

FITC anti-mouse/rat CD29 Antibody

Catalog# / Size	102205 / 50 µg 102206 / 500 µg
Clone	HMβ1-1
Regulatory Status	RUO
Other Names	integrin β1, VLA-β chain, β1 integrin, GPIIa, ITGB1
Isotype	Armenian Hamster IgG
Description	CD29 is a 130 kD protein, also known as integrin β1, VLA-β chain, or GPIIa. It is a member of the integrin family, expressed broadly on leukocytes, endothelial cells, smooth muscle, and epithelial cells. In association with CD49a-f, CD29 forms the VLA-1 through VLA-6 complexes, respectively. It plays an important role in cell-cell or cell-matrix interaction. The HMβ1-1 antibody reacts with both mouse and rat CD29. It is able to block cell adhesion and inhibit T cell proliferation.

Product Details

Verified Reactivity	Mouse, Rat
Antibody Type	Monoclonal
Host Species	Armenian Hamster
Immunogen	Purified mouse VLA-4 (α4β1, CD49d/CD29)
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with FITC under optimal conditions.
Concentration	0.5 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 ≤ 1.0 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)
Application Notes	Additional reported applications (for the relevant formats) include: immunoprecipitation ¹ , immunohistochemistry ⁴ of acetone-fixed frozen sections, <i>in vitro</i> blocking of the adhesion of mouse tumor cell lines to extracellular matrix proteins and <i>in vitro</i> inhibition of T cell proliferative responses ¹ , and <i>in vivo</i> inhibition of neutrophil migration ² . The Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 102235 and 102236).
Application References	<ol style="list-style-type: none"> 1. Noto K, <i>et al.</i> 1995. <i>Int. Immunol.</i> 7:835. 2. Ridger VC, <i>et al.</i> 2001. <i>J. Immunol.</i> 166:3484. 3. Jia W, <i>et al.</i> 2005. <i>Blood</i> 106:3854. PubMed 4. Economopoulou M, <i>et al.</i> 2005. <i>Blood</i> 106:3831. 5. Lawson BR, <i>et al.</i> 2007. <i>J. Immunol.</i> 178:5366. 6. Eisenmann KM, <i>et al.</i> 2007. <i>J. Biol. Chem.</i> doi:10.1074/jbc.M703243200. PubMed 7. Hayashi Y, <i>et al.</i> 2008. <i>Am J Physiol Gastrointest Liver Physiol.</i> 294:G778. PubMed 8. Kim DT, <i>et al.</i> 2008. <i>Blood</i> 111:2929. PubMed 9. Hayashi Y, <i>et al.</i> 2008. <i>J Pharmacol Exp Ther.</i> 326:523. PubMed 10. Carlson TR, <i>et al.</i> 2008. <i>Development.</i> 135:2193. PubMed 11. Sangaletti S, <i>et al.</i> 2008. <i>Cancer Res.</i> 68:9050. (Block) PubMed
(PubMed link indicates BioLegend citation)	

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RRID

AB_312882 (BioLegend Cat. No. 102205)
 AB_312883 (BioLegend Cat. No. 102206)

Antigen Details

Structure	Integrin family, 130 kD
Distribution	Leukocytes, endothelial cells, smooth muscle, epithelial cells
Function	Adhesion
Ligand/Receptor	Extracellular matrix
Cell Type	Embryonic Stem Cells, Endothelial cells, Epithelial cells, Leukocytes, Mesenchymal Stem Cells, Tregs
Biology Area	Cell Adhesion, Cell Biology, Immunology, Innate Immunity, Stem Cells
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	1. Noto K, <i>et al.</i> 1995. <i>Int. Immunol</i> . 7:835. 2. Springer TA. 1990. <i>Nature</i> 346:425.
Gene ID	16412 24511

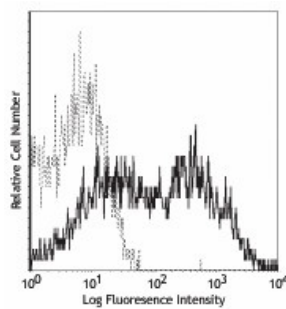
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

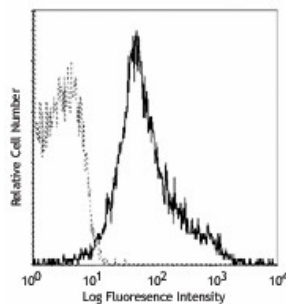
Other Formats

Biotin anti-mouse/rat CD29, Purified anti-mouse/rat CD29, FITC anti-mouse/rat CD29, PE anti-mouse/rat CD29, Alexa Fluor® 488 anti-mouse/rat CD29, Alexa Fluor® 647 anti-mouse/rat CD29, APC anti-mouse/rat CD29, Alexa Fluor® 700 anti-mouse/rat CD29, PE/Cyanine5 anti-mouse/rat CD29, PE/Cyanine7 anti-mouse/rat CD29, Pacific Blue™ anti-mouse/rat CD29, APC/Cyanine7 anti-mouse/rat CD29, PerCP/Cyanine5.5 anti-mouse/rat CD29, Alexa Fluor® 594 anti-mouse/rat CD29, PE/Dazzle™ 594 anti-mouse/rat CD29, TotalSeq™-A0570 anti-mouse/rat CD29, Ultra-LEAF™ Purified anti-mouse/rat CD29, TotalSeq™-C0570 anti-mouse/rat CD29 Antibody

Product Data



Lou rat bone marrow cells stained with HMβ1-1 biotin, then detected with Sav-PE



Lou rat bone marrow cells stained with HMβ1-1 biotin, then detected with Sav-PE

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