

Monoclonal Antibody to CD29 / Integrin beta-1 - FITC

Alternate names:	FNRB, Fibronectin receptor subunit beta, ITGB1, Integrin VLA-4 subunit beta, MDF2, MSK12
Catalog No.:	SM1578F
Quantity:	0.1 mg
Concentration:	0.1 mg/ml
Background:	<p>Integrin beta 1, also known as CD29, is a 130 kDa transmembrane glycoprotein that forms noncovalent complexes with various Integrin alpha subunits (including alpha 1, alpha 2, alpha 3, alpha 4, alpha 5, and alpha 6, also known as CD49a, CD49b, CD49c, CD49d, CD49e, and CD49f, respectively) to form the functional receptors that bind to specific extracellular matrix proteins. Integrin receptors are involved in the regulation of a variety of important biological functions, including embryonic development, wound repair, hemostasis, and prevention of programmed cell death. They are also implicated in abnormal pathological states such as tumor directed angiogenesis, tumor cell growth, and metastasis. These heterodimeric receptors bridge the cytoplasmic actin cytoskeleton with proteins present in the extracellular matrix and/or on adjacent cells. The clustering of integrins on a cell surface leads to the formation of focal contacts. Interactions between integrins and the extracellular matrix lead to activation of signal transduction pathways and regulation of gene expression. In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions.</p>
Uniprot ID:	P05556
NCBI:	9606
Host / Isotype:	Mouse / IgG1
Clone:	4B7R
Immunogen:	Ocular melanoma cell line V+B2.
Format:	<p>State: Liquid purified IgG fraction. Purification: Affinity Chromatography on Protein. Buffer System: PBS, pH 7.4 containing 0.09% Sodium Azide as preservative and 1% BSA as stabilizer. Label: FITC – Fluorescein Isothiocyanate Isomer 1</p>
Applications:	<p>Flow Cytometry: Use 10 µl of neat antibody to label 10e6 cells in 100 µl. This Clone 4B7R is reported to work on Immunohistochemistry on Paraffin Sections. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.</p>
Specificity:	<p>This antibody recognises the beta 1 subunit of Integrin (CD29). Species: Human. Other species not tested.</p>

For research and in vitro use only. Not for diagnostic or therapeutic work.

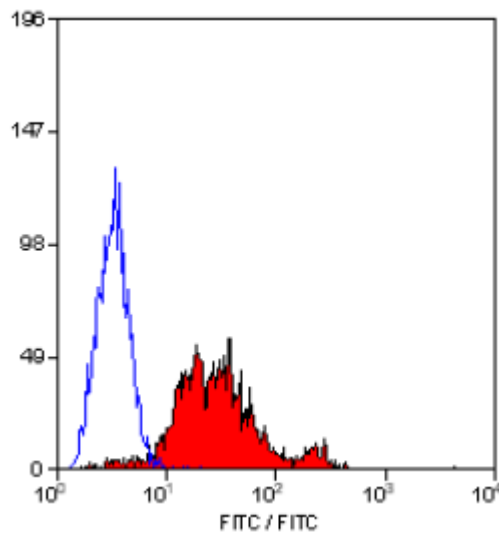
Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General References: 1. Marshall, J. et al. (1998) Comparative analysis of integrins in vitro and in vivo in uveal and cutaneous melanomas. *Br. J. Cancer.* 77: 522-529.
2. Pillay, J. et al. (2010) Functional heterogeneity and differential priming of circulating neutrophils in human experimental endotoxemia. *J Leukoc Biol.* 88: 1-10.
3. Kim, B.S. et al. (2011) Effects of the dichloromethane fraction of dipsaci radix on the osteoblastic differentiation of human alveolar bone marrow-derived mesenchymal stem cells. *Biosci Biotechnol Biochem.* 75:13-9.

Pictures:



Staining of human peripheral blood lymphocytes with FITC conjugated Mouse anti-Human integrin beta 1/CD29 Antibody (SM1578F/FT).

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