

## **VCAM-1 Monoclonal Antibody**

Catalog No: YM0644

Reactivity: Human

**Applications:** WB;IHC;IF;ELISA

Target: VCAM-1

Fields: >>NF-kappa B signaling pathway;>>Cell adhesion molecules;>>TNF signaling

pathway;>>Leukocyte transendothelial migration;>>AGE-RAGE signaling pathway in diabetic complications;>>African trypanosomiasis;>>Malaria;>>Lipid

and atherosclerosis;>>Fluid shear stress and atherosclerosis

Gene Name: VCAM1

**Protein Name:** Vascular cell adhesion protein 1

P19320

P29533

**Human Gene Id:** 7412

**Human Swiss Prot** 

No:

**Mouse Swiss Prot** 

No:

**Immunogen:** Purified recombinant fragment of human VCAM-1 expressed in E. Coli.

**Specificity:** VCAM-1 Monoclonal Antibody detects endogenous levels of VCAM-1 protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Source:** Monoclonal, Mouse

**Dilution:** WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200

**Purification:** Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 81kD

1/3

**Cell Pathway:** Cell adhesion molecules (CAMs);Leukocyte transendothelial migration;

**P References :** 1. Cell Adh Migr. 2009 Oct;3(4):369-72.

2. Arthritis Rheum. 2010 Jan;62(1):105-16.

Background:

This gene is a member of the lg superfamily and encodes a cell surface sialoglycoprotein expressed by cytokine-activated endothelium. This type I membrane protein mediates leukocyte-endothelial cell adhesion and signal transduction, and may play a role in the development of artherosclerosis and rheumatoid arthritis. Three alternatively spliced transcripts encoding different isoforms have been described for this gene. [provided by RefSeq, Dec 2010],

**Function:** 

alternative products:Additional isoforms seem to exist, disease:May play an important role in the genesis of atherosclerosis and rheumatoid arthritis.,domain:Either the first or the fourth Ig-like C2-type domain is required for VLA4-dependent cell adhesion.,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.,induction:By cytokines (e.g. IL-1, TNF-alpha).,online

information:VCAM-1,online information:VCAM1

entry,PTM:Sialoglycoprotein.,similarity:Contains 7 Ig-like C2-type

(immunoglobulin-like) domains., subunit: Binds to ECMV-D capsid proteins and

acts as a receptor for this virus., tissue specificit

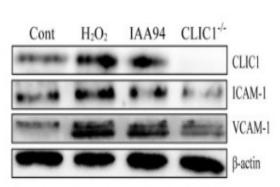
Subcellular Location : Membrane; Single-pass type I membrane protein.

**Expression:** 

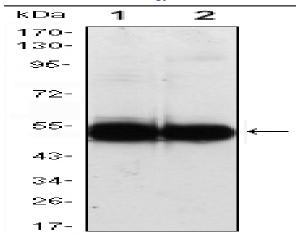
Expressed on inflamed vascular endothelium, as well as on macrophage-like and dendritic cell types in both normal and inflamed tissue.

## **Products Images**

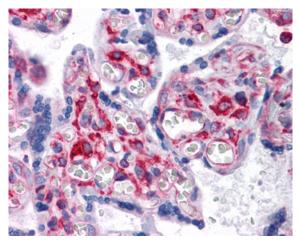
C



Xu, Yingling, et al. "CLIC1 inhibition attenuates vascular inflammation, oxidative stress, and endothelial injury." PloS one 11.11 (2016): e0166790.



Western Blot analysis using VCAM-1 Monoclonal Antibody against HUVEC (1) and EC (2) cell lysate.



Immunohistochemistry analysis of paraffin-embedded human Placenta tissues with AEC staining using VCAM-1 Monoclonal Antibody.