

Anti-CD284 Antibody
Rabbit polyclonal antibody to CD284
Catalog # AP59719

Specification

Anti-CD284 Antibody - Product Information

Application	WB
Primary Accession	000206
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	95680

Anti-CD284 Antibody - Additional Information

Gene ID 7099

Other Names

Toll-like receptor 4; hToll; CD284

Target/Specificity

Recognizes endogenous levels of CD284 protein.

Dilution

WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

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

Anti-CD284 Antibody - 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: [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: <a

<http://www.uniprot.org/citations/23880187> target="_blank">23880187, PubMed:27022195, PubMed:29038465). 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).

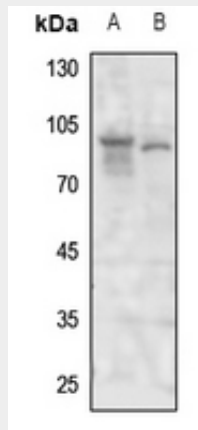
Anti-CD284 Antibody - Protocols

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-CD284 Antibody - Images



Western blot analysis of CD284 expression in HEK293T (A), HeLa (B) whole cell lysates.

Anti-CD284 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CD284. The exact sequence is proprietary.