



Human toll-like receptor 2,TLR2 ELISA Kit

Product Code	CSB-E11781h
Abbreviation	TLR2
Protein Biological Process 1	Immunity
Target Name	toll-like receptor 2
Uniprot No.	O60603
Alias	CD282, TIL4, toll/interleukin 1 receptor-like 4
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Immunity
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.312 ng/mL-20 ng/mL
Sensitivity	0.078 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Immunology
Gene Names	TLR2
Tag Info	quantitative
Protein Description	Sandwich

Description

The human TLR2 ELISA Kit is engineered for accurate measurement of human TLR2 levels from samples including serum, plasma, or tissue homogenates. It uses the Sandwich-ELISA mechanism in combination with the enzyme-substrate chromogenic reaction to measure the TLR2 content in the sample. The color intensity is positively correlated with TLR2 content in the sample. The TLR2 concentration can be calculated according to the standard curve. This kit is tested with high sensitivity, strong specificity, good linearity, high precision and recovery, as well as lot-to-lot consistency.

TLR2 plays a major role in Gram-positive bacterial recognition and defense against mycobacterial infection. TLR2 plays a protective role during infection by triggering a strong pro-inflammatory response, which is beneficial for bacterial clearance. However, the excessive inflammation caused by TLR2 can result in



tissue damage and even affect the healing of damaged tissues. It has been reported that TLR2 has a broad range of functions in infectious diseases and also in other diseases, such as chronic and acute inflammatory diseases, cancers, and even metabolic disorders.

Target Details

This protein is a member of the Toll-like receptor (TLR) family which plays a fundamental role in pathogen recognition and activation of innate immunity. TLRs are highly conserved from Drosophila to humans and share structural and functional similarities. They recognize pathogen-associated molecular patterns (PAMPs) that are expressed on infectious agents, and mediate the production of cytokines necessary for the development of effective immunity. The various TLRs exhibit different patterns of expression. This gene is expressed most abundantly in peripheral blood leukocytes, and mediates host response to Gram-positive bacteria and yeast via stimulation of NF-kappaB.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%
Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%
Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of human TLR2 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
1:1	Average %	96
	Range %	89-101
1:2	Average %	94
	Range %	88-97
1:4	Average %	92
	Range %	85-97
1:8	Average %	94
	Range %	88-98

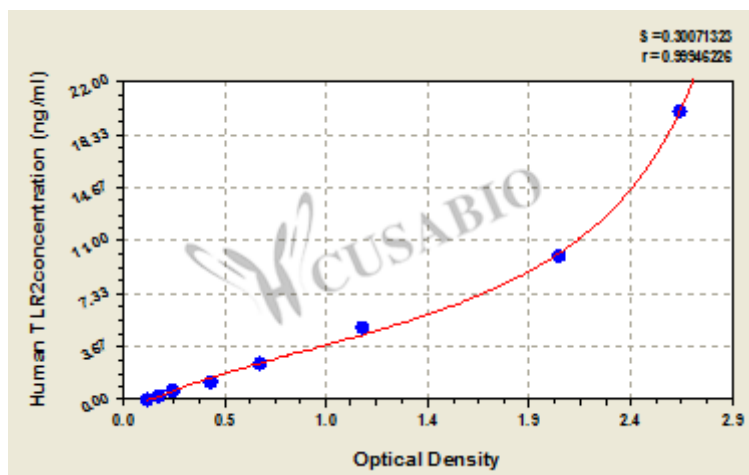
Recovery

The recovery of human TLR2 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	83	89-97
EDTA plasma (n=4)	90	85-96

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



ng/ml	OD1	OD2	Average	Corrected
20	2.632	2.621	2.627	2.504
10	2.068	2.056	2.062	1.939
5	1.151	1.132	1.142	1.019
2.5	0.673	0.639	0.656	0.533
1.25	0.427	0.424	0.426	0.303
0.625	0.255	0.245	0.250	0.127
0.312	0.189	0.177	0.183	0.060
0	0.125	0.121	0.123	?

Msds

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