



# Anti-ITGB1 (aa 96-356) polyclonal antibody (DPABH-07253)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

### Antigen Description

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, cytactin and osteopontin. It recognizes the sequence A-E-I-D-G-I-E-L in cytactin. 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 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. Involved in osteoblast compaction through the fibronectin fibrillogenesis cell-mediated matrix assembly process and the formation of mineralized bone nodules. 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.

### Immunogen

Recombinant fragment, corresponding to amino acids 96-356 of Human Integrin beta 1 (BC020057).

### Isotype

IgG

<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human
<b>Purification</b>	Immunogen affinity purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB, IHC-P
<b>Format</b>	Liquid
<b>Size</b>	100 µg
<b>Buffer</b>	pH: 7.20; Constituents: 99% PBS, 1% BSA
<b>Preservative</b>	0.02% Sodium Azide
<b>Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">ITGB1 integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK13) [ Homo sapiens ]</a>
<b>Official Symbol</b>	ITGB1
<b>Synonyms</b>	ITGB1; integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12); CD29; FNRB; MDF2; VLAB; GPIIA; MSK12; VLA-BETA; integrin beta-1; glycoprotein IIa; integrin VLA-4 beta subunit; very late activation protein, beta polypeptide;
<b>Entrez Gene ID</b>	<a href="#">3688</a>
<b>Protein Refseq</b>	<a href="#">NP_002202.2</a>
<b>UniProt ID</b>	<a href="#">P05556</a>
<b>Pathway</b>	Adaptive Immune System; Arf6 trafficking events; Arrhythmogenic right ventricular cardiomyopathy (ARVC); Axon guidance
<b>Function</b>	actin binding; alpha-actinin binding; cell adhesion molecule binding; collagen binding