Datasheet for ABIN2859215

SLAMF1 ELISA Kit

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Overview

Quantity:	96 tests
Target:	SLAMF1
Binding Specificity:	AA 21-236
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 SLAM/CD150
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: A21-K236
Specificity:	Expression system for standard: NSO Immunogen sequence: A21-K236
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:	SLAMF1
Alternative Name:	SLAMF1 (SLAMF1 Products)
Background:	Protein Function: High-affinity self-ligand important in bidirectional T- cell to B-cell stimulation. SLAM-induced signal-transduction events in T-lymphocytes are different from those in B-cells. Two modes of SLAM signaling are likely to exist: one in which the inhibitor SH2D1A acts as a negative regulator and another in which protein-tyrosine phosphatase 2C (PTPN11)-dependent signal transduction operates. Background: Signaling lymphocytic activation molecule is a protein that in humans is encoded by the SLAMF1 gene. It belongs to the immunoglobulin gene superfamily. This gene is mapped to 1q23.3. It has found that SLAM is constitutively expressed on peripheral blood memory T cells, T-cell clones, immature thymocytes and a proportion of B cells, and is rapidly induced on naive T cells after activation. In MV-resistant cell lines, infection with clinical MV and expression of SLAM, but not CD46, caused cytopathic effects (CPE). The expression of SLAM on activated B and T lymphocytes correlates with the pathology of MV infection in humans and monkeys, in which lymphoid organs are the chief sites of MV replication and the binding of MV to SLAM may impair the signaling functions of SLAM in lymphocyte activation and inhibit Th0/Th1 cytokine production, thereby promoting Th2 cytokine production. It has reported that antibody-mediated ligation of SLAM on thymocytes triggered a protein tyrosine phosphorylation signal in T cells in a SAP-dependent manner. This signal also involved SHIP, the adaptor molecules DOK2, DOK1, and SHC and RASGAP. Synonyms: Signaling lymphocytic activation molecule,CDw150,IPO-3,CD150,SLAMF1,SLAM, Full Gene Name: Signaling lymphocytic activation molecule Cellular Localisation: Cell membrane, Single-pass type I membrane protein. Present on the surface of B-cells and T-cells.
Gene ID:	6504
UniProt:	Q13291

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: Contains 1 Ig-like C2-type (immunoglobulin-like) domain. Tissue Specificity: Constitutively expressed on peripheral blood memory T-cells, T-cell clones, immature thymocytes and a proportion of B-cells, and is rapidly induced on naive T-cells after activation.
Plate:	Pre-coated
Protocol:	human SLAM ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for SLAM has been precoated onto 96-well plates. Standards(NSO, A21-K236) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for SLAM 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 SLAM 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 SLAM 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 SLAM standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 1281, Standard deviation: 87.11, CV(%): 6.8 • Sample 2: n=16, Mean(pg/ml): 3355, Standard deviation: 164.4, CV(%): 4.9 • Sample 3: n=16, Mean(pg/ml): 5633, Standard deviation: 310, CV(%): 5.5, • Sample 1: n=24, Mean(pg/ml): 1426, Standard deviation: 108.4, CV(%): 7.6 • Sample 2: n=24, Mean(pg/ml): 3865, Standard deviation: 201, CV(%): 5.2 • Sample 3: n=24, Mean(pg/ml): 6134, Standard deviation: 392.6, CV(%): 6.4
Restrictions:	For Research Use only

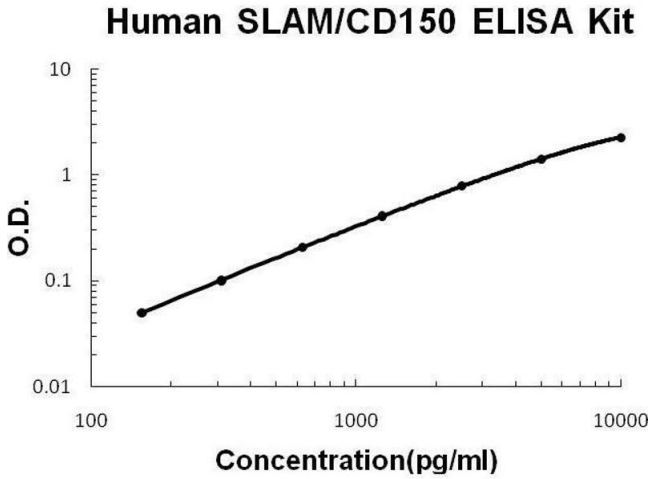
Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C,4 °C

Handling

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

Images



ELISA

Image 1. Human SLAM/CD150 PicoKine ELISA Kit standard curve