

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
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	9 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.

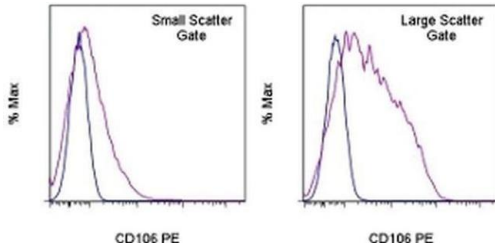
Applications Reported: This 429 antibody has been reported for use in flow cytometric analysis.

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 10⁵ to 10⁸ 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.

Product Images For CD106 (VCAM-1) Monoclonal Antibody (429), PE, eBioscience™



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](#)

9 References

Flow Cytometry (9)

Therapeutic advances in chronic disease

Extracellular HMGB-1 activates inflammatory signaling in tendon cells and tissues.

"12-1061 was used in Flow cytometry/Cell sorting to investigate the dose-dependent effect of HMGB-1 on tendon cells and tissues."

Authors: Zhang C,Gu X,Zhao G,Wang W,Shao J,Zhu J,Yuan T,Sun J,Nie D,Zhou Y

Species
Rat

Dilution
1:100

Year
2022

Cell reports

Dynamics of Asymmetric and Symmetric Divisions of Muscle Stem Cells In Vivo and on Artificial Niches.

"12-1061 was used in Flow cytometry/Cell sorting to generate SNAP-tagged histone H3-reporter mice and find that, unlike fly germline stem cells, differential fate outcomes are associated with a symmetric distribution of the H3.1 and H3.3 histone variants in mouse muscle stem cells."

Authors: Evano B,Khalilian S,Le Carrou G,Almouzni G,Tajbaksh S

Species
Mouse

Dilution
Not Cited

Year
2020

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

More applications with references on thermofisher.com

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