

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

Specification

Anti-TLR4 Reference Antibody (Paridiprbart) - Product Information

Application	FC, Kinetics, Animal Model
Primary Accession	<u>000206</u>
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG
Calculated MW	145 KDa

Anti-TLR4 Reference Antibody (Paridiprbart) - 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 (Paridiprubar) - 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

[10835634](http://www.uniprot.org/citations/10835634), PubMed:[15809303](http://www.uniprot.org/citations/15809303), PubMed:[16622205](http://www.uniprot.org/citations/16622205), PubMed:[17292937](http://www.uniprot.org/citations/17292937), PubMed:[17478729](http://www.uniprot.org/citations/17478729), PubMed:[20037584](http://www.uniprot.org/citations/20037584), PubMed:[20711192](http://www.uniprot.org/citations/20711192), PubMed:[23880187](http://www.uniprot.org/citations/23880187), PubMed:[27022195](http://www.uniprot.org/citations/27022195), PubMed:>29038465, PubMed:>17803912). At the plasma membrane, cooperates with LY96 to mediate the innate immune response to bacterial lipopolysaccharide (LPS) (PubMed:>27022195). Also involved in LPS-independent inflammatory responses triggered by free fatty acids, such as palmitate, and Ni(2+) (PubMed:>20711192). Mechanistically, acts via MYD88, TIRAP and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (PubMed:>10835634, PubMed:>21393102, PubMed:>27022195, PubMed:>36945827, PubMed:>9237759). 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:>14517278). 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:>32894580). In complex with TLR6, promotes inflammation in monocytes/macrophages by associating with TLR6 and the receptor CD86 (PubMed:>23880187). 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:>23880187). 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:>15265881, PubMed:>23880187). 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

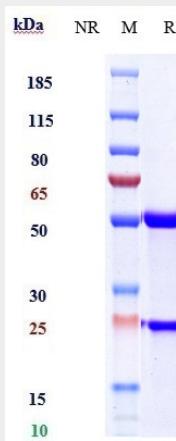
Highly expressed in placenta, spleen and peripheral blood leukocytes (PubMed:9237759, PubMed:9435236). Detected in monocytes, macrophages, dendritic cells and several types of T-cells (PubMed:27022195, PubMed:9237759). Expressed in pancreatic cancer cells but not in normal pancreatic cells (at protein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

Anti-TLR4 Reference Antibody (Paridiprbart) - Protocols

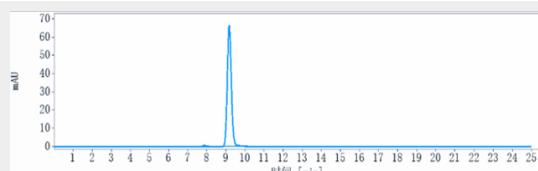
Provided below are standard protocols that you may find useful for product applications.

- [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.