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Product datasheet for SM3016APC

Integrin beta 1 (ITGB1) Mouse Monoclonal Antibody [Clone ID: MEM-101A]

Product data:

Product Type:	Primary Antibodies
Clone Name:	MEM-101A
Applications:	FC
Recommended Dilution:	The reagent is designed for **Flow Cytometry analysis** of human blood cells using 10 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.
Reactivity:	Human, Porcine, Canine
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Raji Burkitt's lymphoma cell line
Specificity:	Antibody SM3016APC (clone MEM-101A) reacts with CD29 (integrin b1 chain), a 130 kDa single chain type I glycoprotein expressed as a heterodimer (non-covalently associated with the integrin a subunits 1-6). CD29 is broadly expressed on majority of hematopoietic and non-hematopoietic cells (leukocytes, platelets, fibroblasts, endothelial cells, epithelial cells and mast cells).
Formulation:	Phosphate buffered saline (PBS) solution containing 15mM sodium azide Label: APC State: Liquid purified Ig fraction Label: Conjugated with cross-linked Allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use.
Purification:	Size-Exclusion Chromatography
Conjugation:	APC
Storage:	Store the antibody at 2-8°C. **DO NOT FREEZE!** This product is photosensitive and should be protected from light.
Stability:	Shelf life: one year from despatch.
Gene Name:	integrin subunit beta 1

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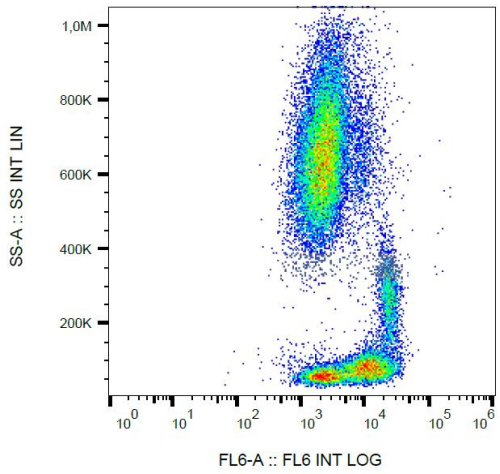
Database Link: Entrez Gene 3688 Human
P05556

Background: CD29 (b1 integrin subunit, GPIIa) forms non-covalently linked heterodimers with at least 6 dibberent a chains (a1-a6, CD49a-f) determining the binding properties of b1 (VLA) integrins. These integrins mediate cell adhesion to collagen, fibronectin, laminin and other extracellular matrix (ECM) components. This interaction hinders cell death, whereas disruption of anchorage to ECM leads to apoptosis. Decreased expression of most b1 integrins correlates with acquiring multidrug resistance of tumour cells during selection in presence of antitumour drug. In platelets, translocation of intracellular pool of b1 integrins to the plasma membrane following thrombin stimulation. These integrins are also up-regulated in leukocytes during emigration and extravascular migration and appear to be critically involved in regulating the immune cell trafficking from blood to tissue, as well as in regulating tissue damage and disease symptoms related to inflammatory bowel disease. Through a b1 integrin-dependent mechanism, fibronectin and type I collagen enhance cytokine secretion of human airway smooth muscle in response to IL-1b.

Synonyms: Fibronectin receptor subunit beta, Integrin VLA-4 subunit beta, ITGB1, FNRB, MDF2, MSK12

Product images:



Surface staining of human peripheral blood with anti-human CD29 (MEM-101A) APC.