

Product datasheet

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ARG65727 anti-CD29 / Integrin beta 1 antibody

Package: 100 μl, 50 μl Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes CD29 / Integrin beta 1

Tested Reactivity Hu

Tested Application FACS, ICC/IF, IHC-P, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name CD29 / Integrin beta 1

Species Human

Immunogen Synthetic peptide derived from Human CD29 / Integrin beta 1.

Conjugation Un-conjugated

Alternate Names CD29; Glycoprotein IIa; Fibronectin receptor subunit beta; VLAB; MSK12; CD antigen CD29; FNRB;

GPIIA; VLA-4 subunit beta; VLA-BETA; MDF2; Integrin beta-1

Application Instructions

Application table	Application	Dilution
	FACS	1:50
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	U87 and 293T	
Observed Size	~ 150 kDa	

Properties

Form	Liquid	
Purification	Affinity purified.	
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.	
Preservative	0.02% Sodium azide	
Stabilizer	50% Glycerol	
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw	

Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links <u>GeneID: 3688 Human</u>

Swiss-port # P05556 Human

Gene Symbol ITGB1

Gene Full Name integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12)

Background Integrins are heterodimeric proteins made up of alpha and beta subunits. At least 18 alpha and 8 beta

subunits have been described in mammals. Integrin family members are membrane receptors involved in cell adhesion and recognition in a variety of processes including embryogenesis, hemostasis, tissue repair, immune response and metastatic diffusion of tumor cells. This gene encodes a beta subunit. Multiple alternatively spliced transcript variants which encode different protein isoforms have been

found for this gene. [provided by RefSeq, Jul 2008]

Function 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-10/beta-1, alpha-10/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 lamimin. 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 2 interferes with isoform 1 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. 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. Integrin alpha-3/beta-1 provides a docking site for FAP (seprase) at invadopodia plasma membranes in a collagen-dependent manner and hence may participate in the adhesion, formation of invadopodia

and matrix degradation processes, promoting cell invasion.

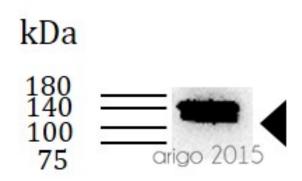
Research Area Developmental Biology antibody; Microbiology and Infectious Disease antibody; Neuroscience

Isoform 5: Isoform 5 displaces isoform 1 in striated muscles. [UniProt]

antibody; Signaling Transduction antibody

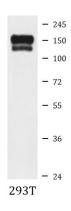
Calculated Mw 88 kDa

PTM The cysteine residues are involved in intrachain disulfide bonds.



ARG65727 anti-CD29 / Integrin beta 1 antibody WB image

Western blot: 30 μg of U87 cell lysate stained with ARG65727 anti-CD29 / Integrin beta 1 antibody at 1:500 dilution.



ARG65727 anti-CD29 / Integrin beta 1 antibody WB image

Western blot: 293T cell lysate stained with ARG65727 anti-CD29 $\!\!/$ Integrin beta 1 antibody.