

# CD106 (VCAM-1) Monoclonal Antibody (429), PE, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Rat, Mouse, Human
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	429
Conjugate	PE
Excitation/Emission Max	565/576 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2572573

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.25 µg/test	10 Publications

## Product Specific Information

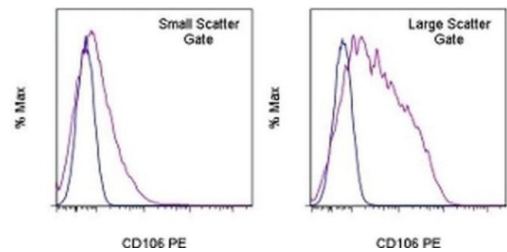
**Description:** The 429 monoclonal antibody reacts with mouse CD106 (Vascular Cell Adhesion Molecule-1, VCAM-1), a 110 kDa transmembrane glycoprotein expressed by myeloid lineage and bone marrow stromal cells. Endothelial cells constitutively express low levels of CD106 and upregulate it upon cytokine stimulation. CD106 binds to integrin alpha4 beta1 (VLA-4, CD49d /CD29) and Integrin a4b7 (LPAM-1) and these interactions in the bone marrow and thymus are important for early lymphocyte and myeloid development. Cytokine-mediated upregulation of CD106 on endothelial cells suggests a role for this antigen in the inflammatory response.

**Applications Reported:** This 429 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This 429 antibody has been tested by flow cytometric analysis of mouse bone marrow cells. This can be used at less than or equal to 0.25 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 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

**Excitation:** 488-561 nm; **Emission:** 578 nm; **Laser:** Blue Laser, Green Laser, Yellow-Green Laser.

**Filtration:** 0.2 µm post-manufacturing filtered.



**CD106 (VCAM-1) Antibody (12-1061-82) in Flow**  
Staining of C57Bl/6 bone marrow cells with 0.125 µg of Rat IgG2a K Isotype Control PE (Product # 12-4321-80) (blue histogram) or 0.125 µg of Anti-Mouse CD106 (VCAM-1) PE (purple histogram). Cells in the small scatter population (left) and large scatter population (right) gates were used for analysis.

[View more figures on thermofisher.com](#)

10 References

Flow Cytometry (10)

Therapeutic advances in chronic disease		Year
<b>Extracellular HMGB-1 activates inflammatory signaling in tendon cells and tissues.</b>		2022
"Published figure using CD106 (VCAM-1) monoclonal antibody (Product # 12-1061-82) in Flow Cytometry"		Species
Authors: Zhang C,Gu X,Zhao G,Wang W,Shao J,Zhu J,Yuan T,Sun J,Nie D,Zhou Y		Rat
		Dilution
		1:100
iScience		Year
<b>Uhrf1 governs the proliferation and differentiation of muscle satellite cells.</b>		2022
"12-1061-82 was used in Flow Cytometry to show that Uhrf1 is a critical epigenetic regulator of proliferation and differentiation in satellite cells, by controlling cell-type-specific gene expression via maintenance of DNA methylation."		Species
Authors: Sakai H,Sawada Y,Tokunaga N,Tanaka K,Nakagawa S,Sakakibara I,Ono Y,Fukada SI,Ohkawa Y,Kikugawa T, Saika T,Imai Y		Mouse
		Dilution
		1:100

[View more Flow references on thermofisher.com](#)

More applications with references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.