

Integrin α 2 (H-293): sc-9089

BACKGROUND

Integrins are heterodimers composed of non-covalently 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. Integrin α 2 is responsible for adhesion of platelets and other cells to collagens. Modulation of collagen and collagenase gene expression force generation and organization of newly synthesized extracellular matrix.

CHROMOSOMAL LOCATION

Genetic locus: ITGA2 (human) mapping to 5q11.2; Itga2 (mouse) mapping to 13 D2.2.

SOURCE

Integrin α 2 (H-293) is a rabbit polyclonal antibody raised against amino acids 840-1132 mapping within an extracellular domain of Integrin α 2 of human origin.

PRODUCT

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

APPLICATIONS

Integrin α 2 (H-293) is recommended for detection of Integrin α 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 α 2 (H-293) is also recommended for detection of Integrin α 2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Integrin α 2 siRNA (h): sc-29371, Integrin α 2 siRNA (m): sc-270406, Integrin α 2 shRNA Plasmid (h): sc-29371-SH, Integrin α 2 shRNA Plasmid (m): sc-35683-SH, Integrin α 2 shRNA (h) Lentiviral Particles: sc-29371-V and Integrin α 2 shRNA (m) Lentiviral Particles: sc-35683-V.

Molecular Weight of Integrin α 2: 150 kDa.

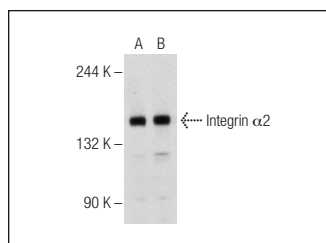
STORAGE

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

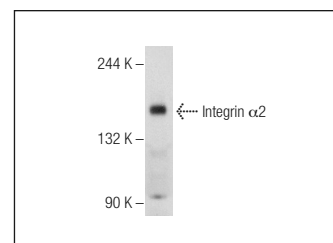
RESEARCH USE

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

DATA



Integrin α 2 (H-293): sc-9089. Western blot analysis of Integrin α 2 expression in MDA-MB-231 (A) and HT-1080 (B) whole cell lysates.



Integrin α 2 (H-293): sc-9089. Western blot analysis of Integrin α 2 expression in A-431 whole cell lysate.

SELECT PRODUCT CITATIONS

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3. Krishnamurthy, M., et al. 2008. Expression and function of α 1 integrins in pancreatic β (INS-1) cells. *J. Cell Commun. Signal.* 2: 67-79.
4. Bielawski, K., et al. 2008. Proline-linked nitrosoureas as prolidase-convertible prodrugs in human breast cancer cells. *Pharmacol. Rep.* 60: 171-182.
5. Garamszegi, N., et al. 2010. Extracellular matrix-induced transforming growth factor- β receptor signaling dynamics. *Oncogene* 29: 2368-2380.
6. Ihara, Y., et al. 2011. Alteration of integrin-dependent adhesion and signaling in EMT-like MDCK cells established through overexpression of calreticulin. *J. Cell. Biochem.* 112: 2518-2528.
7. Ishii, K., et al. 2011. Involvement of epithelial-mesenchymal transition in adenoid cystic carcinoma metastasis. *Int. J. Oncol.* 38: 921-931.
8. Shin, E.S., et al. 2014. PEDF expression regulates the proangiogenic and proinflammatory phenotype of the lung endothelium. *Am. J. Physiol. Lung Cell. Mol. Physiol.* 306: L620-L634.
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MONOS
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Try **Integrin α 2 (C-9): sc-74466** or **Integrin α 2 (HAS-4): sc-53353**, our highly recommended monoclonal alternatives to Integrin α 2 (H-293).