

Datasheet for ABIN1889452

CD21 ELISA Kit

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1 Image

Overview

Quantity:	96 tests
Target:	CD21 (CR2)
Binding Specificity:	AA 21-71
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	0.78-50 ng/mL
Minimum Detection Limit:	0.78 ng/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human CD21/CR2
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: CHO Immunogen sequence: Ile21-71
Specificity:	Expression system for standard: CHO Immunogen sequence: Ile21-71
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<20pg/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:	CD21 (CR2)
Alternative Name:	CR2 (CR2 Products)
Background:	<p>Protein Function: Receptor for complement C3Dd, for the Epstein-Barr virus on human B-cells and T-cells and for HNRPU. Participates in B lymphocytes activation. .</p> <p>Background: Complement receptor type 2(CR2), also known as C3DR or CD21, is a protein that in humans is encoded by the CR2 gene. It is mapped to 1q32.2. CR2 is involved in the complement system. It binds to iC3b(inactive derivative of C3b), C3dg, or C3d. CR2 is the membrane protein on B lymphocytes to which the Epstein-Barr virus (EBV) binds during infection of these cells. CR2, together with CD19, CD81, and CD225, forms the B-cell coreceptor complex, which lowers the activation threshold of the B-cell antigen receptor. Genetic variations in this gene are associated with susceptibility to systemic lupus erythematosus type 9 (SLEB9).</p> <p>Synonyms: Complement receptor type 2,Cr2,Complement C3d receptor,Epstein-Barr virus receptor,EBV receptor,CD21,CR2,C3DR,</p> <p>Full Gene Name: Complement receptor type 2</p> <p>Cellular Localisation: Membrane, Single-pass type I membrane protein.</p>
Gene ID:	1380
UniProt:	P20023
Pathways:	Complement System

Application Details

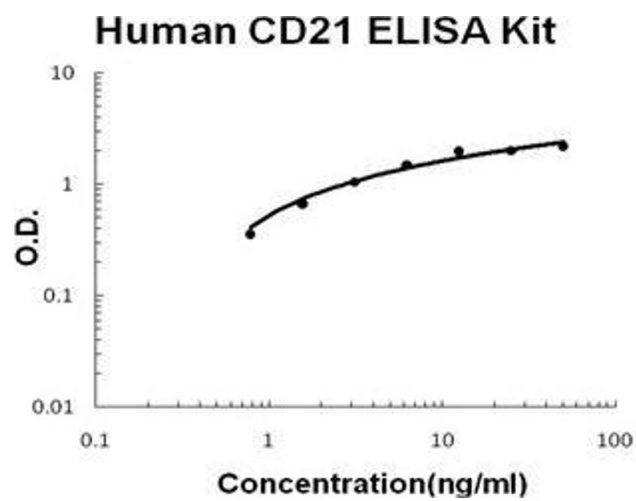
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	<p>Sequence similarities: Belongs to the receptors of complement activation (RCA) family.</p> <p>Tissue Specificity: Mature B-lymphocytes, T-lymphocytes, pharyngeal epithelial cells, astrocytes and follicular dendritic cells of the spleen.</p>

Application Details

Plate:	Pre-coated
Protocol:	human CD21 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for CD21 has been precoated onto 96-well plates. Standards(CHO, Ile21-71) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CD21 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 CD21 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 50 ng/mL, 25 ng/mL, 12.5 ng/mL, 6.25 ng/mL, 3.12 ng/mL, 1.56 ng/mL, 0.78 ng/mL human CD21 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 CD21 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(ng/ml): 9.7, Standard deviation: 0.44, CV(%): 4.5• Sample 2: n=16, Mean(ng/ml): 18.4, Standard deviation: 0.77, CV(%): 4.2• Sample 3: n=16, Mean(ng/ml): 34.5, Standard deviation: 1.24, CV(%): 3.6,• Sample 1: n=24, Mean(ng/ml): 12.2, Standard deviation: 0.77, CV(%): 6.3• Sample 2: n=24, Mean(ng/ml): 21.6, Standard deviation: 1.23, CV(%): 5.7• Sample 3: n=24, Mean(ng/ml): 38.8, Standard deviation: 1.86, CV(%): 4.8
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 CD21/CR2 PicoKine ELISA Kit standard curve