

Product datasheet for **TA328165S**

Integrin beta 1 (ITGB1) Mouse Monoclonal Antibody [Clone ID: 1084CT17.4.1]

Product data:

Product Type:	Primary Antibodies
Clone Name:	1084CT17.4.1
Applications:	WB
Recommended Dilution:	WB: 1:1000
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified His-tagged ITGB1 protein was used to produced this monoclonal antibody.
Formulation:	PBS with 0.09% (W/V) sodium azide
Concentration:	lot specific
Purification:	This antibody is purified through a protein G column, followed by dialysis against PBS.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	integrin subunit beta 1
Database Link:	NP_596867 Entrez Gene 3688 Human P05556



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Background:

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.

Synonyms:

CD29; FNRB; GPIIA; MDF2; MSK12; VLA-BETA; VLAB

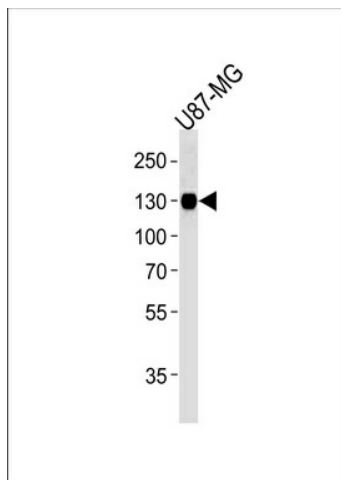
Protein Families:

Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

Protein Pathways:

Arrhythmogenic right ventricular cardiomyopathy (ARVC), Axon guidance, Cell adhesion molecules (CAMs), Dilated cardiomyopathy, ECM-receptor interaction, Focal adhesion, Hypertrophic cardiomyopathy (HCM), Leukocyte transendothelial migration, Pathogenic Escherichia coli infection, Pathways in cancer, Regulation of actin cytoskeleton, Small cell lung cancer

Product images:



ITGB1 Antibody (Cat. #TA328165S) western blot analysis in U87-MG cell line lysates (35ug/lane). This demonstrates the ITGB1 antibody detected the ITGB1 protein (arrow).