SANTA CRUZ BIOTECHNOLOGY, INC.

Integrin β3 (H-96): sc-14009

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Integrins are heterodimers composed of noncovalently associated transmembrane α and β subunits. The 16 α and 8 β subunits heterodimerize to produce more than 20 different receptors. Most integrin receptors bind ligands that are components of the extracellular matrix, including fibronectin, collagen and vitronectin. Certain integrins can also bind to soluble ligands such as fibrinogen, or to counterreceptors on adjacent cells such as the intracellular adhesion molecules (ICAMs), leading to aggregation of cells. Ligands serve to cross-link or cluster integrins by binding to adjacent integrin receptors; both receptor clustering and ligand occupancy are necessary for the activation of integrin-mediated responses. In addition to mediating cell adhesion and cytoskeletal organization, integrins function as signaling receptors. Signals transduced by integrins play a role in many biological processes, including cell growth, differentiation, migration and apoptosis.

CHROMOSOMAL LOCATION

Genetic locus: ITGB3 (human) mapping to 17q21.32; Itgb3 (mouse) mapping to 11 E1.

SOURCE

Integrin β3 (H-96) is a rabbit polyclonal antibody raised against amino acids 635-730 mapping near the C-terminus of Integrin β3 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Integrin β3 (H-96) is recommended for detection of Integrin β3 of mouse, rat, human and *Xenopus laevis* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Integrin β3 (H-96) is also recommended for detection of Integrin β3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Integrin β3 siRNA (h): sc-29375, Integrin β3 siRNA (m): sc-35677, Integrin β3 siRNA (r): sc-63292, Integrin β3 shRNA Plasmid (h): sc-29375-SH, Integrin β3 shRNA Plasmid (m): sc-35677-SH, Integrin β3 shRNA Plasmid (r): sc-63292-SH, Integrin β3 shRNA (h) Lentiviral Particles: sc-29375-V, Integrin β3 shRNA (m) Lentiviral Particles: sc-35677-V and Integrin β3 shRNA (r) Lentiviral Particles: sc-63292-V.

Molecular Weight of Integrin β3: 125 kDa.

Positive Controls: human platelet whole cell lysate: sc-363773 or MDA-MB-231 cell lysate: sc-2232.

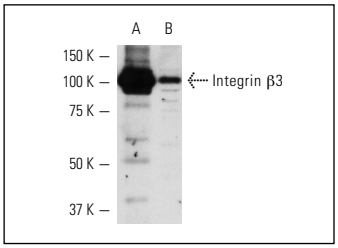
STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



Integrin β3 (H-96): sc-14009. Western blot analysis of Integrin β3 expression in human platelets (**A**) and MDA-MB-231 whole cell lysate (**B**).

SELECT PRODUCT CITATIONS

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2. Kaneko, Y., et al. 2011. β1 and β3 integrins disassemble from basal focal adhesions and β3 integrin is later localised to the apical plasma membrane of rat uterine luminal epithelial cells at the time of implantation. Reprod. Fertil. Dev. 23: 481-495.
3. Mouguelar, V.S., et al. 2011. The integrin-binding motif RGDS induces protein tyrosine phosphorylation without activation in Bufo arenarum (Amphibia) oocytes. Reproduction 141: 581-593.
4. Krautkrämer, E., et al. 2011. Pathogenic old world hantaviruses infect renal glomerular and tubular cells and induce disassembling of cell-to-cell contacts. J. Virol. 85: 9811-9823.
5. Veron, D., et al. 2012. Acute podocyte vascular endothelial growth factor (VEGF-A) knockdown disrupts αVβ3 integrin signaling in the glomerulus. PLoS ONE 7: e40589.
6. Di Vito, C., et al. 2012. The phytoestrogen 8-prenylnaringenin inhibits agonist-dependent activation of human platelets. Biochim. Biophys. Acta 1820: 1724-1733.
7. Bertoni, A., et al. 2012. Dehydroepiandrosterone-sulfate inhibits thrombin-induced platelet aggregation. Steroids 77: 260-268.
8. Nagai, Y., et al. 2013. p130Cas plays important roles in osteoclastic bone resorption. J. Bone Miner. Res. doi: 10.