Datasheet for ABIN1706080

TLR1 ELISA Kit

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Overview

Quantity:	96 tests
Target:	TLR1
Binding Specificity:	AA 22-578
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	156-10.000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human TLR1
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: S22-N578
Specificity:	Expression system for standard: NSO Immunogen sequence: S22-N578
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<10pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g Nacl

Target Details

Target:	TLR1
Alternative Name:	TLR1 (TLR1 Products)
Background:	Protein Function: Participates in the innate immune response to microbial agents. Specifically recognizes diacylated and triacylated lipopeptides. Cooperates with TLR2 to mediate the innate immune response to bacterial lipoproteins or lipopeptides. Acts via MYD88 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (By similarity). . Background: TLR1 is a member of the Toll-like receptor family(TLR) of pattern recognition receptors of the innate immune system. TIR1 gene was mapped to 4p14 by fluorescence in situ hybridization. TLR1 recognizes pathogen-associated molecular pattern with a specificity for gram-positive bacteria. TLR1 has also been designated as CD281(cluster of differentiation 281). TLR1 interacts with TLR2 to recognize the lipid configuration of the native mycobacterial lipoprotein as well as several triacylated lipopeptides. Synonyms: Toll-like receptor 1,Toll/interleukin-1 receptor-like protein,TIL,CD281,TLR1,KIAA0012, Full Gene Name: Toll-like receptor 1 Cellular Localisation: Cell membrane, Single-pass type I membrane protein . Cytoplasmic vesicle, phagosome membrane, Single-pass type I membrane protein.
Gene ID:	7096
UniProt:	Q15399
Pathways:	TLR Signaling, Activation of Innate immune Response, Cellular Response to Molecule of Bacterial Origin, Toll-Like Receptors Cascades

Application Details

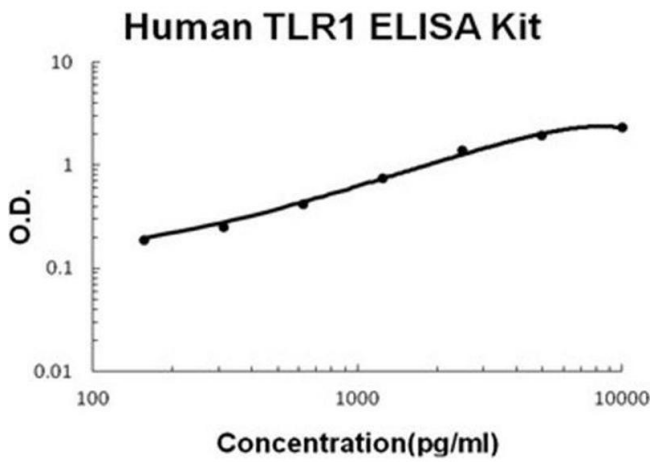
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Sequence similarities: Belongs to the Toll-like receptor family.

Application Details

	Tissue Specificity: Ubiquitous. Highly expressed in spleen, ovary, peripheral blood leukocytes, thymus and small intestine.
Plate:	Pre-coated
Protocol:	human TLR1 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for TLR1 has been precoated onto 96-well plates. Standards(NSO, S22-N578) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for TLR1 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human TLR1 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 10,000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL human TLR1 standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human TLR1 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 1565, Standard deviation: 84.51, CV(%): 5.4 • Sample 2: n=16, Mean(pg/ml): 3289, Standard deviation: 105.2, CV(%): 3.2 • Sample 3: n=16, Mean(pg/ml): 5057, Standard deviation: 192.2, CV(%): 3.8, • Sample 1: n=24, Mean(pg/ml): 1833, Standard deviation: 139.3, CV(%): 7.6 • Sample 2: n=24, Mean(pg/ml): 3245, Standard deviation: 266.1, CV(%): 8.2 • Sample 3: n=24, Mean(pg/ml): 5630, Standard deviation: 444.8, CV(%): 7.9
Restrictions:	For Research Use only

Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C,4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months



ELISA

Image 1. Human TLR1 PicoKine ELISA Kit standard curve