Datasheet for ABIN968389

anti-Integrin beta 3 antibody (AA 592-712)

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Overview

Quantity:	50 µg
Target:	Integrin beta 3 (ITGB3)
Binding Specificity:	AA 592-712
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Integrin beta 3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Human Integrin beta3 aa. 592-712
Clone:	1-Integrin Beta 3 Chain
Isotype:	IgG1
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	Integrin beta 3 (ITGB3)
Alternative Name:	CD61 (ITGB3 Products)
Background:	Integrins are heterodimeric transmembrane receptors that mediate cell-cell or cell-matrix adhesion. They contain noncovalently associated alpha and beta subunits that consist of a large extracellular region (the ligand-binding domain), a short transmembrane region, and a cytoplasmic domain of varying length. In mammals, at least 17 alpha subunits and 8 beta subunits have been identified and these proteins can heterodimerize to form at least 22 different receptors. Although there is a high degree of redunancy, each integrin has a specific biological function. For example, the beta3 subunit associates with alphaIIb in platelets where this glycoprotein complex acts as a fibrinogen receptor and mediates platelet aggregation. In endothelial cells (EC), beta3 complexes with the alphav subunit to form the vitronectin receptor. This receptor mediates endothelial cell adhesion to vitronectin, fibrinogen, von Willebrand factor, thrombospondin, laminin, and fibronectin. In confluent EC cultures, the alphavbeta3 integrin localizes to focal adhesions at the cell body and cell-cell borders. Thus, continued study of individual integrin subunits will provide insights to mechanisms of cell adhesion and signaling. This antibody is routinely tested by western blot analysis. Synonyms: Integrin beta3 chain
Molecular Weight:	104 kDa
Pathways:	Regulation of G-Protein Coupled Receptor Protein Signaling, Signaling Events mediated by VEGFR1 and VEGFR2, Smooth Muscle Cell Migration, Integrin Complex

Application Details

Comment:	Related Products: ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

Storage:	-20 °C
Storage Comment:	Store undiluted at -20° C.

Publications

Product cited in:

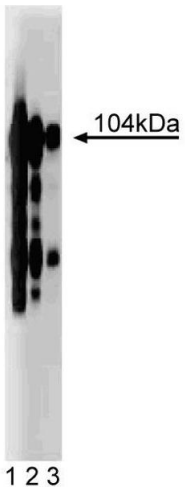
Greenwood, Theibert, Prestwich, Murphy-Ullrich: "Restructuring of focal adhesion plaques by PI 3-kinase. Regulation by PtdIns (3,4,5)-p(3) binding to alpha-actinin." in: **The Journal of cell biology**, Vol. 150, Issue 3, pp. 627-42, (2000) (PubMed).

Tang, Gao, Ware: "Enhancement of endothelial cell migration and in vitro tube formation by TAP20, a novel beta 5 integrin-modulating, PKC theta-dependent protein." in: **The Journal of cell biology**, Vol. 147, Issue 5, pp. 1073-84, (1999) (PubMed).

Yip, Marsh: "An Arg-Gly-Asp peptide stimulates constriction in rat afferent arteriole." in: **The American journal of physiology**, Vol. 273, Issue 5 Pt 2, pp. F768-76, (1997) (PubMed).

Chen, Djaffar, Pidard, Steiner, Cieutat, Caen, Rosa et al.: "Ser-752-->Pro mutation in the cytoplasmic domain of integrin beta 3 subunit and defective activation of platelet integrin alpha IIb beta 3 (glycoprotein IIb-IIIa) in a variant of Glanzmann ..." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 89, Issue 21, pp. 10169-73, (1992) (PubMed).

Albelda, Daise, Levine, Buck: "Identification and characterization of cell-substratum adhesion receptors on cultured human endothelial cells." in: **The Journal of clinical investigation**, Vol. 83, Issue 6, pp. 1992-2002, (1989) (PubMed).



Western Blotting

Image 1. Western blot analysis of Intergrin beta3 on a human platelet lysate. Lane 1: 1:2500, lane 2: 1:5000, lane 3: 1:10000 dilution of the anti- human CD61 antibody.