

AM26285FC-N**Monoclonal Antibody to Beta1 Integrin - FITC**

Quantity:	0.1 mg
Concentration:	0.1 mg/ml
Background:	<p>Integrins alpha-1/beta-1, alpha-2/beta-1, alpha-10/beta-1 and alpha-11/beta-1 are receptors for collagen. Integrins alpha-1/beta-1 and alpha-2/beta-2 recognize the proline-hydroxylated sequence G-F-P-G-E-R in collagen. Integrins alpha-2/beta-1, alpha-3/beta-1, alpha-4/beta-1, alpha-5/beta-1, alpha-8/beta-1, alpha-10/beta-1, alpha-11/beta-1 and alpha-V/beta-1 are receptors for fibronectin. Alpha-4/beta-1 recognizes one or more domains within the alternatively spliced CS-1 and CS-5 regions of fibronectin. Integrin alpha-5/beta-1 is a receptor for fibrinogen. Integrin alpha-1/beta-1, alpha-2/beta-1, alpha-6/beta-1 and alpha-7/beta-1 are receptors for laminin. Integrin alpha-4/beta-1 is a receptor for VCAM1. It recognizes the sequence Q-I-D-S in VCAM1. Integrin alpha-9/beta-1 is a receptor for VCAM1, cytotactin and osteopontin. It recognizes the sequence A-E-I-D-G-I-E-L in cytotactin. Integrin alpha-3/beta-1 is a receptor for epiligrin, thrombospondin and CSPG4. Alpha-3/beta-1 may mediate with LGALS3 the stimulation by CSPG4 of endothelial cells migration. Integrin alpha-V/beta-1 is a receptor for vitronectin. Beta-1 integrins recognize the sequence R-G-D in a wide array of ligands. Isoform beta-1B interferes with isoform beta-1A resulting in a dominant negative effect on cell adhesion and migration (in vitro). In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions. When associated with alpha-7/beta-1 integrin, regulates cell adhesion and laminin matrix deposition. Involved in promoting endothelial cell motility and angiogenesis. May be involved in up-regulation of the activity of kinases such as PKC via binding to KRT1. Together with KRT1 and GNB2L1/RACK1, serves as a platform for SRC activation or inactivation. Plays a mechanistic adhesive role during telophase, required for the successful completion of cytokinesis.</p>
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10F (for use in human samples)
Clone:	BV7
Format:	State: Liquid 0.2 µm filtered Ig fraction Purification: Protein G Buffer System: PBS Preservatives: 0.02% sodium azide Stabilizers: 1% bovine serum albumin Label: FITC
Applications:	Flow cytometry: The typical starting working dilution is 1:50. Immunoassay. Western blot: The typical starting working dilution is 1:50.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

Monoclonal antibody BV7 binds to human beta1 integrin chain present on tumor cells. BV7 is active on HT-29 colon carcinoma cells and on HCCP-2998 tumor cells. BV7 binds to several other tumor cells (MG3 osteosarcoma, A375 melanoma, MHCC-1410 and Lovo colon carcinoma) but does not affect adhesion to endothelial cells.

Species Reactivity:

Tested: Human

Storage:

Store at 2 - 8 °C.

Shelf life: one year from despatch.

General Readings:

1. Martín-Padura I, Bazzoni G, Zanetti A, Bernasconi S, Elices MJ, Mantovani A, et al. A novel mechanism of colon carcinoma cell adhesion to the endothelium triggered by beta 1 integrin chain. *J Biol Chem.* 1994 Feb 25;269(8):6124-32. PubMed PMID: 7509799.