## SANTA CRUZ BIOTECHNOLOGY, INC.

# Integrin α2/β1 (2B2.29): sc-71429



## BACKGROUND

Integrins are heterodimers composed of noncovalently associated transmembrane  $\alpha$  and  $\beta$  subunits. The 16  $\alpha$  and 8  $\beta$  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.

#### REFERENCES

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#### CHROMOSOMAL LOCATION

Genetic locus: ITGA2 (human) mapping to 5q11.2; ITGB1 (human) mapping to 10p11.2.

#### SOURCE

Integrin  $\alpha 2/\beta 1$  (2B2.29) is a mouse monoclonal antibody raised against Integrin  $\beta 1$  from HT1080 fibrosarcoma cell extract of human origin.

## PRODUCT

Each vial contains 100  $\mu g~lg G_1$  in 1.0 mL PBS with < 0.1% sodium azide and 0.1% gelatin.

## **APPLICATIONS**

Integrin  $\alpha 2/\beta 1$  (2B2.29) is recommended for detection of Integrin  $\alpha 2$  and Integrin  $\beta 1$  of human 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 flow cytometry (1 µg per 1 x 10<sup>6</sup> cells).

Molecular Weight of Integrin  $\alpha$ 2: 150 kDa.

Molecular Weight of Integrin B1: 130 kDa.

#### **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.

#### PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



See Integrin β1 (A-4): sc-374429 for Integrin β1 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647.