

Human VCAM1 ELISA Kit ab100661

3 References 2 Images

Overview

Product name	Human VCAM1 ELISA Kit
Detection method	Colorimetric
Sample type	Cell culture supernatant, Serum, Plasma
Assay type	Sandwich (quantitative)
Sensitivity	< 0.3 ng/ml
Range	0.247 ng/ml - 60 ng/ml
Recovery	95 %

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	98.76	85% - 104%
Serum	94.42	83% - 103%
Plasma	93.58	82% - 102%

Assay duration	Multiple steps standard assay
Species reactivity	Reacts with: Human
Product overview	Abcam's VCAM1 Human ELISA (Enzyme-Linked Immunosorbent Assay) kit is an <i>in vitro</i> enzyme-linked immunosorbent assay for the quantitative measurement of Human VCAM1 in serum, plasma and cell culture supernatants.

This assay employs an antibody specific for Human VCAM1 coated on a 96-well plate. Standards and samples are pipetted into the wells and VCAM1 present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-Human VCAM1 antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of VCAM1 bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

Notes	Optimization may be required with urine samples.
Platform	Microplate

Properties

Storage instructions

Store at -20°C. Please refer to protocols.

Components	1 x 96 tests
20X Wash Buffer	1 x 25ml
320X HRP-Streptavidin Concentrate	1 x 200µl
5X Assay Diluent B	1 x 15ml
Assay Diluent A	1 x 30ml
Biotinylated anti-Human VCAM1	2 vials
Recombinant Human VCAM1 Standard (lyophilized)	2 vials
Stop Solution	1 x 8ml
TMB One-Step Substrate Reagent	1 x 12ml
VCAM1 Microplate (12 x 8 wells)	1 unit

Function

Important in cell-cell recognition. Appears to function in leukocyte-endothelial cell adhesion. Interacts with the beta-1 integrin VLA4 on leukocytes, and mediates both adhesion and signal transduction. The VCAM1/VLA4 interaction may play a pathophysiologic role both in immune responses and in leukocyte emigration to sites of inflammation.

Tissue specificity

Expressed on inflamed vascular endothelium, as well as on macrophage-like and dendritic cell types in both normal and inflamed tissue.

Sequence similarities

Contains 7 Ig-like C2-type (immunoglobulin-like) domains.

Domain

Either the first or the fourth Ig-like C2-type domain is required for VLA4-dependent cell adhesion.

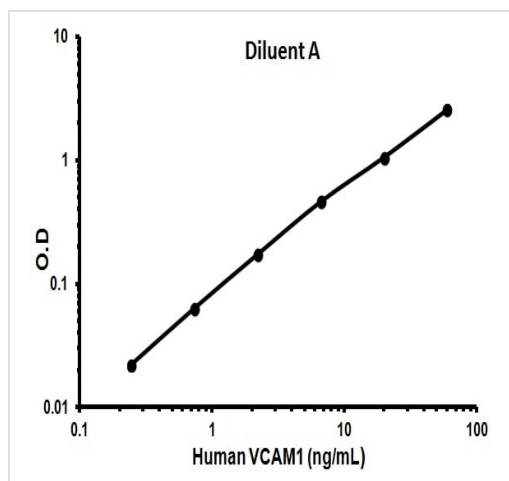
Post-translational modifications

Sialoglycoprotein.

Cellular localization

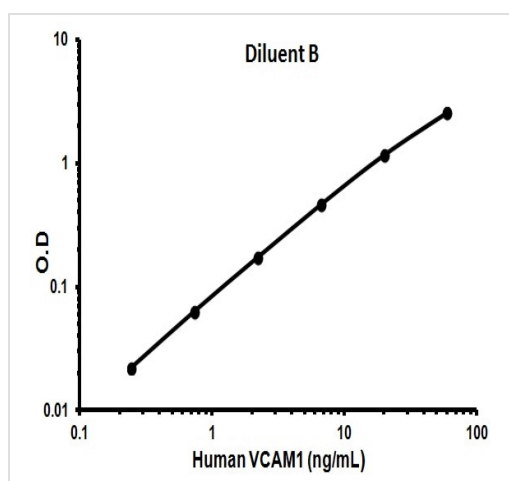
Membrane.

Images



Representative standard curve using ab100661

Typical standard curve



Representative standard curve using ab100661

Typical standard curve

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