www.antibodiesinc.com
orders@antibodiesinc.com
530-758-4400

PRODUCT DATASHEET

Anti-Integrin β3 (Extracellular region) Antibody

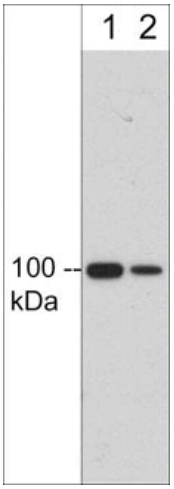
phosphosolutions ANTIBODIES THAT WORK

Product Details

Available Variants	100 µL (SKU:IM5811)
Conjugate	Unconjugated
Isotype	IgG1
Clone	M581
Gene Name	ITGB3
Host Species	Mouse
Format	Protein A Purified
Physical State	Liquid
Buffer	PBS + 1 mg/ml BSA, 0.05% NaN3 and 50% glycerol
Applications	ELISA, ICC, WB
Dilution Ranges	WB: 1:500 ICC: 1:50
Species Reactivity	Human, Mouse, Rat
Immunogen	Clone M581 was generated from a recombinant protein containing amino acid residues in the extracellular region of human Integrin β3. This sequence has high homology with rat and mouse Integrin β3, and has low homology to other integrin family members.
Specificity	This antibody detects a 100kDa* protein corresponding to the molecular mass of Integrin β3 on SDS-PAGE immunoblots of human platelets and endothelial cells (HUVEC).
Molecular Weight	100
Quality Control	Western blots performed on each lot.
Storage	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at

	-20°C.
UniProt ID	P05106 UniProt Summary: Integrin alpha-V/beta-3 (ITGAV:ITGB3) is a receptor for cytotactin, fibronectin, laminin, matrix metalloproteinase-2, osteopontin, osteomodulin, prothrombin, thrombospondin, vitronectin and von Willebrand factor. Integrin alpha-IIb/beta-3 (ITGA2B:ITGB3) is a receptor for fibronectin, fibrinogen, plasminogen, prothrombin, thrombospondin and vitronectin. Integrins alpha-IIb/beta-3 and alpha-V/beta-3 recognize the sequence R-G-D in a wide array of ligands. Integrin alpha-IIb/beta-3 recognizes the sequence H-H-L-G-G-G-A-K-Q-A-G-D-V in fibrinogen gamma chain. Following activation integrin alpha-IIb/beta-3 brings about platelet/platelet interaction through binding of soluble fibrinogen. This step leads to rapid platelet aggregation which physically plugs ruptured endothelial surface. Fibrinogen binding enhances SELP expression in activated platelets. ITGAV:ITGB3 binds to fractalkine (CX3CL1) and acts as its coreceptor in CX3CR1-dependent fractalkine signaling. ITGAV:ITGB3 binds to NRG1 (via EGF domain) and this binding is essential for NRG1-ERBB signaling. ITGAV:ITGB3 binds to FGF1 and this binding is essential for FGF1 signaling. ITGAV:ITGB3 binds to FGF2 and this binding is essential for FGF2 signaling. ITGAV:ITGB3 binds to IGF1 and this binding is essential for IGF1 signaling. ITGAV:ITGB3 binds to IGF2 and this binding is essential for IGF2 signaling. ITGAV:ITGB3 binds to IL1B and this binding is essential for IL1B signaling. ITGAV:ITGB3 binds to PLA2G2A via a site (site 2) which is distinct from the classical ligand-binding site (site 1) and this induces integrin conformational changes and enhanced ligand binding to site 1. ITGAV:ITGB3 acts as a receptor for fibrillin-1 (FBN1) and mediates R-G-D-dependent cell adhesion to FBN1. In brain, plays a role in synaptic transmission and plasticity. Involved in the regulation of the serotonin neurotransmission, is required to localize to specific compartments within the synapse the serotonin receptor SLC6A4 and for an appropriate reuptake of serotonin. Controls excitatory synaptic strength by regulating GRIA2-containing AMPAR endocytosis, which affects AMPAR abundance and composition. ITGAV:ITGB3 act as a receptor for CD40LG. ITGAV:ITGB3 acts as a receptor for IBSP and promotes cell adhesion and migration to IBSP. Integrin ITGA2B:ITGB3 is also the receptor of the erythrocyte-specific ICAM4 ligand involved in heterotypic cell-cell adhesion between erythrocytes and activated platelets.
Country of Origin	United States
Shipping	Blue Ice
Expiration	After date of receipt, stable for at least 1 year at -20°C.
Usage Statement	For research use only. Not intended for therapeutic or diagnostic use. Use of all products is subject to our terms and conditions, which can be viewed on our website.
NCBI Gene ID	3690

Product Images



Western blot analysis of human umbilical vein endothelial cells (HUVEC). The blots were probed with mouse monoclonal anti-integrin β3 (IM5811) at 1:250 (lane 1) and 1:1000 (lane 2).