

Product datasheet for **SM1740P**

Integrin beta 1 (ITGB1) Mouse Monoclonal Antibody [Clone ID: 12G10]

Product data:

Product Type:	Primary Antibodies
Clone Name:	12G10
Applications:	ELISA, FC, WB
Recommended Dilution:	Flow Cytometry: 1/25-1/50 ELISA: 10 µg/ml. Western Blot. Note: Clone 12G10 has been reported for use in Immunoprecipitation. However, due to the nature of the epitope recognised by clone 12G10, we do not recommend this application.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified human beta1 integrin preparation from HT1080 fibrosarcoma cell extract. Spleen cells from an immunised BALB/c mice were fused with cells of the X63/Ag8.653 mouse myeloma cell line.
Specificity:	This antibody recognises the beta1 integrin. This antibody has been shown to bind to a ligand induced binding site antibody, binding being increased in the presence of Fibronectin ligand. This antibody also enhances alpha 5-beta 1 - Fibronectin interactions. Does not react with Rat and Mouse.
Formulation:	PBS containing 0.09% Sodium Azide as preservative. State: Purified State: Liquid purified IgG fraction.
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein G.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.



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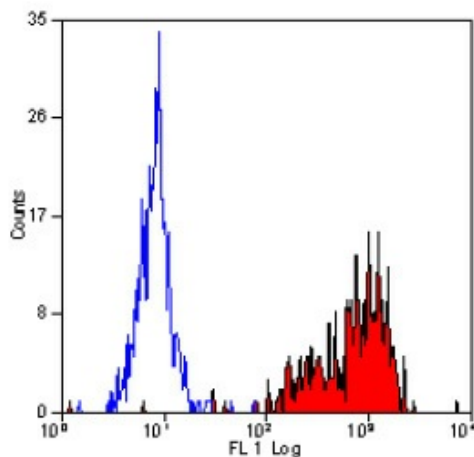
Gene Name: integrin subunit beta 1

Database Link: [Entrez Gene 3688 Human P05556](#)

Background: 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.

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

Product images:



Staining of human peripheral blood monocytes with Mouse Anti Human CD29.