

## Biotin anti-mouse CD106 Antibody

<b>Catalog# / Size</b>	105703 / 50 µg 105704 / 500 µg
<b>Clone</b>	429 (MVCAM.A)
<b>Other Names</b>	VCAM-1, INCAM-110
<b>Isotype</b>	Rat IgG2a, κ
<b>Description</b>	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 (α <sub>v</sub> β <sub>3</sub> integrin) and LPAM-1 (α <sub>v</sub> β <sub>1</sub> integrin). The 429 antibody has been reported to partially block VCAM-1-mediated binding.

### Product Details

<b>Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	Mouse preadipose cell line PA6
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions.
<b>Concentration</b>	0.5 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C. <b>Do not freeze.</b>
<b>Application</b>	FC - Quality tested
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is ≤ 0.06 µg per 10 <sup>6</sup> cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: immunohistochemical staining <sup>2,3,5-7</sup> of acetone-fixed frozen sections, blocking <sup>4,5,8</sup> of ligand binding <i>in vitro</i> and <i>in vivo</i> , and immunoprecipitation <sup>1</sup> . 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).
<b>Application References</b>	<ol style="list-style-type: none"> <li>1. Kinashi T, et al. 1995. J. Leukoc. Biol. 57:168. (IP)</li> <li>2. Koni PA, et al. 2001. J. Exp. Med. 193:741. (IHC)</li> <li>3. Ishiyama N, et al. 1998. Pathobiology 66:274. (IHC)</li> <li>4. Kinashi T, et al. 1994. Blood Cells 20:25. (Block)</li> <li>5. Baron JL, et al. 1994. J. Clin. Invest. 93:1700. (Block IHC)</li> <li>6. Buck CA, et al. 1996. Cell Adhes. Commun. 4:69. (IHC)</li> <li>7. Hata H, et al. 2004. J. Clin. Invest. 114:582. (IHC)</li> <li>8. Meunier MC, et al. 2005. Nature Medicine 11:1222. (Block) PubMed</li> <li>9. Monnier J, et al. 2012. J. Immunol. 189:956. PubMed</li> <li>10. Motohashi N, et al. 2013. J Cell Sci. 126:2678. PubMed</li> </ol>
<b>Product Citations</b>	<ol style="list-style-type: none"> <li>1. Mueller A, et al. 2016. Nature. 540:276-279. PubMed</li> <li>2. Swanson P, et al. 2016. PLoS Pathog. 12:e1006022. PubMed</li> <li>3. Sarshad AA, et al. 2018. Mol Cell. 71:1040. PubMed</li> </ol>
<b>RRID</b>	AB_313204 (BioLegend Cat. No. 105703) AB_313205 (BioLegend Cat. No. 105704)

### Antigen Details

<b>Structure</b>	Ig superfamily, 47 kD
<b>Distribution</b>	Bone marrow stromal cells, myeloid progenitors, splenic dendritic cells, activated endothelial cells
<b>Function</b>	Adhesion
<b>Ligand/Receptor</b>	VLA-4 ( $\alpha_4\beta_1$ , integrin) and LPAM-1 ( $\alpha_4\beta_1$ , integrin)
<b>Cell Type</b>	Dendritic cells, Endothelial cells, Mesenchymal Stem Cells
<b>Biology Area</b>	Cell Adhesion, Cell Biology, Immunology, Neuroinflammation, Neuroscience, Stem Cells
<b>Molecular Family</b>	Adhesion Molecules, CD Molecules
<b>Antigen References</b>	<ol style="list-style-type: none"> <li>1. Barclay AN, et al. 1997. The Leukocyte Antigen FactsBook Academic Press.</li> <li>2. Kinashi T, et al. 1995. J. Leukoc. Biol. 57:168.</li> <li>3. Bevilacqua MP. 1993. Annu. Rev. Immunol. 11:767.</li> <li>4. Koni PA, et al. 2001. J. Exp. Med. 193:741.</li> </ol>
<b>Gene ID</b>	<a href="#">22329</a>

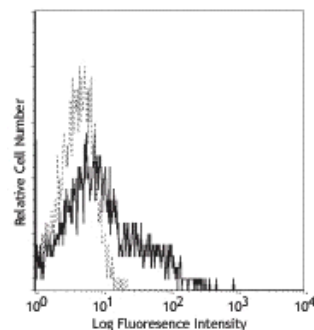
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

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 myeloid cells stained with 429 FITC

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