Datasheet for ABIN1889443

CD22 ELISA Kit

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Overview

Quantity:	96 tests
Target:	CD22
Binding Specificity:	AA 22-702
Reactivity:	Mouse
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 Mouse CD22
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-R702
Specificity:	Expression system for standard: NSO Immunogen sequence: S22-R702
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:	CD22
Alternative Name:	CD22 (CD22 Products)
Background:	Protein Function: Mediates B-cell B-cell interactions. May be involved in the localization of B-cells in lymphoid tissues. Binds sialylated glycoproteins, one of which is CD45. Preferentially binds to alpha-2,6-linked sialic acid. The sialic acid recognition site can be masked by cis interactions with sialic acids on the same cell surface. Upon ligand induced tyrosine phosphorylation in the immune response seems to be involved in regulation of B-cell antigen receptor signaling. Plays a role in positive regulation through interaction with Src family tyrosine kinases and may also act as an inhibitory receptor by recruiting cytoplasmic phosphatases via their SH2 domains that block signal transduction through dephosphorylation of signaling molecules. Background: CD22 or cluster of differentiation-22, is a molecule belonging to the SIGLEC family of lectins. This gene is mapped to 19q13.2. It is found on the surface of mature B cells and to a lesser extent on some immature B cells. Generally speaking, CD22 is a regulatory molecule that prevents the overactivation of the immune system and the development of autoimmune diseases. It is a negative regulator of antigen receptor signaling whose onset of expression at the mature B cell stage may serve to raise the antigen concentration threshold required for B cell triggering. CD22 functions as an inhibitory receptor for B cell receptor (BCR) signalling. This gene can downmodulate signaling through the IgM and IgD B-cell receptors(BCRs), but not through the IgG BCR, because the IgG cytoplasmic tail prevents CD22 phosphorylation and actually enhances IgG-BCR signaling. Synonyms: B-cell receptor CD22,B-lymphocyte cell adhesion molecule,BL-CAM,Sialic acid-binding Ig-like lectin 2,Siglec-2,T-cell surface antigen Leu-14,CD22,Cd22,Lyb-8, Siglec2, Full Gene Name: B-cell receptor CD22 Cellular Localisation: Cell membrane, Single-pass type I membrane protein.
Gene ID:	12483
UniProt:	P35329

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 immunoglobulin superfamily. SIGLEC (sialic acid binding Ig-like lectin) family. Tissue Specificity: B-lymphocytes.
Plate:	Pre-coated
Protocol:	mouse CD22 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for CD22 has been precoated onto 96-well plates. Standards(NSO, S22-R702) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CD22 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 mouse CD22 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 mouse CD22 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 mouse cell culture supernatants, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse CD22 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(ng/ml): 1.86, Standard deviation: 0.099, CV(%): 5.3 • Sample 2: n=16, Mean(ng/ml): 4.32, Standard deviation: 0.207, CV(%): 4.8 • Sample 3: n=16, Mean(ng/ml): 7.35, Standard deviation: 0.309, CV(%): 4.2, • Sample 1: n=24, Mean(ng/ml): 2.54, Standard deviation: 0.17, CV(%): 6.7 • Sample 2: n=24, Mean(ng/ml): 5.13, Standard deviation: 0.313, CV(%): 6.1 • Sample 3: n=24, Mean(ng/ml): 7.44, Standard deviation: 0.417, CV(%): 5.6
Restrictions:	For Research Use only

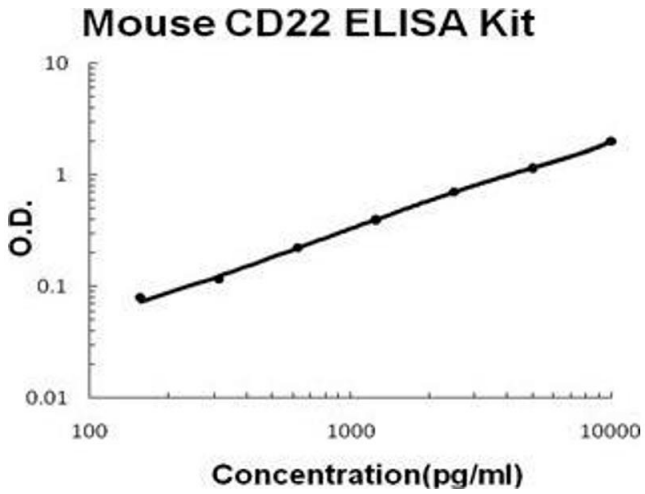
Handling

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

Handling

Expiry Date:	12 months

Images



ELISA

Image 1. Mouse CD22 PicoKine ELISA Kit standard curve