

PE anti-mouse CD106 Antibody

Catalog# / Size	105713 / 50 µg 105714 / 200 µg
Clone	429 (MVCAM.A)
Regulatory Status	RUO
Other Names	VCAM-1, INCAM-110
Isotype	Rat IgG2a, κ
Description	CD106 is a 110 kD glycosylphosphatidylinositol (GPI)-linked transmembrane protein, also known as VCAM-1 and INCAM-110. It is constitutively expressed on bone marrow stromal cells, myeloid progenitors, splenic dendritic cells, activated endothelial cells, as well as some lymphocytes. CD106 expression can be upregulated on endothelial cells by inflammatory cytokines. CD106 is involved in adhesion and acts as a counter-receptor for VLA-4 ($\alpha_4\beta_1$ integrin) and LPAM-1 ($\alpha_4\beta_7$ integrin). The 429 antibody has been reported to partially block VCAM-1-mediated binding.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Mouse preadipose cell line PA6
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions.
Concentration	0.2 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 µg per 10^6 cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunohistochemical staining ^{2,3,5-7} of acetone-fixed frozen sections, blocking ^{4,5,8} of ligand binding <i>in vitro</i> and <i>in vivo</i> , immunoprecipitation ¹ , and spacial biology (IBEX) ^{11,12} . The Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 105727 & 105728).
Application References	<ol style="list-style-type: none"> 1. Kinashi T, <i>et al.</i> 1995. <i>J. Leukoc. Biol.</i> 57:168. (IP) 2. Koni PA, <i>et al.</i> 2001. <i>J. Exp. Med.</i> 193:741. (IHC) 3. Ishiyama N, <i>et al.</i> 1998. <i>Pathobiology</i> 66:274. (IHC) 4. Kinashi T, <i>et al.</i> 1994. <i>Blood Cells</i> 20:25. (Block) 5. Baron JL, <i>et al.</i> 1994. <i>J. Clin. Invest.</i> 93:1700. (Block IHC) 6. Buck CA, <i>et al.</i> 1996. <i>Cell Adhes. Commun.</i> 4:69. (IHC) 7. Hata H, <i>et al.</i> 2004. <i>J. Clin. Invest.</i> 114:582. (IHC) 8. Meunier MC, <i>et al.</i> 2005. <i>Nature Medicine</i> 11:1222. (Block) PubMed 9. Monnier J, <i>et al.</i> 2012. <i>J. Immunol.</i> 189:956. PubMed 10. Motohashi N, <i>et al.</i> 2013. <i>J Cell Sci.</i> 126:2678. PubMed

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Product Citations

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7. Moretti FA, *et al.* 2018. *Elife.* 7:e35816. [PubMed](#)
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11. Kwok T, *et al.* 2022. *Front Aging.* 3:838943. [PubMed](#)
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RRID

AB_1134166 (BioLegend Cat. No. 105713)
AB_1134164 (BioLegend Cat. No. 105714)

Antigen Details

Structure	Ig superfamily, 47 kD
Distribution	Bone marrow stromal cells, myeloid progenitors, splenic dendritic cells, activated endothelial cells
Function	Adhesion
Ligand/Receptor	VLA-4 ($\alpha 4/\beta 1$ integrin) and LPAM-1 ($\alpha 4/\beta 7$ integrin)
Cell Type	Dendritic cells, Endothelial cells, Mesenchymal Stem Cells
Biology Area	Cell Adhesion, Cell Biology, Immunology, Neuroinflammation, Neuroscience, Stem Cells
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	<ol style="list-style-type: none">1. Barclay AN, <i>et al.</i> 1997. <i>The Leukocyte Antigen FactsBook</i> Academic Press.2. Kinashi T, <i>et al.</i> 1995. <i>J. Leukoc. Biol.</i> 57:168.3. Bevilacqua MP. 1993. <i>Annu. Rev. Immunol.</i> 11:767.4. Koni PA, <i>et al.</i> 2001. <i>J. Exp. Med.</i> 193:741.
Gene ID	22329

Related Protocols

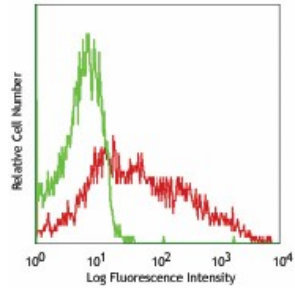
[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Biotin anti-mouse CD106, FITC anti-mouse CD106, LEAF™ Purified anti-mouse CD106, Purified anti-mouse CD106, Alexa Fluor® 488 anti-mouse CD106, Alexa Fluor® 647 anti-mouse CD106, PE anti-mouse CD106, PerCP/Cyanine5.5 anti-mouse CD106, APC anti-mouse CD106, PE/Cyanine7 anti-mouse CD106, Pacific Blue™ anti-mouse CD106, Alexa Fluor® 594 anti-mouse CD106, TotalSeq™-A0226 anti-mouse CD106, Ultra-LEAF™ Purified anti-mouse CD106, TotalSeq™-C0226 anti-mouse CD106, TotalSeq™-B0226 anti-mouse CD106

Product Data

C57BL/6 bone marrow cells stained with
429 PE (gated on myeloid cell
population)



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