDL or amyloid-beta 42, the TLR4:TLR6 complex is internalized and triggers inflammatory response, leading to NF-kappa-B-dependent production of CXCL1, CXCL2 and CCL9 cytokines, via MYD88 signaling pathway, and CCL5 cytokine, via TICAM1 signaling pathway (PubMed:<a href="http://www.uniprot.org/citations/23880187" target="\_blank">23880187</a>). In myeloid dendritic cells, vesicular stomatitis virus glycoprotein G but not LPS promotes the activation of IRF7, leading to type I IFN production in a CD14-dependent manner (PubMed:<a href="http://www.uniprot.org/citations/15265881" target="\_blank">15265881</a>, PubMed:<a href="http://www.uniprot.org/citations/23880187" target="\_blank">23880187</a>). Required for the migration- promoting effects of ZG16B/PAUF on pancreatic cancer cells.

### Cellular Location

Cell membrane; Single-pass type I membrane protein. Early endosome. Cell projection, ruffle {ECO:0000250|UniProtKB:Q9QUK6}. Note=Upon complex formation with CD36 and TLR6, internalized through dynamin-dependent endocytosis (PubMed:20037584). Colocalizes with RFTN1 at cell membrane and then together with RFTN1 moves to endosomes, upon lipopolysaccharide stimulation. Co-localizes with ZG16B/PAUF at the cell membrane of pancreatic cancer cells (PubMed:36232715)

### Tissue Location

Highly expressed in placenta, spleen and peripheral blood leukocytes (PubMed:9237759, PubMed:9435236). Detected in monocytes, macrophages, dendritic cells and several types of T-cells (PubMed:27022195, PubMed:9237759). Expressed in pancreatic cancer cells but not in normal pancreatic cells (at protein level) (PubMed:36232715).

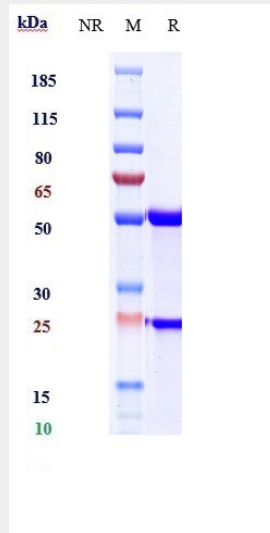
### Anti-TLR4 Reference Antibody (Paridiprubart) - Protocols

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

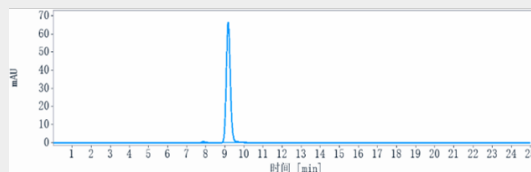
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-TLR4 Reference Antibody (Paridiprubart) - Images



Anti-TLR4 Reference Antibody (Paridiprubart) 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-TLR4 Reference Antibody (Paridiprubart) is more than 95% ,determined by SEC-HPLC.