Datasheet for ABIN1112577

CD40 Ligand ELISA Kit

Go to Product page

Overview

Quantity:	96 tests
Target:	CD40 Ligand (CD40LG)
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	62.5-4000 pg/mL
Minimum Detection Limit:	62.5 pg/mL
Application:	ELISA

Product Details

Purpose:	For quantitative detection of CD40L in human serum, body fluids, tissue lysates or cell culture supernates.
Sample Type:	Cell Culture Supernatant, Plasma, Serum, Tissue Lysate
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Sensitivity:	< 15 pg/mL
Components:	1. One 96-well plate pre-coated with anti-Human CD40L antibody 2. Lyophilized human CD40L standards: 2 tubes (10ng / tube) 3. Sample / Standard diluent buffer: 30ml 4. Biotin conjugated anti-human CD40L antibody (Concentrated): 130 µl.
Material not included:	1. 37 °C incubator 2. Microplate reader (wavelength: 450nm) 3. Precise pipette and disposable pipette tips 4. Automated plate washer 5. ELISA shaker 6. 1.5ml of Eppendorf tubes 7. Plate cover 8. Absorbent filter papers 9. Plastic or glass container with volume of above 1L

Target Details

Target:	CD40 Ligand (CD40LG)
Alternative Name:	sCD40L (CD40LG Products)
Background:	CD40L, also called CD154, is a 261 amino acids protein is a member of the TNF superfamily of molecules. It is primarily expressed on activated T cells but is also found in a soluble form. It binds to CD40 on antigen-presenting cells (APC), which leads to many effects depending on the target cell type. In general, CD40L plays the role of a costimulatory molecule and induces activation in APC in association with T cell receptor stimulation by MHC molecules on the APC. In total CD40L has three binding partners: CD40, Į5beta1 integrin and ĮIIbbeta3.
Pathways:	NF-kappaB Signaling, Production of Molecular Mediator of Immune Response, Cancer Immune Checkpoints

Application Details

Comment:	This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-P-Cadherin polyclonal antibody was pre-coated onto 96-well plates. And the biotin conjugated anti-CD40L polyclonal antibody was used as detection antibodies. The standards test samples and biotin conjugated detection antibody were added - the wells subsequently and wash with wash buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with wash buffer. TMB substrates were used - visualize HRP enzymatic reaction. TMB was catalyzed by HRP - produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional - the CD40L amount of sample captured in plate. Read the O.D. absorbance at 450 nm in a microplate reader and then the concentration of CD40L can be calculated.
Plate:	Pre-coated
Reagent Preparation:	1. Before the experiment, centrifuge each kit component for several minutes to bring down all reagents to the bottom of tubes. 2. It is recommend to measure each standard and sample in duplicate. 3. Do NOT let the plate completely dry at any time! Since the dry condition can inactivate the biological material on the plate. 4. Do not reuse pipette tips and tubes to avoid cross contamination. 5. Do not use the expired components and the components from different batches. 6. To avoid the marginal effect of plate incubation for temperature differences (the marginal wells always get stronger reaction), it is recommend to equilibrate the ABC working solution and TMB substrate for at least 30 min at room temperature (37°C) before adding to wells.The TMB substrate (Kit Component 8) is colorless and transparent before use, if not, please contact us for replacement.

Application Details

Sample Preparation:	Preparation of sample and reagents 1. Sample Isolate the test samples soon after collecting, then, analyze immediately (within 2 hours). Or aliquot and store at -20 °C for long term. Avoid multiple freeze-thaw cycles. Tissue lysate or body fluids, cell culture supernate: Centrifuge to remove precipitate, analyze immediately or aliquot and store at -20 °C . Serum: Coagulate the serum at room temperature (about 4 hours). Centrifuge at approximately 1000 × g for 10 min. Analyze the serum immediately or aliquot and store at -20 °C . Note: 1. Coagulate blood samples completely, then, centrifuge, and avoid hemolysis and particle. 2. NaN3 can not be used as test sample preservative, since it is the inhibitor for HRP.
Restrictions:	For Research Use only

Handling

Preservative:	Sodium azide, Thimerosal (Merthiolate)