

CD106 (VCAM-1) Monoclonal Antibody (STA), eBioscience™

Product Details

Size	100 µg
Species Reactivity	Human
Published Species	Human, Mouse
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	STA
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_467422

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	-
Immunocytochemistry (ICC/IF)	-	2 Publications
Flow Cytometry (Flow)	1 µg/test	10 Publications
Immunoprecipitation (IP)	-	1 Publication

Product Specific Information

Description: The STA monoclonal antibody reacts with human CD106 (Vascular Cell Adhesion Molecule-1, VCAM-1), a 110 kDa transmembrane glycoprotein expressed by myeloid lineage and bone marrow stromal cells. Endothelial cells constitutively express low levels of CD106 and upregulate it upon cytokine stimulation. CD106 binds to Integrin alpha4beta1 (VLA-4, CD49d /CD29) and Integrin alpha4beta7 (LPAM-1). Cytokine-mediated upregulation of CD106 on endothelial cells suggests a role for this antigen in the inflammatory response.

Applications Reported: STA has been reported for use in flow cytometric analysis, and immunohistochemical staining of frozen tissue sections.

Applications Tested: The STA antibody has been tested by flow cytometric analysis of TNF alpha-activated HUVEC cells. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

📖 14 References

Western Blot (1)

<p>PloS one</p> <p>Cytokine induction of VCAM-1 but not IL13R2 on glioma cells: a tale of two antibodies.</p> <p>"Published figure using CD106 (VCAM-1) monoclonal antibody (Product # 14-1069-82) in Immunoprecipitation"</p> <p>Authors: Mahadev V,Starr R,Wright SL,Martinez C,Jensen MC,Barish ME,Forman SJ,Brown CE</p>	<p>Year 2014</p> <p>Species Human</p>
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Immunocytochemistry (2)

<p>Nature communications</p> <p>The critical role of SENP1-mediated GATA2 deSUMOylation in promoting endothelial activation in graft arteriosclerosis.</p> <p>"Published figure using CD106 (VCAM-1) monoclonal antibody (Product # 14-1069-82) in Immunofluorescence"</p> <p>Authors: Qiu C,Wang Y,Zhao H,Qin L,Shi Y,Zhu X,Song L,Zhou X,Chen J,Zhou H,Zhang H,Tellides G,Min W,Yu L</p>	<p>Year 2017</p>
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<p>Microbial pathogenesis</p> <p>Effects of Aggregatibacter actinomycetemcomitans leukotoxin on endothelial cells.</p> <p>"Published figure using CD106 (VCAM-1) monoclonal antibody (Product # 14-1069-82) in Immunofluorescence"</p> <p>Authors: Dietmann A,Millonig A,Combes V,Couraud PO,Kachlany SC,Grau GE</p>	<p>Year 2014</p> <p>Species Human</p>
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Flow Cytometry (10)

<p>PLoS genetics</p> <p>Multimodal CRISPR perturbations of GWAS loci associated with coronary artery disease in vascular endothelial cells.</p> <p>"Published figure using CD106 (VCAM-1) monoclonal antibody (Product # 14-1069-82) in Flow Cytometry"</p> <p>Authors: Wünnemann F,Fotsing Tadjó T,Beaudoin M,Lalonde S,Lo KS,Kleinstiver BP,Lettre G</p>	<p>Year 2023</p>
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IP (1)

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