

Integrin $\alpha 6$ (1.BB.460): sc-71426

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.

REFERENCES

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- Russell, A.J., et al. 2003. $\alpha 6 \beta 4$ integrin regulates keratinocyte chemotaxis through differential GTPase activation and antagonism of $\alpha 3 \beta 1$ integrin. *J. Cell Sci.* 116: 3543-3556.
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CHROMOSOMAL LOCATION

Genetic locus: ITGA6 (human) mapping to 2q31.1; Itga6 (mouse) mapping to 2 C2.

SOURCE

Integrin $\alpha 6$ (1.BB.460) is a mouse monoclonal antibody raised against SW1222 colorectal cell line of human origin.

PRODUCT

Each vial contains 200 μg IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Integrin $\alpha 6$ (1.BB.460) is available conjugated to either phycoerythrin (sc-71426 PE) or fluorescein (sc-71426 FITC), 200 $\mu\text{g}/\text{ml}$, for WB (RGB), IF, IHC(P) and FCM.

APPLICATIONS

Integrin $\alpha 6$ (1.BB.460) is recommended for detection of Integrin $\alpha 6$ of mouse, rat and 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 1×10^6 cells).

Suitable for use as control antibody for Integrin $\alpha 6$ siRNA (h): sc-43129, Integrin $\alpha 6$ siRNA (m): sc-43130, Integrin $\alpha 6$ shRNA Plasmid (h): sc-43129-SH, Integrin $\alpha 6$ shRNA Plasmid (m): sc-43130-SH, Integrin $\alpha 6$ shRNA (h) Lentiviral Particles: sc-43129-V and Integrin $\alpha 6$ shRNA (m) Lentiviral Particles: sc-43130-V.

Molecular Weight of Integrin $\alpha 6$ proform: 140 kDa.

Molecular Weight of Integrin $\alpha 6$ heavy chain: 120 kDa.

Positive Controls: human platelet extract: sc-363773, DU 145 cell lysate: sc-2268 or Hep G2 cell lysate: sc-2227.

SELECT PRODUCT CITATIONS

- Micocci, K.C., et al. 2016. ADAM9 silencing inhibits breast tumor cells transmigration through blood and lymphatic endothelial cells. *Biochimie* 128-129: 174-182.

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 for detailed protocols and support products.



See **Integrin $\alpha 6$ (F-6): sc-374057** for Integrin $\alpha 6$ antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.