Datasheet for ABIN2859338

MADCAM1 ELISA Kit

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Overview

Quantity:	96 tests
Target:	MADCAM1
Binding Specificity:	AA 22-365
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	125-8000 pg/mL
Minimum Detection Limit:	125 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse MADCAM-1
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: Q22-T365
Specificity:	Expression system for standard: NSO Immunogen sequence: Q22-T365
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:	MADCAM1
Alternative Name:	MADCAM1 (MADCAM1 Products)
Background:	Protein Function: Cell adhesion leukocyte receptor expressed by mucosal venules, helps to direct lymphocyte traffic into mucosal tissues including the Peyer patches and the intestinal lamina propria. It can bind both the integrin alpha-4/beta-7 and L-selectin, regulating both the passage and retention of leukocytes. Both isoform 1 and isoform 2 can adhere to integrin alpha-4/beta-7. Isoform 2, lacking the mucin-like domain, may be specialized in supporting integrin alpha-4/beta-7-dependent adhesion strengthening, independent of L-selectin binding. . Background: MADCAM1(Mucosal Vascular Addressin Cell Adhesion Molecule 1), also known as MACAM1, is a protein that is encoded by the MADCAM1 gene. By PCR-based analysis of somatic cell hybrids, Leung et al(1997) mapped the MACAM1 gene to chromosome 19. The protein encoded by this gene is an endothelil cell adhesion molecule that interacts preferentially with the leukocyte beta7 integrin LPAM-1(alpha4 / beta7), L-selectin, and VLA-4(alpha4/beta1) on myeloid cells to direct leukocytes into mucosal and inflamed tissues. It is a member of the immunoglobulin superfamily and is similar to ICAM-1 and VCAM-1. Synonyms: Mucosal addressin cell adhesion molecule 1,MAdCAM-1, mMAdCAM-1,Madcam1, Full Gene Name: Mucosal addressin cell adhesion molecule 1 Cellular Localisation: Membrane, Single-pass type I membrane protein.
Gene ID:	17123
UniProt:	Q61826

Application Details

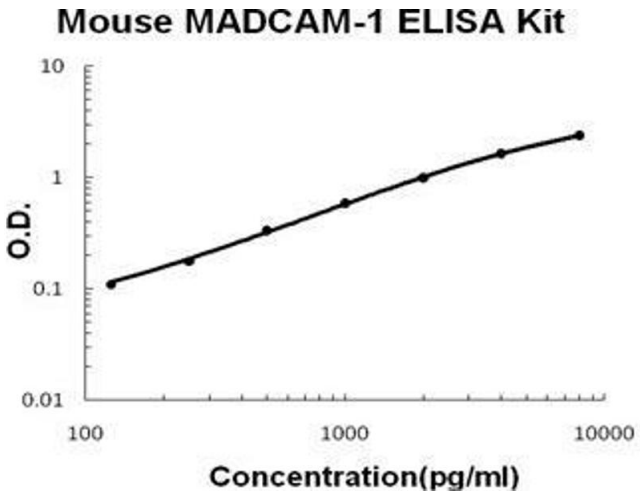
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Tissue Specificity: Highly expressed on high endothelial venules (HEV) of organized intestinal lymphoid tissues like the Peyer patches and mesenteric lymph nodes, and in the lamina propria

Application Details

	of the intestine. Some expression found in the spleen, and low levels of expression in the peripheral lymph nodes and the lactating mammary gland. No expression was detected in the liver, kidneys, lungs or in normal brain. Expressed as well in brain endothelioma cells, and mucosal tissues which are in a chronic state of inflammation, such as inflammed pancreas. .
Plate:	Pre-coated
Protocol:	mouse MADCAM-1 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for MADCAM-1 has been precoated onto 96-well plates. Standards(NSO, Q22-T365) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for MADCAM-1 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 MADCAM-1 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 8000pg/mL, 4000pg/mL, 2000pg/mL, 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL mouse MADCAM-1 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 supernates or serum to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse MADCAM-1 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 853, Standard deviation: 53.74, CV(%): 6.3 • Sample 2: n=16, Mean(pg/ml): 2254, Standard deviation: 133, CV(%): 5.9 • Sample 3: n=16, Mean(pg/ml): 3827, Standard deviation: 183.7, CV(%): 4.8, • Sample 1: n=24, Mean(pg/ml): 976, Standard deviation: 75.15, CV(%): 7.7 • Sample 2: n=24, Mean(pg/ml): 2486, Standard deviation: 164.1, CV(%): 6.6 • Sample 3: n=24, Mean(pg/ml): 4127, Standard deviation: 210.5, CV(%): 5.1
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. Mouse MADCAM-1 PicoKine ELISA Kit standard curve