

VCAM-1/CD106 Antibody (Center)

Rabbit Polyclonal Antibody Catalog # ABV11325

Specification

VCAM-1/CD106 Antibody (Center) - Product Information

Application WB
Primary Accession P19320
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 81276

VCAM-1/CD106 Antibody (Center) - Additional Information

Gene ID 7412

Positive Control Western blot: NIH-3T3 and HepG2 cell

lysates.

Application & Usage WB: 1:1000.

Other Names

VCAM1; L1CAM; Vascular cell adhesion protein 1; INCAM-100

Target/Specificity

VCAM1

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

In PBS with 0.09% (W/V) sodium azide.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

VCAM-1/CD106 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.



VCAM-1/CD106 Antibody (Center) - Protein Information

Name VCAM1

Function

Cell adhesion glycoprotein predominantly expressed on the surface of endothelial cells that plays an important role in immune surveillance and inflammation (PubMed:31310649). Acts as a major regulator of leukocyte adhesion to the endothelium through interaction with different types of integrins (PubMed:10209034). During inflammatory responses, binds ligands on the surface of activated endothelial cells to initiate the activation of calcium channels and the plasma membrane-associated small GTPase RAC1 leading to leukocyte transendothelial migration (PubMed:22970700). Serves also as a quality- control checkpoint for entry into bone marrow by providing a 'don't-eat-me' stamping in the context of major histocompatibility complex (MHC) class-I presentation (PubMed:35210567).

Cellular Location

[Vascular cell adhesion protein 1]: Cell membrane; Single-pass type I membrane protein

Tissue Location

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

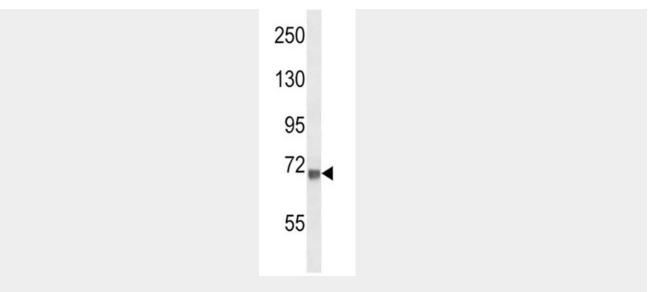
VCAM-1/CD106 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

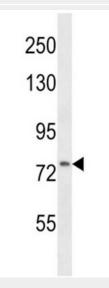
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

VCAM-1/CD106 Antibody (Center) - Images





CD106 Antibody western blot analysis in mouse NIH-3T3 cell line lysates (35 μ g/lane).



CD106 Antibody western blot analysis in HepG2 cell line lysates (35 µg/lane).

VCAM-1/CD106 Antibody (Center) - Background

Cell adhesion molecules are a family of closely related cell surface glycoproteins involved in cell-cell interactions during growth and are thought to play an important role in embryogenesis and development. Neuronal cell adhesion molecule (NCAM) expression is observed in a variety of human tumors including neuroblastoma, rhabdomyosarcoma, Wilms' tumors, Ewing's sarcomas and some primitive myeloid malignancies. The intracellular adhesion molecule-1 (ICAM-1), also referred to as CD54, is an integral membrane protein of the immunoglobulin superfamily and recognizes the B2å1 and B2åM integrins. PECAM-1 (platelet/endothelial cell adhesion molecule-1), also referred to as CD31, is a glycoprotein expressed on the cell surfaces of monocytes, neutrophils, platelets and a subpopulation of T cells. VCAM-1 (vascular cell adhesion molecule-1) was first identified as an adhesion molecule induced on human endothelial cells by inflammatory cytokines such as IL-1, tumor necrosis factor (TNF) and lipopolysaccharide (LPS). The KALIG gene encodes a nerve cell adhesion molecule (NCAM) -like protein and is deleted in 66% of patients with Kallmann's syndrome, anosmia with secondary hypogonadism.