

DESCRIPTION

Species Reactivity	Human
Specificity	The antibody was screened using COS cells transfected with cDNAs for E-Selectin, VCAM-1, ICAM-1 and PECAM-1 and was shown to be specific for human VCAM-1/CD106.
Source	Monoclonal Mouse IgG ₁ Clone # BBIG-V1
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Activated HUVEC human umbilical vein endothelial cells
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

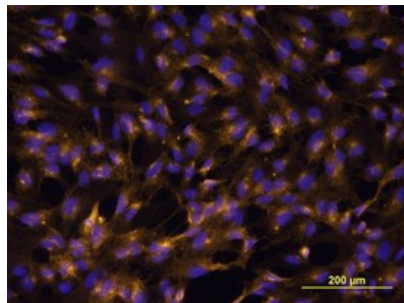
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Recombinant Human VCAM-1/CD106 (Catalog # 809-VR) under non-reducing conditions only
Immunocytochemistry	8-25 µg/mL	See Below
Immunoprecipitation	10 µg/mL	Radiolabelled activated HUVEC human umbilical vein endothelial cells, see our available Western blot detection antibodies
Adhesion Blockade	The adhesion of U937 human histiocytic lymphoma cells (5×10^4 cells/well) to immobilized Recombinant Human VCAM-1/CD106 (Catalog # ADP5 , 2.5 µg/mL, 100 µL/well) was maximally inhibited (80-100%) by 30 µg/mL of the antibody.	

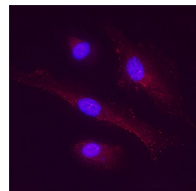
DATA

Immunocytochemistry

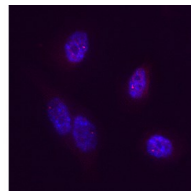


VCAM-1/CD106 in HUVEC Cells. VCAM-1/CD106 was detected in immersion fixed HUVEC human umbilical vein endothelial cells using Human VCAM-1/CD106 Monoclonal Antibody (Catalog # BBA5) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the Northern-Lights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (yellow; Catalog # [NL007](#)) and counter-stained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#). This antibody is not suitable for labeling formalin-fixed, paraffin-embedded tissue.

Immunocytochemistry



TNF alpha treated



Untreated

VCAM-1/CD106 in HUVEC cells treated with TNF alpha (positive) and untreated HUVEC cells (negative). VCAM-1/CD106 was detected in immersion fixed HUVEC cells treated with TNF alpha (positive) and untreated HUVEC cells (negative) using Mouse Anti-Human VCAM-1/CD106 Monoclonal Antibody (Catalog # BBA5) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # [NL007](#)) and counterstained with DAPI (blue). Specific staining was localized to plasma membrane. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Vascular cell adhesion molecule 1 (VCAM-1) is expressed on the surface of activated endothelial cells and macrophages. It binds to leukocyte integrins VLA-4 and α4β7 to promote leukocyte adhesion at sites of inflamed vasculature.